# ACR 2021

ASSOCIATION FOR CONSUMER RESEARCH

VOLUME XLIX
ADVANCES IN CONSUMER RESEARCH

Editors:
Tonya Williams Bradford
Anat Keinan
Matthew Thomson

ACR 2021 SEATTLE
what the world needs now

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Advances in Consumer Research, Volume 49

Tonya Williams Bradford, Anat Keinan, and Matthew Thomson

Preface

The 52nd Annual Conference of the Association for Consumer Research (ACR) was held October 8 - 30, 2021 virtually with the ACR Community, and not in Seattle as originally hoped. This conference marked ACR's 2nd virtual conference. We leveraged lessons learned from the 1st ACR virtual conference (Paris) and introduced innovations for the community. Our focus was to continue the community's hallmark experience of welcoming scholars from around the globe from interdisciplinary perspectives and employing an array of methodologies to share and discuss knowledge of consumer behavior.

Our conference theme was "What the World Needs Now." This theme was inspired by the fact that the world was finding its way through the COVID-19 pandemic and grappling with racial, social, and climate injustices. It was our hope that ACR 2021 would be an opportunity for scholars across research interests and paradigms to unite with a focus on how we can employ our talents to improve the world around us through rigorous and relevant scholarship. Though we were originally inspired to have our community gather in Seattle—the Emerald City, we quickly found ourselves facing a different reality brought into focus by the pandemic. We were heartened by possibilities as the first vaccinations rolled-out but quickly realized that travel limitations would hinder the global ACR community from gathering. Thus, we moved forward with planning a virtual conference—one we hoped would take the best of what our community is and reimagine those experiences in virtual gatherings.

Amidst disappointment within our community that ACR2021 would be virtual, we sought to create novel opportunities for engagement while providing the rich intellectual stimulation that is the hallmark of ACR. We are appreciative to those who jumped onboard with these innovations which facilitated the personal interactions we look forward to, and the growth we crave through opportunities to share research and learn from one another. Further, we endeavored to garner conference participation across the rich diversity in our community—from institution type, geography and gender, race, or ethnic identification, to time in the field, methodology, and research area.

Throughout the conference, the challenge to advance research agendas that unite and help the world was brought to us through the Fellows' Addresses (by John F. Sherry, Jr. and Melanie Wallendorf), the Presidential Address (by June Cotte), the Keynote Conversation (Juliet Schor and David Crockett), the Sheth doctoral consortium, mid-career workshops, the Film Festival, Knowledge Forums, Competitive Paper Roundtable discussions, Special Sessions, and Working Papers.

We crafted three venues to facilitate social engagement and recreate opportunities for spontaneous interaction. In lieu of receptions, there were Globe Trotting sessions where conference attendees were introduced to a slice of life from different parts of the world. To meet new people, we invited colleagues from around the globe to host small group conversations in the form of Colleague Confabs. Recognizing that each year brings new members to ACR, the co-chairs hosted Meet & Greet sessions the weeks prior to the conference where we shared a bit about ourselves as members of this grand community. We are grateful to:

- Our colleagues who made the vision for Globe Trotting a reality beyond our wildest imagination, we thank you—Stefania Borghini and Andrea Rurale (Italy); Harija Banovic, Klaus G. Grunert, Lina Jacobsen, Maartje Mulders, Anne O. Peschel, Violeta Stancu, Catalin Stancu, and Sascha Steinmann (Denmark); Franklin Velasco (Ecuador); Sumitra Auschaitrakul, Theeranuck Pusaksrikit, Yupin Patarapongsan, and Sydney Chinchanachokchai (Thailand); and, Sumire Stanislawski, Kosuke Mizukoshi, Shuji Ohira, and Yuichiro Hidaka (Japan).

- The faculty who graciously volunteered as part of our Colleague Confabs: Eduardo Andrade, Donnel Briley, Rajesh Chandy, Amitava Chattopadhyay, David Crockett, Giana Eckhardt, Christina Goulding, Zeynep Gurhan-Canli, Ashlee Humphreys, Jeff Inman, Yuwei Jiang, Rob Kozinets, Angela Lee, Don Lehmann, Tina Lowrey, Debbie MacInnis, Ann McGill, David Mick, Anirban Mukhopadhyay, Connie Pechmann, Hilke Plassmann, Stefano Puntoni, Priya Raghubir, Hope Schau, Stacy Wood, and Juliet Zhu.

The pace of innovation in the field can be staggering, however the conference is an opportunity to ground us in our shared focus on consumer research. To provide opportunities for deep engagement with new content, Knowledge Forums were held in the weeks leading up to the conference, with supplemental discussions held during the conference. Competitive papers, a great way to advance research toward publication, were presented through videos. In addition, Competitive Paper Roundtables were moderated by scholars across the various tracks which allowed for lively discussions amongst authors and others interested in the different research areas.

As we do each year, the members of the ACR Community help make the conference a success. And, it was no different with this novel conference format. We especially wish to thank:

- The diligent Working Paper Co-chairs: Liat Levontin, Rima Touré-Tillery, Echo Wen Wan;
- The thought-provoking Knowledge Forum co-chairs: Jonah Berger, Michael Luchs, and Frederick Wherry;
- The ingenious Film Festival co-chairs Finola Kerrigan and Eric Li;
- The phenomenal Associate Editors: Fleura Bardhi, Jonathan Berman, Amit Bhattacharjee, Katherine Burson, Hanna Chang, Samantha Cross, Marcus Cunha Jr., Kelly Goldsmith, Hal Hershfield, Ryan Hamilton, Szu-chi Huang, Mathew Isaac, Uma Karmarkar, Selin Malkoc, Theo Noseworthy, Nailya Ordabayeva, Mario Pandelaere, Gabriele Paolacci, Lisa Peñaloza, Adriana Samper, Daiane Scaraboto, Yael Steinhart Abigail Sussman, Keith Wilcox, Lawrence Williams, and Meng Zhu;
- The indefatigable Program Committee, Competitive Paper Reviewers, and Working Paper Reviewers;
- The insightful Competitive Paper Moderators: Pankaj Aggarwal, Melissa Akaka, Zeynep Arsel, Lisa Bolton, Cynthia Cryder, Susan Dobscha, Giana Eckhardt, David Gal, Andrew Gershoff, Lauren Grewal, Neeru Paharia, Chiara Longoni, Sarah Moore, Jeff Parker, Marie-Agnès Parmentier, Cristel Russell, and Gülden Ülkümen;

- The incredible Mid-Career Workshop co-chairs: Simona Botti, Sonia Monga, and Americus Reed;
- The inspiring Sheth Doctoral Consortium co-chairs: Lea Dunn and Grand Packard;
- Our tech-savvy doctoral student hosts who helped presenters and participants navigate Webex and Zoom seamlessly; and,
- Every conference attendee who learned how to navigate the Ex Ordo conference platform and demonstrated flexibility moving from one Webex session to the next!

The conference featured 260 hours of live content and 244 recorded presentations and films for the 1,461 participants from 41 different countries. We received 874 total submissions and accepted 526, which represents a 60% acceptance rate. This year's conference presented 239 competitive papers (54% acceptance rate), 68 Special Sessions (87% acceptance rate), 201 working papers (63% acceptance rate), 9 Knowledge Forums (41% acceptance rate) and 7 films (88% acceptance rate). We thank our generous sponsors: The Sheth Foundation, the Society for Consumer Psychology, the Journal of Consumer Research, the Marketing Science Institute, Stukent, and the Schulich School of Business at York University.

Special acknowledgement goes to ACR Executive Director Rajiv Vaidyanathan, the ACR Executive Assistant Brenda Monahan, and our graphic designer Yoni Alter.

We have nothing but gratitude for June Cotte, ACR President 2021, and her trust in us to organize ACR 2021, and for her never ending encouragement and support for the wildest of ideas. Planning the SECOND virtual conference for this tremendous community was a labor of love for the three of us!

With thankfulness.

Your ACR 2021 Conference Co-Chairs,

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2021 ACR Presidential Address

Generalists: Bulwark Against Tribalism

June Cotte, Western University, Canada

I am going to talk to you today about generalists, to make a case against hyper-specialization, and the need for generalists to help consumer research from descending further into tribalism. But I can't jump right into the fray. First, a bit of history. I would like to place what I am doing today within the history of ACR Presidential Addresses.

ACR Presidential Addresses come in many forms and I'd like to review three types, in order to situate my own approach.

One approach is when scholars use this platform to dive deep into their own research area, to plumb it thoroughly and draw out broad insights for the entire field. Two examples stand out in my mind. Debbie's MacInnis' 2004 Presidential Address built on her own work about hope to offer a lively discussion of generative concepts in consumer research. Joe Alba's 1999 discussion of consumer expertise (and lack thereof) was both smart and hilarious. My sense is that this genre is the most popular for Presidential speeches.

A second approach asks us to question what we are really doing as consumer researchers, and why. Why do we do this job? Why do we love it? What does it mean to be a consumer researcher? What should it mean? In 2014 Linda Price talked about wonderment in research, rather than a direct and instrumental approach to "getting published." A few years later, Stacy Wood cautioned us about the narrowness of a "single story." This type of address is harder to define, but it is basically smart people trying to remind us that research can be inventive, exuberant, and important. Remembering these things will help us make our research better.

A final type are those Presidential Addresses that are in some sense accusatory. They are aimed at showing us how we are going wrong, or when we are ignoring critical topics, or where we should go next. There are three exemplars across history I'd like to highlight. One is Russ Belk's 1986 address that exhorted us to consider more macro level consumption issues. In highlighting what was then a field almost entirely devoted to studying individual consumption decisions, often of the grocery variety, he made the "…very simple and obvious point … the care and detail with which we have imagined that consumers make choices - as if they were the sole focus of daily life. However true this may be for some consumers some of the time, it is not true of most consumers most of the time." Another is David Mick, whose 2005 address named and defined the Transformative Consumer Research movement, and beseeched consumer researchers to work on important substantive problems focused on improving consumer welfare. He was hoping the establishment of TCR would "…usher in a renaissance of an original mission of ACR, namely, to conduct and impart outstanding research in the service of quality of life." And in 2020, Eileen Fischer turned from a more traditional focus on research in general to interrogate the ACR association itself. She examined recent societal upheavals, and gave the field some clear marching orders, especially around diversity, inclusion, and intersectionality. This third type of speech is closest to what I am doing here with you today.

In many ways, I am aligning myself with Rich Lutz's 1989 Presidential Address. At the time, he was playing a dual role as ACR President and JCR Editor, a dual role I now find myself in. By the way, although he may not realize it, Rich was an early positive influence on me and my career. Although he was already "famous" he was welcoming and lovely when I met him as a doctoral student. And his deep dive into philosophy of science issues as he grappled with the emergence of what was then called "naturalistic" research remains an intimidating intellectual achievement. I think it's essential to revisit it. Why? Because what Rich, and others, argued for has come to pass: as consumer researchers, we largely accept the legitimacy of various ontological and epistemological traditions. But I am motivated by a second aspect of Rich's address where I feel that **we as a field have failed spectacularly**.

I want to quote him at length here: "We need to ***read*** and benefit from one another's work. Consumer research is a vital and vibrant field, due in large part to its diversity. We need to respect the legitimacy of different paradigms and draw on the eclectic insights offered by this variety of approaches. By cultivating a more sophisticated pluralistic view of the research enterprise, we can actually learn more from each other." I don't think we are learning from each other. I don't think we are learning from each other. And we should. That's what I'm going to talk about now.

Let's start with a thought experiment. As a researcher, do you mainly carry out experiments in labs or online? If so, when was the last time you fully read an article using ethnographic methods? Do you mostly rely on depth interviews? If so, when was the last time you carefully read an article that used machine learning tools to analyze large datasets? How many of you read JCR or JACR from cover to cover, every issue? How many of you regularly make yourself uncomfortable like that? I suppose it's good that we don't really argue anymore about the legitimacy of different approaches to carrying out research, but I worry it's because we have just learned to ignore each other. That is bad. That is not progress.

I have seen "bridging the gap" discussions at virtually every AMA doctoral consortium I've attended, and they are usually talking about marketing as a field splintering into quant, CB, and strategy. But in my twenty-five years in the field, I've also seen the birth and/or growth of CCT, SJDM, TCR, SCP and others. And I wonder: there a field of consumer research anymore? Does it matter?

Of course, we aren't alone in this. A biologist likely wouldn't introduce herself as such; she would likely say she was a microbiologist, a marine biologist, or even a biostatistician. A linguist isn't just a linguist, she may be a historical linguist, a sociolinguist, a psycholinguist, ethnolinguist, a computational linguist, or even a neurolinguist. We are hyper-specialized. And hyper-specialization is both blessing and curse.

I realized recently I've been ranting about this issue for years, but simplistically. It's only for the purposes of this talk that I've attempted to some intellectual meat on the bones of an old argument. Robin Coulter and others have written about the need for marketing, as a field, to work together across specialities. And Arnould and Thompson, more than ten years ago, wrote in JCR that rather than developments in consumer research fostering different camps, the various sub-specialities could create multiple, insightful, theoretical conversations that "enable consumer researchers to poach and cross-fertilize ideas, methods, and contexts from a variety

of theoretical conversations that differentially address core topics." This was true then, and it's true now. But I don't think we are having these conversations. We should, and we can, but I don't think we are.

I've shared my dismay in many excellent discussions with Robin and other colleagues. We have watched our students learn and scan the world differently than we did. We have watched the rise of electronic databases coincide with the departure of intellectual breadth in our field. Most of us rarely visit physical libraries, where opportunities for serendipitous discovery abound. The likelihood of running across ideas outside our training and research domains is miniscule because we carefully craft our keyword searches and focus our intake of ideas. We deny ourselves the joys of stumbling about.

I'd like to walk you through a personal example: one of my first research interests was gambling. When I went to the library, I grabbed books off the shelves, skimmed them and chose which to read. Along the way, due to the Dewey decimal system, I also came across books on play, which led to books on leisure, where there were mentions of leisure time, and chapters about how we think about time as humans. I did not read them all in one sitting, for certain, but my experiences wandering about the stacks took me from my own work on gambling to my dissertation topic on timestyles. That sort of discovery isn't possible on Google Scholar.

Something like this also happened with journal articles in the library. As a new student, I still remember going to look for one of Kahnemann and Tversky's articles and discovering this journal called Econometrica. At that point, I hadn't even heard of it, but it intrigued me that there was this whole other aspect to our field, and I recall sitting down and going through several issues, just to get used to the arguments and areas in that journal. Again, how many of us now, if we find a promising article through a Google Scholar search, would go back to the journal it came from and read an issue or two? I am pretty sure I wouldn't. Younger scholars in the audience are likely rolling their eyes now and thinking the equivalent of "okay Boomer." There's one advantage of a virtual address; I can pretend that isn't happening.

Analogously, this same argument emerges as we debate doctoral training. It comes up with special clarity when one discusses, as many of you have, what sort of comprehensive exam your students should take, or if they should take one at all. I've argued for years that in this emerging world of specialists, a comprehensive exam is the last time that we can insist our students really master a very wide range of material. But increasingly, this argument loses to the notion that the sooner students specialize in a very narrow area, the sooner they can publish, the better the job they can get, and on it goes. And I am not downplaying the pressure here. But those conversations that Arnould and Thompson talked about don't happen. And I think that if we, as a discipline, continue to do this, we are going to discover that in this domain, as in so many others, what may be good for the individual student, in the moment, is bad for the collective group of researchers, and the future of our field.

I'd like to investigate two questions for the rest of my talk. The first question is: What happens when consumer research becomes more hyper-specialized? My main thesis is not novel, but it bears repeating. I predict two outcomes from hyper-specialization. First, we will become a narrower and narrower set of subfields that fails to create innovative solutions to consumer-relevant problems, and we will have less and less to say about the world writ large. Second, we will continue to close ranks, to make meaningful communication between groups impossible. We will actively increase aggressive ingroup/out-group dysfunction, which, by the way, counts as its casualties both replication failures and retractions.

True to my own style, I started reading interesting books about these ideas and followed them to their influential underlying studies. Books like Range by David Epstein, Hivemind by Sarah Cavanaugh and Tribalism by Stevan Hobfoll. Of course, my choice of books is its own sort of confirmation bias: I believe we have become so specialized as to be dysfunctional, so I sought out evidence to support me. But these books make powerful arguments.

For example, David Epstein argues that cognitive entrenchment in our own subfields stifles innovation and understanding. In diverse areas such as music, sports, chess, education, video games, and yes, science, he shows support for the idea that people who become great at something very, very specialized often got there through broad sampling behavior and multifaceted learning. These people try new and varied things, leading them to build better abstract conceptual models and to grasp ideas more deeply. And he makes a pretty persuasive case that "learning is most efficient in the long run with it is really inefficient in the short run." I think most of us already know this. When we teach our undergrads or MBAs, we make them struggle a bit early by letting them wander about and stumble into developing their own compasses, so that in the long run they learn and retain ideas and understand material better. He quotes statistician Doug Altman, who says "Everyone is so busy doing research that they don't have time to stop and think about the way they're doing it."

And in the book, Epstein profiles Arturo Casadevall, a scientist at Johns Hopkins, who created the R3 Initiative, which stands for rigor, responsibility, and reproducibility, and aims to de-specialize the training of scientists. Scientists learn philosophy, history, logic, ethics, communication, and leadership, as well as statistics. In line with the thesis of the entire book, Casadevall argues that "Young scientists are rushed to specialize before they learn how to think; they end up unable to produce good work themselves and unequipped to spot bad or fraudulent work by their colleagues." Ouch. But I can't tell you how validating that felt to me. All these years of thinking this… if only I had thought to write a book about it! So we should recognize that there is quite a lot of research showing that a diverse group of specialists cannot fully replace the contributions of broad individuals. Contrary to much of the advice you may have heard, even if you move from topic to topic, or even broad area to broad area, your experience and learning move with you. You will look at a new area with information learned from the old one. As Epstein says, mental meandering is a source of power and head starts are overrated. Look around, learn around, and embrace the power of the well-timed stumble.

The second question I'd like to investigate is: why is specialization **dangerous** for the field? Beyond less learning, less creativity, and less problem-solving ability, there is an even greater risk to hyper-specialization in consumer research: we resort to our tribes. Now, I realize that tribes, and tribalism, as language, has more than a whiff of colonialism to it. But it's the best term I can find to describe the stronger-than-ingroup/outgroup behavior I intend here. And we have a history of using the term in consumer research when talking about consumers themselves: Cova, Kozinets, and Shanker's book on Consumer Tribes, with its many contributing authors, being just one obvious example. But there is a dark side to consumer researchers following a more tribal path. A friend of mine, political scientist Howard Ernst, once gave a talk where he argued that what starts as an affinity group may become a club, then a clique, and then, when resources become scarce or other threats emerge, it becomes a tribe in which we learn to distrust, fight or defend against, or just plain avoid, the "other."

As Stevan Hobfoll argues in his book " We can live in relative harmony when resources related to survival are not threatened or substantively lost. But even the whiff of threat of loss, awakens our deeper protective genetic makeup." We know this about people, about consumers. So why don't we know it about ourselves, as consumer researchers? There are only so many pages in a journal issue. Only so many awards to be won, and jobs to be granted. You may think I am overstating this. So okay, another thought experiment. You are sitting in a marketing faculty meeting. Your school has to hire a researcher, who will teach introductory consumer behavior. All consumer researchers could do that. Yet, how quickly, in your school, does this discussion devolve into the "type" of researcher you need? How fast do the laboratory experimentalists make the case for "one of their own?" How about the CCT researchers? What language gets used by the AI machine learning folks about the best sort of research? Importantly, these debates usually are framed as factual arguments.

As Hobfell argues: "We do not see the tribalism in plain view because we see ourselves as individuals, and falsely interpret our behavior as thoughtful and rational… Who would want to get up at a meeting at work and begin with the phrase 'Based on my distorted view of the world and this situation, and the fact that I feel threatened, I think…?'" Now, I understand why sticking with our tribe feels good; I get that, I really do. No one wants to feel left behind. No one wants to think that the research methodology, or areas of research, they specialize in (or hyper-specialize in), that is to say: their tribe, is outdated, incorrect, or not worthy of investment. And when threatened, a tribe often responds aggressively and retreats further into itself in defense.

So, in our current era of threatened scientific integrity, rather than reach out and collaborate WITHIN consumer research, we are defending our turf, casting aspersions on other tribes. This is a toxic breeding ground indeed. It threatens the progress and relevance of our entire field. It makes existential failures possible. And this brings me to Cavanagh's excellent book Hivemind. Although the book is focused on social media, it has clear implications for the argument I am making here. Indeed, the subtitle of the book is "The New Science of Tribalism in our Divided World." As many others have, she discusses echo chambers on social media. But we do this as well, in our consumer research tribes: we self-sort into groups who already share similar ideas and then repeat those ideas, and the associated research paradigms back and forth to one another, which strengthens them. This can be positive, because it feels secure to be part of a community, to be supported by others who were trained as we were, and who think similarly. I get it, it can be a warm and validating feeling. This can be positive, but I see the harm too. As we stick to our tribes, we dig deeper and deeper trenches, so that we can no longer discuss ideas across the entire field. And we get more and more polarized in our thinking. So, we get sweeping statements and accusations between the tribes: all experimentalists p-hack, qualitative work isn't science, we should only rely on big datasets, etc. It makes it impossible to learn from those outside our tribe, never mind collaborating with them!

Cavanagh also interviews social neuroscientist and psychology professor Jim Coan, whose arguments about in- and out-groups sort of turn traditional thinking on its head. He argues that ingroups aren't mainly about **excluding** some people, but about actively **including** some people. That when groups are pitted against each other, people in one tribe don't actually devote many resources to going after the outgroup; they devote more resources to their tribe. And by resources here I am stretching this to include more than money and jobs. I also mean time, attention, journal space, you name it. Philosopher Martha

Nussbaum talks about this when she makes the point that fear leads us to cling to our tribe and "…narrow our behavior and the options we consider, which is the opposite of what we should be doing."

I'd like to walk through an example to illustrate my argument. Let's take for our example, the very reasonable consumer research question: how do people decide what to spend money on? Our field has devoted extensive resources to answering this question, from many perspectives. There is CCT research on how consumers decide on spending, both day to day and for retirement. Often this research takes a social and cultural perspective to look at structural and market forces acting on consumers. There is also a rich history of more psychological oriented consumer research looking at this same question, from a decision-making or information processing perspective, for example. However, with some notable examples, most of this work (both sociological and psychological) largely cites work similar to theirs. Typically, there is very little integration of a more sociological bent into the psychological inquiries, and vice versa. I am not "naming and shaming" here, as it would entirely make my point about aggression in tribes. I am just pointing this out. And, of course, macro-economic approaches to consumer spending more broadly do not cite either the psychological or sociological perspectives. We are ignoring each other. Respectfully right now, but still…

So, what's the way forward? How can we as individuals within the ACR community build better knowledge about consumers? Can we broaden our perspectives and our training away from hyper specialization? I think we can, but there is massive institutional inertia to overcome. BUT AS A START WE NEED MORE GENERALISTS! What can we do? I have a few suggestions to get us started moving in the right direction. I am going to focus on individuals here, rather than institutions, because I think the beginning steps need to be taken by people.

I have three recommendations: 1) realign your self-appraisal. Why identify as an experimentalist? Why think of yourself as a machine learning expert? Or a consumer culture theorist? Is it because, deep down, we don't really want to identify as consumer researchers? Do we want to be psychologists, economists, statisticians, or sociologists? I don't know, but I think there is deep-seated issue there. Why not recognize that within marketing you have already specialized: in consumer research and consumer problems. Make it your goal to study consumers, and align your identity with solving consumer relevant problems. And when you teach doctoral students, teach them broadly as well as narrowly. Work as a consumer researcher; train others to be consumer researchers.

2) Focus by problem, not by research tradition, theoretical background, or method. Review the literature on the problem you are trying to solve, across all sources and methodologies. Read everything on your problem. Everything, or as close to everything you can get. And that likely includes books, and journals outside consumer research.

3) If you make the problem big enough, you can more clearly see it. For example, maybe you are interested in the effect of word-of-mouth on consumer decisions. We have psychological consumer research on persuasion knowledge and reactance, we have big data approaches to tracking WOM online, we have socio-cultural studies of power and status that could affect WOM sender and receiver, etc. Should one person be experts in all those fields? Not necessarily. But a generalist approach to the consumer problem would read widely across all those areas, and then would design research, perhaps with a team, that is informed by all those areas and is laser focused on solving the problem.

Many of you, I suspect, vehemently disagree with my idea that we need more generalists because specialization has become a prob-

lem in consumer research. But our field is reputationally threatened from outside consumer research due to data integrity scandals, the perception that we tackle small and insignificant problems, and other concerns. Perhaps our response can be to band together, to broaden together, and by learning to integrate more perspectives elevate all of us. If we don't learn to communicate from our increasingly narrow (yet deep) tribal trenches, we risk being stuck down in the muck, irrelevant, unheard, and unheeded.

It has been my honor to serve as ACR President, and I thank you all very much for honoring me in this way.

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2021 ACR Fellows' Addresses

Capturing Sensuous Momentarity
John F. Sherry, Jr., University of Notre Dame, USA

Time travels in diverse paces with diverse persons.
Rosalind
As You Like It
Act III, Scene 2

Thanks

I thank all the creators and jesters, outlaws and caregivers, explorers and sages, poets and characters, and the ordinary invisible folk enabling my journey to be so interesting and fulfilling. They are so many that I fear overlooking some inadvertently in any list I might attempt. You know who you are. I thank my colleagues at the University of Florida for warmly initiating me into a fascinating new tribe and encouraging me to discern my own path. I thank my colleagues at Northwestern University for the entrepreneurial climate and intellectual challenge that allowed me to unfold, experiment and flourish as a scholar. I thank my colleagues at the University of Notre Dame for celebrating a homecoming that became an open invitation for generativity and communal engagement. I thank the convivial ACR community that has furnished me with a vibrant multi-disciplinary home. I thank the mettlesome CCT community in which I have grown up and grown old (and sometimes just groaned). I thank the co-authors, invisible college mates and reviewers who have improved my efforts immeasurably. I thank David Mick for his generous introduction. Finally, I thank all the Fellows of ACR who have literally laid down the figurative money in our joint learned enterprise, to advance the common good of our field. I am especially pleased to receive this honor in the company of my friend and co-conspirator, Melanie Wallendorf.

The time is out of joint
Hamlet
Hamlet
Act 1, Scene 5

Prologue

I began noodling this essay during the long sequestration of the pandemic, in the third trimester of an unplanned retirement. The time on my hands moved naturally enough to time on my mind. I paid closer attention to my home, my residential block, and the home office in my attic now overstuffed with the material culture of my former school office (Sherry 2013). Almost suspended in amber, but also caroming in time through these increasingly present objects of contemplation. All as I looked forward with joyous anticipation to the arrival of time's most ironic/heroic/tragic metaphor (Brown 2012), the bugs of (seventeenth) summer, the cicadas of Brood X.

I was also in the midst of wrapping up several projects with several co-authors that grapple with the experience of time. I have one research stream that examines the spatiotemporal dynamics that impart vitality to an event. Imagine a coordinate plane that represents dialectical engagements as poles of continua that generally characterize a phenomenon. One continuum extends from ordinary time (*chronos*) to extraordinary time (*kairos*). The other continuum extends from ordinary place (*topos*) to extraordinary place (*chora*) (Lane 2001). Burning Man would exist primarily in Quadrant I, where its participants use ferity, fantasy and festivity to create sacred time and sacred place, and contrast most strikingly with Quadrant III, the secular, profane or "default" world of ordinary marketplaces, such as periodic markets. Quadrant IV, which exalts the temporal dimension, would be home to vestavals such as tailgates, which encourage reflection, reminiscence, and reverie. Quadrant II, which exalts the spatial dimension, would be inhabited by such spectacular venues as cruise ships, those self-contained floating cities comprising hosts of themed micro-environments that invite consumers to escape from the mundane world. Almost all of this work (and the consumer research literature at large) has emphasized the spatial at the expense of the temporal, although these dimensions are thoroughly interpenetrating. It's time for us to take a closer look at time.

Theme

Let's take the instant by the forward top;
King of France
All's Well That Ends Well
Act V, Scene 3

There is little agreement on the ontology of time. Of the two leading interpretive contenders, the eternalist (as opposed to presentist) perspective is grounded in relativity theory and is favored by physicists and philosophers. This perspective posits a four-dimensional block universe in which past, present and future are equally real. It regards our subjective sense of time as an illusion of our conscious mind, abetted by the numerous cognitive, embodied clocks that inform much of our behavior, including the experiential time travelling (Buonomano 2017) that I engage today. Theorizing the ontology of time is currently beyond the purview of consumer research, but a better understanding of the phenomenology of time is of increasing interest to our discipline. Jackson (2018, pp. xv; xvii; 207) notes that *being-in-the-now* is inherently unstable, threatened with disruption by the sensuous, and that its apprehension requires a bracketing of conventional modes of representation in favor of exploring the interrelation of different temporal modes, preferably through art. Toward this end, I lay out some initial thoughts on prospective themes and methods I hope might interest you.

Momentarity is a point in time experienced in its full multisensory presence and associated layers of meaning (contra Gumbrecht 2003), or re-experienced in recollection elicited by the researcher. It is a specific case of the temporality characteristic of consumption sites such as periodic markets, vestavals and Temporary Autonomous Zones, the analysis of whose spatial dimensions we privilege in our literatures above their temporal aspects (Lee and Wei 2020; Kymäläinen and Nordström 2010). We've looked at time cycles timestyles, timescapes and timeworking (Belk, Wallendorf and Sherry 1989; Woermann and Rokka 2015; Sherry 2007; Robinson et al 2021) but largely from the perspective of degrees of duration or emplacement. While we could elaborate a phenomenology of "ordinary" time to interesting effect, the dimension of "extraordinary" time might prove a more immediately productive playground for identifying and delimiting the minimal parameters of momentarity. Thus, I suggest a primary focus on *kairos* rather than *chronos*, recognizing nonetheless their inescapable intertwining.

The evocative disruption of *chronos*, including our experience of caroming across *chronos* eras or leaving them altogether (as in episodes of ataraxia or nostalgia) are common *kairos* moments. These are happenings of momentous liminality. I propose the term "kairophany" as a cognate to the existing term chronophany, to capture the flickering character of this temporal shining through of qualitative difference. Kairophany is the sensation of these flickering moments of subjectively compelling *kairos* strands as they erupt from the *chronos* timescape. Similarly, I understand kairophany to be less discontinuous or ontologically levelling than the "rupture in time" (Eliade 1952, p. 230) that Jung ascribed to the manifestation of synchronicity. Kairophany is an interruption, rather than a shredding, of *chronos*.

The moment I imagine is a mash-up of epiphany and a kind of temporal narrative transportation that can only be described as time travel (Gumbrecht 2003; 2021; Bradford and Sherry 2019). The moment is unpredictable and evanescent. It requires a drop-everything-else approach to interrogation, a kind of premeditated spontaneity or strategic impulsiveness that permits capture before evaporation. Its representation and interpretation might require a Wordsworthian recollection in tranquility.

Ripeness is all.
Edgar
King Lear
Act V, Scene 2

Methods

Recall Beth Hirschman's (1985) invocation of Mitroff and Kilman's (1978) Jungian typology of scientific typologies in her exhortation that the discipline expand its approaches beyond those of the analytic scientist to include, in particular, the equally valid and insightful perspectives of the humanist. With the maturing of CCT we have made some significant progress in this direction, but a nascent sub-disciplinary embrace of arts-based research (Seregina 2019) promises to enrich our inquiry enormously. The rise of humanistic practices in contiguous social sciences (Cahnmann-Taylor and Siegesmund 2018) seems a signal that the time is ripe.

Our discipline's reluctant embrace of the crisis of representation (Sherry and Schouten 2002) has discouraged researchers from rendering their temporal epiphanies in a format more suited to exploitation than conventional academic prose. Poets (e.g., TS Eliot and Gary Snyder) and novelists (e.g., James Joyce and Kurt Vonnegut) have long experimented with nonlinear narrative and problematized time, as have artists in other genres. The creative nonfiction style and privileging of informant voices characterizing some of the literature on retroscapes, as well as some of the verse emerging from the poetic turn in consumer research, offer glimpses of the potential that alternative genres have to sharpen our interpretation and enhance our understanding of consumers' experience of time. And the variety and quality of temporary in our liminoid travel (Turner 1974).

I imagine one method of engaging momentarity to be a mash-up of autoethnography and subjective personal introspection, an insight-based approach that is grounded in what Spitler (2014) has called "thick participation". Thick participation would move us beyond the interview-centric format that dominates consumer ethnography, opening our inquiry to more sensory modalities and genres of representation. Thick participation would seem to be a requisite for the thick description (Geertz 1973) to which we aspire, but achieving this more embracive immersion demands that we expand our methodological palette. Or dance card. Or sheet music . . .

Consider a temporal counterpart to critical incident analysis. Critical moment analysis (Wei 2011) might permit us to capture, represent and interpret momentarity in a way that would challenge our own tempocentric bias. So also might lyrical or oneiric moment analysis. Or ritual moment analysis. A full account would certainly tax our descriptive capabilities, and likely require a portfolio of techniques beyond that employed in traditional ethnography. I would ground the enterprise in a multisensory ethnography (Howes 2019) that borrowed approaches from arts-based research (Leavy 2019). I would also suggest that the researcher become the subject in the initial phase of calibration. Experiment on yourself before others. Try practicing a kind of procedural mindfulness by noticing each moment, examining it, and instead of letting it go to focus on your breathing, break the meditative cycle through an act of *occupandi temporis* by focusing relentlessly on the interruption, almost as if you were proactively day dreaming. I think of this practice as a seizure, in the sense of the suddenness of capture; the moment might have a Dionysian or Apollonian quality. Also as a caesura, a pause or a break in the action. You might also think of it as a freeze, as an insect trapped in amber, or a frieze, as form of storytelling. As you might suspect, one of my go-to disruptive *being-in-time* practices is poetry (Sherry and Schouten 2002; Brown and Wijland 2015). The goal of the practice is to dive deeply enough into temporal experience to produce a rich, resonant representation receptive to interpretation.

Provocations

For in a minute there are many days.
Juliet
Romeo and Juliet
Act III, Scene 5

In keeping with my Prologue, I capture three moments in the episodes that catalyzed this essay. The first poem-in-progress is a covid poem, the second a retirement poem, and the third a cicada poem. While they are original poetry, they might also be understood as poetic transcriptions or poetic translations (Rojas Gaviria 2021; Canniford 2012), insofar as they constitute a form of me-search (Brown and Patterson 2020). I will recommend additional techniques in a later section. Following these poems, I'll offer some insights into time that arise from their creation.

covid reverie

struck by the image,
dull afternoon reflection in low sun,
in a window pane rimed near
translucent with cobwebs, pollen, mold,
gone cloudy with seasons of neglect,
set in a rotting side door forced open in his search
for rake and shovel in a damp garage,
the freeze before flight or fight
helped him identify the shroud of turin
his face became - the countenance at least,
the matted beard, hair shaggy on the shoulders,
face etched with dispossession and fatigue,
the appearance less miraculous
than delivery from the plague that bred it
felt to him that moment,
that the visage he envisioned
might even better be the green man
better caught in better light
off to remake the world another time,
or simply just the wandering dude
abiding in the mist

indolence

first day retired
spent
glued to YouTube,
gleaning nuances of
head butt,
approaches and angles,
pivots and plants,
crush of crown on
cartilage,
marveling at options
to become a spear,
to launch a low grade
payload like a poor
old man,
the best defense
a good offense,
using your head
for the first time,
the rest of your
life

brood ex situ

muzzle buzzing with
her meagre meal,
determined to acquire the taste,
lips flickering over dry teeth,
she fails to hide her grimace
with every crispy crunch,
obliged to munch against the tickle,
my lab was a lawn sweeper
battening on bugs
so many years ago
years later,
a new lab pup

grew weary of my tales
of grueling passages these
new bugs would endure
to fill her belly,
of the feast they would provide,
so eager was I
to relive the joyous frenzy
of sudden long awaited plenty
through her jaws

the raspy doppler
death chant trill,
the maddening million
rain stick serenade,
the victory song as dirt
rains from the trees
and sparkling prizes slowly
shell themselves
has barely sounded
near my home this year

a shimmering translucent
solitaire
lies in state
on a sidewalk slab,
a glory and
a disappointment,
a quick sniff from my pup

prevents a pawing,
an unmissed snack time
passed on the cement

warrens pock the lawns
this year instead,
colonies of rabbits
plague the gardens
bunny fluffles
flourish in the yards.
their stunning silence
calls out to the dog,
indifferent poses
instigating chase

she scatters them
like billiard balls on felt,
taunting bucks and does
shake her embrace.
happy and exhausted
she trots home,
untroubled by nostalgia's
subtle tug
or dearth of manna
that defers our feast

In each of the poems, prosody and imagery work in tandem to evoke the presence of different kinds of time, and their relationships to one another. This evocation is about the power of immediacy, about inhabiting the moment, and is prior to any invocation or elicitation of meaning that the poems may entrain. Collectively they are a made object, wrought by a "maker-thinker" (Loveless 2019, p. 37) to produce as visceral an effect as a cognitive one. In *covid reverie*, the fluid intermingling of *chronos* dimensions is punctuated by *kairos* interruptions, as the time-outside-of-time epiphanies of self-discovery are triggered by intertwining mythological, spiritual, folkloric, cinematic and seasonal time markers. Placemaking becomes an invitation to time travel. Personal transformation unfolds in the temporal seam between natural and spiritual rhythms. In *indolence*, the protagonist is both immersed and suspended in time, in a timing-is-everything challenge to identity, a liminal temporality affording him a surprising and powerful new sense of agency. Implicit judgments and critiques of just-being, of cyber time or screen time, and of senescence are countered in an apotheosis that is itself a not so veiled jab at Richard II's declamation "I wasted time and now doth time waste me." In *brood ex situ*, a simultaneous unspooling of chronos dimensions, a *pas de deux* of interspecies temporality (culminating in a literal bunny hop alluding to physicists' metaphoric use of billiard balls to describe apparently paradoxical behavior of *chronos* time in wormholes), and a protagonist's ill-fated desire to repeat unique *kairos* experiences conspire to remind us that an epiphany is always at hand if we are alive to the fullness of time. The moments in these poems – the arrest of attention, the suddenness of insight, the sounds of silence, the beings-to-becomings, the sensuousness of time, time travel triggers, nostalgia and aiglatson – are presences to be appreciated in their manifold fullness.

I asked three poets to comment on the poems, and I offer these excerpts as an affirmation of my premise:

" . . . I found myself ascribing the weight of extraordinary time to the moments of sublimity in these three poems. . . . the characters are all frozen in anti-classical living pictures. In each piece there is a subject in contrapposto . . . and another that's inert, with evenly-distributed weight. I loved this before knowing why & am continuing to meditate on the choice . . . [T]he poet . . . emphasizes that wonderful stillness-in-action. The commas and line breaks figure the distance in "clicks" across the poem, which is an effect that resonates within the distance . . . set up between the physical shapes: face and glass; face and screen; crown of head and face; face and leash; leash, dog; dog, cicada. It also sets [the reader] up for the wonderful subversion & commentary that is thematic in each of these poems . . . ordinary time is sometimes defined negatively as time that isn't interrupted and antagonized by the extraordinary. . .

"*brood ex situ* . . . [shows how] the persona's expectations are not met, but a new, softer, less exotic experience emerges as its counterpoint. It works for me as a commentary on how youth's magic, wonder, and excitement can't be recaptured by the old, but that age allows us to appreciate, if not expect, such letdowns for the beauty they offer in their own right. . . . *Covid reverie* has some of the same ordinary-time and ageing theme as "*brood*," with a connection to a relic of a distant past that delivers its myth-magic through a Catholic tradition. The conceit is good. The questions, "Can this be real?" and "Can this be me?" linger with the inevitable but unfortunate yes answer to both. . . . [T]he overall image

is haunting . . ." I wish . . . [*indolence*] wasn't an ordinary-time experience for me. It pains me how much I relate to it in my now. [Across all my readings] . . . nostalgic memories of my own . . . didn't happen to me in the moment. Just now, however, [the] post-covid-man-ghost did transport me to an experience I had in my early thirties . . ."

"I recognize the extraordinary in ordinary times and the ability for the poetic voice to stir up . . . experiences kept at bay . . . ; but a flicker, a word, a sentiment fans these fires again with the same ferocity as before and in some cases I am back in that moment and feeling the pain over and over again. Buried, yet not deep enough. . . . The poems have afforded me the opportunity to walk through difficult moments and to relive emotions . . . It is in the ordinary that extraordinary takes flight and it is these insights that shape us and speak to our core.". . . *Covid reverie* . . . speaks to a very critical moment in my life . . . a life changer . . . This episode marks another key moment . . . the beginning and the end of a special life. The words . . . brought the day . . . back to me. . . . Both very vulnerable episodes and 'locked out' on many levels emotionally . . . In *indolence*, I am amused at the capturing of myself . . . [and] all the ordinary things I do in a day, which . . . shout life . . . The pandemic has given the 'luxury' of sloth and I for one fully bathe in it . . . In *brood ex situ,* I think of my [favorite] cat . . . and of his quirks and personality . . . I knew I would never have the like of him again. [Later], a feral cat . . . had 5 kittens . . . and [the] last was a double of [this favorite cat.] . . . I knew he was reincarnated and . . . this gift of having him back was all consuming. I was not going to lose him again. However, it was not to be. Now . . . a visitor coming over the garden wall . . . could be mark 3."

The sensuous nature of temporal experience, its flickering, protean character, and its ability to provoke sympathetic time travel in its relating come through in these commentaries. As objects of contemplation and vehicles for projection, the poems transcend the persona's account and invite readers to explore their own temporal fades and cuts, a kind of implicit and nondirective "future research" invitation offered by the poet.

Poetry is just one method of helping us be in the moment, opening up space for the imagination in representation and analysis (Ballestero and Winthereik 2021). Other time-unbinding genres abound. Photography and videography have become consumer research staples; the former has been dramatized in exhibitions by Barbara Olsen and Tom O'Guinn, and the latter institutionalized by Russ Belk and Rob Kozinets in the ACR Film Festival. Short stories (Schouten 2014; Brown and Kerrigan 2020) have made time travelling inroads into the discipline. Rob Kozinets and Usva Seregina have used painting to render momentarity visible, and researchers have deployed a wide range of other media in the art installations and curations at CCT conferences. Elizabeth Chin has employed dance at one of these conferences as well.

Other techniques are ready for importation from other disciplines. Flash ethnography is "compressed and intense, saturated with vivid imagery and affect; and crucially . . . self-enclosed: . . . a discrete whole, rather than an excerpt from a larger project; 800 words is the limit (Stone and McGranahan 2021, p. 2). McLean (2016, pp.152-156) recommends the creation of "fabulatory art" that challenges ethnography to move from "descriptive fidelity" to "poetic invention," that would assume the shape of montage. Both

Causey (2017) and Taussig (2011) have championed drawing as a way of knowing. Graphic novels have now appeared in consumer research (O'Sullivan and Kozinets 2020). Both juxtaposition (Vogel 2021) and ethnographic post cards (Danyi et al 2021) – thematic photo on the front, short commentary on the back, shared and work-shopped among collaborators – are approaches conforming to the literary technique of katachresis. Tonya Bradford and I have experimented with this approach in our study of vestaval. Songwriting creates resonance and nuance in our understanding (Jacobsen 2018). Just listen to Chris Hackley moan the "CCT Blues," (https://www.youtube.com/watch?v=n1pgyaiw610), or Wharton's *Brand Inequity* cover the auto-erotic momentarity of "Mustang Sally" (https://www.youtube.com/watch?v=wRGsLcdQaZI). Performance is yet another way of dealing with the crisis of representation (Butler-Kisber 2018). Alternative vessels for discovering and conveying insights into time are bountiful.

Conclusion

O time, thou must untangle this, not I.
It is too hard a knot for me t'untie!
Viola
Twelfth Night
Act II, Scene 2

Time is illusive and elusive. The "scholartistry" I propose is a "direct embodied engagement with the sensory qualities" of temporal experience (Cahnemann and Seizesmund 2018, p. 5). It requires a commitment to "polydisciplinamory" and "experimental multimodality" if it is to realize its potential as "research-creation" (Loveless 2019, pp. 2; 55; 57; 61). It is the apotheosis of transgressive interdisciplinarity, the love driving our pursuit of inquiry that impels such rhizomatic wandering among the many ways of knowing that comprise form as well as content. It is the creative engagement with these dimensions, the courageous tilting against canons, which our senior scholars need to model and sanction, so that our junior scholars are empowered and incented to research-create. Consumer researchers (Belk 1986; Holbrook et al. 1989; Sherry 1991) have long advocated more humanistic approaches than we have rushed to adopt. Journals beyond the flagships have begun responding to the call, and some conferences have made space for performances and curations. I'd love to see this trend go mainstream, with more researchers probing momentarity creatively. I hope some of you will start today. *Ars longa, vita brevis.*

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2021 ACR Fellows' Addresses

Seeing the Forest: A Sociological Perspective on Community in Consumer Research

Melanie Wallendorf, University of Arizona, USA

Thank you, David, for that touching introduction. I only hope I have lived up to your complimentary remarks.

I'm recording this speech in Tucson, Arizona, on land that has been continuously occupied by humans for over 10,000 years. I respectfully acknowledge that the University of Arizona sits on the land and territories of Indigenous peoples. Today, the state of Arizona is home to 22 federally recognized tribes, with the city of Tucson being home to the Tohono O'odham and the Pascua Yaqui.

Particularly given the topic of this address, I'm saddened to not be on a stage with David and my long-time co-author, co-conspirator, and friend, John Sherry. For the two of us to be receiving this award, and at the same time, is as unbelievable to me today as it would have been if someone had predicted it over 35 years ago when we began working together. At that time, our work on a team project that developed into the Consumer Culture Theory research area was critiqued by some in this very association as "not consumer research" and "not rigorous," to quote a few of the kinder descriptors. I'm deeply honored and moved that the field's evaluation of that work has shifted so profoundly over time.

I have chosen Community as the topic for this address, drawing on my background as a sociologist, to put forward some ideas that hopefully you haven't already thought of, but nonetheless will consider intriguing. That is a high bar. It means that, as a sociologist in a field of primarily consumer psychologists, I will have to entice you to be open to new ideas. I experienced early in my career what much research across many academic fields has found: openness to new ideas is *not* a characteristic hallmark of academics, despite their self-perception to the contrary. As Gary Zukav (1979) pointed out over four decades ago in his book *The Dancing Wu Li Masters*, "we clutch our ideas."

I've heard some consumer psychologists describe the difference between a psychological orientation and a sociological orientation to consumer research by stating that psychology studies individuals, while sociology studies groups of individuals. But from my perspective as a sociologist, that's not quite it. Instead, I would say that sociology studies community and society, attempting to understand people's positions in the social structures that pattern their connections to others.

Today I will try to persuade you to unclutch the idea that we are individuals, or at least unclutch that idea during this talk. That's right. I'm going to assert that the idea that people are individuals is a fabrication of our imagination. Instead, sociology views people as more like the coastal redwoods at Henry Cowell Redwoods State Park near Santa Cruz, CA where I have spent sabbatical and other breaks from teaching. There, I walk or hike among the *sequoia sempervirens,* the tallest trees in the world (Henze 2015). As Powers (2018, p. 142) writes about these forest trees: "There are no individuals. There aren't even separate species. Everything in the forest is the forest."

While their canopy is a fascinating ecosystem (Preston 2007), today I'm going to refer to the forest trees' connections to each other via their roots and a mesh of fungal strands that connects their roots. This mesh of fungi, called mycelium, is so dense in old-growth forests that one teaspoon of soil contains many miles of it (Wohllenben 2015).

I've learned from my former dissertation advisor, long-time mentor and friend, Jerry Zaltman (Zaltman and Zaltman 2008;

Lakoff and Johnson 1980), that we fathom new ideas by relying on metaphors, so I will use an arboreal one to drive this talk. These forest metaphors are based on the memoir by ecologist and silviculturist, Suzanne Simard (2021) titled *Finding the Mother Tree: Discovering the Wisdom of the Forest*; the Pulitzer prize winning novel by Richard Powers (2018) titled *The Overstory*; and the natural science volume by Peter Wohlleben (2015) titled *The Hidden Life of Trees: What They Feel, How They Communicate;* as well as other sources (Baker 1956; Hageneder 2005; Sheldrake 2020; Thoreau 1972/1864). As my former professor, mentor, colleague and friend, the late Sidney Levy, once observed, the good news about getting a Fellow's Award is having a year to prepare a speech, but the bad news is having a year to obsess about a it.

What do I mean when I say sociology studies community? I don't mean that it studies the nodes in a social network, where the individuals who are connected are the focus. Instead, I mean that sociology takes the perspective that the whole of what we are is defined through our connections and the social structures that undergird and pattern our behavior. Sociologists, then, study the equivalent of the mycelium strands in the soil that connect the trees, rather than studying the trees themselves.

The arboreal world of the old-growth forest has much to teach us about community. Old-growth forests "are at least 150 years old with a diverse ecosystem that has largely been left undisturbed by human impact or intervention" (Sloss 2021, p. 8). The old growth forest is a community of trees intricately connected and differentiated through the half of their biomass that exists underground (Wohlleben 2015). Powers (2018, p. 3) expresses this idea by giving voice to the trees as they address humans: "Your kind never sees us whole. You miss half of it, and more. There's always as much belowground as above."

What exists below ground in the forest is similar to the social structure that sociologists study. It isn't visible, and isn't even something that most people are conscious of as a force shaping their lives. Particularly in individualistic, Western societies, people view themselves as consciously directing their lives, rather than as making choices that are deeply rooted in and reinforcing of their positions in social structure. Forest trees communicate through the soil fungi that connect their roots in what the journal *Nature* termed a "wood wide web" (Simard, 2021, p. 165). The word *fungi* may bring mushrooms to mind, but really mushrooms are the ripened fruit of the fungal strands below the surface (Sheldrake 2020).

Consumer research's historical grounding in psychology has produced much fascinating research. However, it has also blinded the field, such that it sees the individual trees, and not the underground forest of social structure and its community connections.

Forest ecologists' knowledge about old-growth forests prompts important research questions about community and consumer behavior that have been understudied. I will overview questions that arise from considering the old-growth forest in these four arenas of consumer research: (1) cooperation and care, (2) responses to inequality, (3) dependence on climate, and (4) time frame.

Cooperation and Care

The interconnected community of trees in an old-growth forest is characterized primarily by cooperation and care rather than competition (Simard 2021; Wohlleben 2015). The fungal strands provide

water and nutrients from the soil to the tree, and the tree provides sugars produced through photosynthesis to the fungal strands. They are mutually supportive, but without tracking how much they owe each other. Through the fungal strands, trees communicate and provide resources to other trees within their community. In stressful times, different species can alternate giving and receiving; for example, in summer at the height of their photosynthesis, the birch give carbon to Douglas firs, but in spring and fall, the firs give more carbon to the birch (Simard 2021). Trees can differentiate their own roots from the roots of other trees, sensing which roots belong to their kin, or to their same species, or to other species (Simard 2021). Together they construct a mutually protective ecosystem. As Powers (2018, p. 453) notes, "A forest knows things. They wire themselves up underground. There are brains down there, ones our own brains aren't shaped to see."

The fungal strands containing that knowledge are severed when trees are transplanted, turning planted trees into loners (Wohlleben 2015). This means a planted tree does not have a network to call upon for resources or information about nearby dangers, so it is more fragile, and dependent on humans for irrigation and fertilizer. Even with this care, loner trees do not reach the height of the same species of trees in a forest, because, as with humans, reaching one's full potential requires the support of a community (Wohlleben 2015).

Human communities are also built on reciprocal relationships. We have long known that when those relationships are strong, the community is more resilient (Durkheim 1933/1893). Yet only a small portion of consumer research considers existing reciprocal relationships (for examples, see: Epp and Velagaleti 2014; Thomas, Price, and Schau 2013). The term *sharing economy* has been used to describe peer-to-peer, short-term rentals of possessions through an online platform (Sundararajan 2016), but that term is a misnomer, so I won't use it. When my mother told me to share my childhood toys with my younger sister, she certainly did not mean I should rent them to her.

Instead, I'll use Arnould and Rose's (2015) terminology to refer to these as relationships of mutuality, through which much consumption occurs. Mutuality raises research questions about how households manage their joint use of property, such as cars, in ways that prevent conflict. It also poses questions about what kinds of families or groups are more successful in managing mutuality in use of their possessions. Further consideration of the care and cooperation of mutuality generates research questions about the neighborhood networks through which consumers occasionally give neighbors a ride or help each other move big pieces of furniture or lend each other the proverbial cup of sugar. An interest in mutuality presents research questions about the networks of kin and friends through which used baby equipment and children's outgrown clothing circulate, in what we might call the *kula* (Malinowski 1922) of the cradle.

When and how do social bonds provision consumers with what they need, beyond the reach of the market? Are those bonds in fact, as popular belief asserts, less strong today than in the past? To what extent are craigslist and eBay supplanting relations of mutuality, replacing the care and cooperation of social networks with monetary exchange between strangers? What are the effects on community of such platforms?

Or, were neighborhood bonds of mutuality reinvigorated through shared consumption at driveway happy hours during COVID lockdowns? How did these events come about? Did consumers temporarily "make do" with happy hour with the neighbors or did they forge new connections, forming mycelium strands to draw upon later? Which kinds of neighborhoods are more robust as a result and which kinds are more fragile, having separated rather than connected consumers?

A counter-trend to mutuality is the privatization of what used to be public life. Privatization represents a consumption shift in society's bedrock about which our literature is almost silent. Gated communities privatize the provision of security for those who can afford to live there. Backyard swimming pools privatize what used to be a community gathering place, although one with a complex social history regarding its role in both gender and racial segregation in the U.S. (Wiltse 2007). Reliance on private cars rather than public transport separates us from contact with those who may be different from ourselves. All of these forms of privatized consumption may erode community ties, at a long run profit to some firm. They turn consumers into loner trees, rather than members of a forest ecosystem. What are the collective consequences of privatized consumption?

Forest trees cooperate by growing outward until their branches reach another tree's branch tips (Wohlleben 2015). After that, they don't grow outward anymore, because that light is already taken. They aren't greedy. They seem to know that each tree should take only its share of the community's resources. Could consumer research discover when and how consumers might act similarly, only taking their proportional share of available resources because it is in the best interest of the community, and ultimately, in their own best interest as a member wanting that community to persist? More consumer research is needed on how to get consumers in a community facing long-term drought to use their scarce water resources with the community's best interest in mind (see Phillips and Ozanne 2017).

Responses to Inequality

Turning to the second arena: Let's consider responses to inequality in access to resources. Not all tree seedlings take root in equally fertile soil with equal access to water and sunlight. Some sprout in rocky soil or soil with less water than nearby trees. Some have little access to sunlight, being shaded by larger trees. As a result, not all seedlings live. But one of the functions of the mycelium strands is to help redress structural inequality, to send help to young trees attempting to grow where fewer resources are available. The kin seedlings near a Mother Tree grow faster than other seedlings because the Mother Tree sends them more carbon. Interestingly, the Mother Trees are bigger when they are near kin seedlings, so they are also benefiting, not just being depleted by the kin seedlings (Simard 2021).

But if the Mother Tree also faces scarce resources, it has less to send to its seedlings, and the community is further weakened by not growing strong young trees. Strength begets strength, and weakness begets weakness, escalating inequality. Providing care through cooperative mutuality mitigates, but does not eliminate, inequality in access to resources.

Contemporary consumer culture has not learned how to mitigate inequality. Instead, economic inequality is sharply increasing within the U.S. (Horowitz, Igielnik, and Kochar 2020) and within most countries globally (UNDESA 2020). Economic inequality goes hand-in-hand with consequential consumption inequalities: in access to affordable housing, nutritious food, and adequate medical care. At its core, economic inequality is a central component of racial and ethnic inequality.

The consumption problems that arise from inequality are not widely studied in consumer research, most of which assumes consumers can choose from a plethora of products and services (for an exception, see Martin and Hill 2012). But what could we learn if we studied economically challenged consumers making highly constrained choices? More broadly, when the housing property value

that a child's parents can afford to buy determines funding levels for that child's public school, as is done in the US, inequality is perpetuated because of unequal fertility of the educational soil in which children grow. How can we expect to have equal outcomes for children if we don't fund schools equally or better yet, equivalently?

Economic inequality and its associated consumption inequalities persist despite their negative effects on everyone in a society, not just those at the bottom. Epidemiologist Richard Wilkinson constructed an index of social indicators that affect everyone, such as life expectancy, literacy, high school graduation rates, homicides, child wellbeing, mental illness and addictions. His team then explored differences among 23 relatively rich, market democracies (Wilkinson and Pickett 2010; Wilkinson 2011). Paradoxically, they find that well-being in developed societies is not dependent on average income levels, but is strongly dependent on there being relatively low levels of economic inequality.

Only when economic inequality is substantially reduced will the consumption equality that is assumed in much of our research become a reality.

Dependence on Climate

The third arena of questions raised by knowledge about the old-growth forest concerns dependence on climate. Forest trees are completely dependent on local climate; a tree can't move to find a better climate. We aren't that different; at present, we can't move to another planet if this one becomes uninhabitable. But trees are not actively involved in destroying their environment. In fact, they are doing everything they can to preserve ours. Trees store up to 22 tons of carbon in their trunks, branches and roots (Wohlleben 2015). After a tree dies, it turns that carbon to humus, and then to coal. Every functioning ecosystem must have a mechanism for eliminating its detritus.

Consumer culture has moved in the opposite direction, relying on indestructible plastics and difficult-to-replace coal. The coal we consume today is from trees that died 300 million years ago. Contemporary worldwide deforestation means that new coal is not being formed at the rate it is being burned to fuel consumer society. As Powers (2018, p. 286) phrases this idea: "We are cashing in a billion years of planetary savings bonds and blowing it on assorted bling."

Consumer research could address how to get consumers to make consumption choices that help improve the environment, acting like poplars and willows that clean soils of chlorinated solvents and remove heavy metals. What are the social network effects that can accelerate change in consumers' behaviors? Cotton shopping bags and recycled cans won't save the planet. Dramatic consumer change on a mass scale is needed quickly.

It is past time for consumption's role in climate change to be peripheral in our literature. We can't stand by, studying the minutia of consumer behavior while the planet becomes ever-more inhospitable to human life.

Time Frame

For a fourth arena of consumer research questions, let's return to the fact that old-growth forests are at least 150 years old. Forest trees live on a different time frame than humans. Coastal redwoods can live longer than 2,000 years (Hageneder 2005). Pondering these trees shifts us to a slower, longer time frame. In old growth forests, few changes are noticeable in a person's lifetime (Wohlleben 2015). Each time I return to Henry Cowell Redwoods State Park, its largest tree seems unchanged, blessedly not harmed by recent nearby wildfires.

By comparison, most consumer research studies phenomena that occur in a very short period of time. Understandably, most consumer research is chosen to fit the time frame of researchers' careers. Tenure decisions are made after six or seven years, where each article may take at least a year to get through the review process, pushing researchers to try to complete projects quickly. Each study in a paper may be based on a lab experiment that took no more than 15 minutes for participants to complete, with student subjects drawing from little long-run life experience. mTurk tasks take so little time that participants are paid in cents. Even ethnographers often visit a fieldsite only sporadically for a year or two, or only interview informants for an hour or two. By the time frame of trees, those are all very short time frames.

Wide open for study are the consumer behaviors that take place over a longer time frame. Imagine the advance in our understanding if some consumer researchers set up a panel early in their careers, and then tracked those same people across time regarding their purchase decisions and consumption, and then published each new discovery. Yes, of course, finding funding and repeatedly tracking down people pose challenges, but the rewards would be immense.

It is possible to do. For example, the Harvard Study of Adult Development studied 724 male participants every two years, starting in 1939 when they were 18 or 19 and continuing for over 80 years. Over this time, the project expanded to also study their wives, and their children. This Second Generation Study is examining the impact of childhood experiences, documented contemporaneously rather than retrospectively, on their health in midlife. The project has spanned several generations of researchers and has had 4 directors (Waldinger 2015).

Similarly, the Nurses' Health Study (https://nurseshealthstudy.org) has been continuously funded by the National Institutes of Health since its first wave of data collection in 1976. Every two years, health data has been collected from the original sample of over 121,00 nurses, with a younger cohort added in 1989. In 2010, the study expanded to a wider variety of health care workers, both male and female. In most waves of data collection, the response rate is around 90%.

What if a consumer researcher studied the consumption experiences of a group of children, and then tracked their consumption through their lives? What could we learn about how people become particular kinds of decision makers and consumers? Might we learn how some patterns of consumption persist in families over time?

Even a dead tree continues nurturing its offspring. Its wealth of stored water and nutrients are released through the efforts of insects and fungi to other nearby plants and especially to the tree's offspring. The Mother Tree, the hub that has seeded other trees around it, thereby transfers its knowledge of what is helpful or harmful to the next generation (Simard 2021).

Consumer research knows little about the intergenerational transfer of possessions and wealth, or about large bequests to charitable and not-for-profit organizations (for exceptions, see Bradford 2009; Curasi, Price, and Arnould 2004; Türe and Ger 2016). Our literature is mostly silent about this key driver of social structure. Yet, these wealth and property transfers are a primary cause of the intergenerational stability of economic inequality mentioned earlier. Perhaps studying these transfers could uncover ways to redress some of the growing inequality that threatens society's political stability.

If a tree dies by no longer being adapted to the environment in its location, it sends its resources to the incoming species,

sharing knowledge to help them, a form of welcoming and helping a new generation of immigrants (Simard 2021).

What ways of welcoming and helping immigrants adapt to a new consumer culture are most effective? While some consumer research on this topic has been done (Wallendorf and Reilly 1983; Peñaloza 1994; Oswald 1999; Askegaard, Arnould and Kjeldgaard 2005; Leudicke 2015; Veresiu and Giesler 2018), there is still much to learn about the longer term processes by which refugees, asylum seekers, and other categories of immigrants become rooted in their new consumer context. What is the role of consumer products firms and other corporations in welcoming them? How can their resettlement processes occur such that immigration does not exacerbate inequality?

In summary, consumer research that regards each individual as a separate person, equivalent to all other humans, in what Simard (2021, p. 288) calls "reductionist science," vastly oversimplifies human life. It misses people's connections in an ongoing community that profoundly directs the resources they have access to, the opportunities presented to them, and the choices that make sense to them, whether or not they are aware of social structure's impact on them. In looking at the ACR logo, notice that it has always had the idea of a connected community embedded in it; the three figures are holding hands.

In closing, I'd like to again express my deep appreciation in receiving this award.

Thank you for your openness in listening to this talk. I hope I have met the bar of providing some ideas that you hadn't already thought of, yet nonetheless find intriguing.

And finally, I encourage you to connect with other ACR members as you would if you were leaving a big room where this speech was given. Ask them, "So what did you think about the fellows' speeches?" In doing so, you will be fostering the connections that constitute a community, the network of mycelium strands beneath the surface.

And please, don't disappear in the community of trees. I'd love to hear from you, and would welcome your questions or comments. Thank you.

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Competitive Papers—Full

Types of Possessions Associated with Physical Attractiveness

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INTRODUCTION

A few years back I remember seeing this attractive woman waiting for her flight at the boarding area. This woman was a stranger to me. Based on her looks, this is what I thought, "given her supermodel-like figure, she must never touch stuff like burgers or fries", "her bag although I do not see any brand name or logo on it seems like Hermès", and "her earrings look like they are from Tiffany & Co". In hindsight, sometimes I question myself as to why my notions about her were not something like "she loves eating burgers and fries", "her bag is from a thrift store", and that "she made her own earrings". Thinking back, I also wondered if I made similar assumptions about physically attractive people as a child. And the answer was yes. For example, as a seven-year-old, I believed that pretty girls lived in a room that had pink walls, slept on bedsheets that had pictures of princesses, and owned things such as stickers, glitter pens, and colorful feathers.

Psychologists refer to my response as the beauty-is-good stereotype (Langlois et al. 2000) or the halo effect (Nisbett and Wilson 1977) i.e., having certain perceptions about a person solely based on their external appearance. Beauty stereotypes exist in adults and children. Studies reveal that both grownups (Dittmar 2007) and kids (Thomas 2020) consider external beauty and luxury goods as cues for high-status. Examples of things that adults see as being luxurious include "fashionable ski outfits, upscale wines" (Sundie et al. 2011, p 664), "outdoor grills, sub-zero freezers" (Wang and Griskevicius 2014, p 835), "fur, fine china, pearl necklaces, and oriental rugs" (Richins 1994, p 512). Currently, the extant literature shows us the types of material possessions that adults link with high-status. But it is not definite in the extant literature if the material goods that children perceive as status related are the same as adults. Past research shows that children connect expensive things with attractive people and cheap things with less attractive people (Thomas 2020). However, we do not clearly know yet what these expensive or cheap possessions are in the minds of children. Therefore, the primary objective of the present research is to address this gap present in the extant literature.

THEORETICAL BACKGROUND

People and Possessions

People form bonds with possessions (Richins 1994) and sometimes think of them as being an extended part of themselves (Belk 1988). A college diploma, a wedding ring, family photos, and heirlooms are a few examples of material things people consider much-loved, special, treasured, and priceless (Ferraro, Escalas, and Bettman 2011). Possessions provide a sense of stability and security to humans. For instance, when people move from one place to another, they take certain things such as, artifacts, souvenirs, or furniture with them to preserve old memories and create familiarity in the new environment (Mehta and Belk 1991). Possessions help people relive the past and embrace the future. Older individuals use possessions to reminisce their early days (Price, Arnould, and Curasi 2000), while others hold on tightly to possessions received from someone beloved who is no longer alive (e.g., a gift received from a parent or grandparent). When people have to let go of their cherished possessions, they tend to experience intense grief, a period of mourning, and a feeling of identity loss (Ferraro et al. 2011).

Possessions also have a superficial angle attached to them. People use material objects to mark their status or class in society (Han et al. 2010). This kind of behavior is referred to as conspicuous consumption (Veblen 1899). Conspicuous consumption occurs when individuals feel the need to flash luxury items in front of others to be seen as superior or a person of high-class. Sometimes conspicuous consumption goes to an extreme degree where people diverge or completely stop consuming certain material goods to preserve their status in society (Berger and Heath 2007; 2008). For instance, individuals with ancestral wealth might avoid purchasing or using specific material possessions that are popular among the newly rich (Berger and Heath 2007). Like adults, children also engage in conspicuous consumption. Previous studies show that children use branded goods to signal identity, gain popularity, and seek high status among peers (Chaplin and John 2005; 2007; 2010). And when children are seen consuming non-branded goods instead of branded goods they are often ridiculed, pestered, and bullied by their peers (Wooten 2006).

External Appearance and Possessions

This article focuses on the relationship between beauty and material possessions. Previous research reveals that people associate happiness, success, and self-worth with individuals who are attractive and own luxury goods (Dittmar et al. 2014). The lifestyles of the good-looking and the wealthy are commonly described as the "beautiful-material-good-life" (Dittmar 2007). Studies indicate that the ownership of luxury items creates a halo effect. For example, men who show off their expensive possessions are viewed as more attractive (Sundie et al. 2011). Similarly, women who flaunt their designer handbags and shoes are seen as being more fashionable and pretty (Wang and Griskevicius 2014). While many studies have examined the beauty-material possessions link in adults, research done using children as participants is relatively less. Even though prior work shows us that children, like adults, connect expensive items with attractive people and in-expensive/cheap items with unattractive people (Thomas 2020), there is less clarity as to what these items actually are. Hence, the present research addresses this gap in the extant literature by revealing the types of material possessions children relate with attractive and less attractive individuals.

METHOD

Drawing Method: Past studies have used drawings as a tool to understand children's inner most thoughts especially in contexts where children have struggled to express their feelings verbally (Cherney et al. 2006). Hence, in the present research, a drawing method was implemented to identify the types of possessions children associate with attractiveness.

Participants: Two hundred and twenty-two children (55% females, M_{age} = 8.99) were recruited from three public schools. These children belonged to middle-income families. Required permissions and ethical approvals were taken before the commencement of this study.

Procedure: The children took part in the study while seated in a classroom at their respective school. Each room had approximately twenty children. Two students shared a table. Each participant was given an A3 size sheet of paper and a box of twelve color pencils. The paper was divided into two halves using a black line. The participants were asked to draw children of the same gender as themselves. Girls were asked to draw a picture of a "pretty girl" on the left side of the paper and a picture of a "less pretty girl" on the right side of the paper. Similarly, boys were asked to draw a picture of a "good-looking boy" on the left side of the paper and a picture of a "less good-looking boy" on the right side of the paper. When the drawings were completed, the participants were asked to answer the following question, "what types of things do the characters in your pictures own"? The entire activity took approximately an hour. At the end of the activity, the children were thanked for their participation and were asked to keep the box of twelve color pencils as an incentive for taking part in the study.

Data Analysis and Validity: To analyze the drawing data, Braun and Clarke's (2006, p 87) thematic analysis process was employed, which involved, familiarization with the data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and preparing themes. The data analysis was a back-and-forth process. I also requested an independent person to code 25% of the data to ensure cross-coder reliability.

FINDINGS
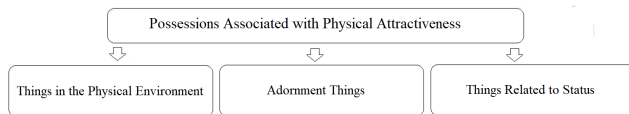
Figure 1 The Main Themes

Figure 1 shows the main themes obtained from the data analysis.

Theme 1. Things in the Physical Environment: The theme physical environment is defined based on the background that children drew around the pictures of their main characters. The analysis revealed that children represented dissimilar physical environments for attractive and unattractive individuals. For instance, in eight-year-old Lucy's drawing (see Figure 2) the pretty girl's picture has a background that has two trees, two butterflies, a green-colored cloud-like structure, sunshine, two blue flowers, an orange flower, and a red balloon. Lucy on the other hand has not drawn any background in the less pretty girl's picture. Similarly, in 9-year-old Sam's drawing (see Figure 2), the good-looking boy's picture has a backdrop of green grass and blue skies. However, the backdrop in the less good-looking boy's picture has no color. Female participants, in particular, have linked the world of the pretty girl with glitter, sparkles, flowers, blue skies, sunshine, and lots of colors. In contrast, the less pretty girl's world has been connected with bugs, insects, spiders, lizards, dark clouds, trees with no leaves, garbage, and a colorless world.

Theme 2. Adornment Things: *Adornment goods are possessions people use to enhance, rectify, and camouflage their physical appearance (*Bloch and Richins 1992*).* The female participants described the pretty girl to own lots of dresses, shoes, jewelry, handbags, and makeup. On the contrary, the less pretty girl was perceived by female participants to own plain-boring clothes and accessories. For example, in 10-year-old Anne's picture (see Figure 3), the pretty girl is seen wearing a fancy purple dress with flower-like patterns on it. Anne has also drawn a golden crown, a blue necklace, pink stockings, and a pair of purple high heeled ankle boots for the pretty girl. In contrast, Anne has sketched a blue colored dress with messy patterns for the less pretty girl condition. The data analysis showed male participants having similar perceptions. For instance, 11-year-old Kevin visualized the good-looking boy wearing a multi-colored shirt, a pair of pink pants, and dark green pointed shoes. On the other
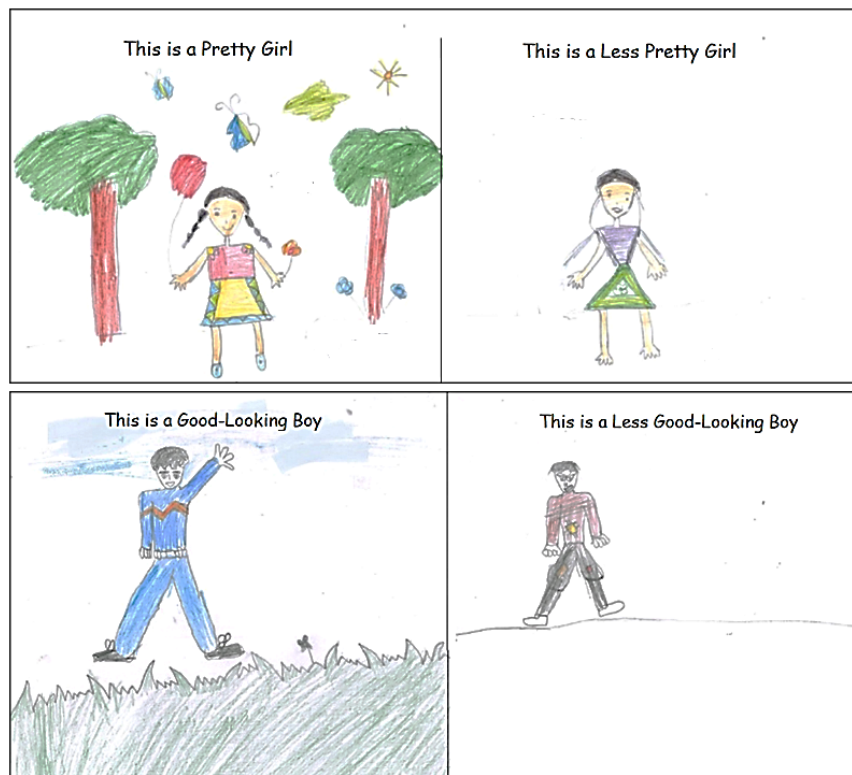
Figure 2 Lucy and Sam's Drawings Depict the Things in the Physical Environment Associatedwith Attractive and Less Attractive Individuals

hand, Kevin has imagined the less good-looking boy in some form of yellow clothing and no shoes on his feet (see Figure 3).

Theme 3. Things Related to Status: When asked about the types of possessions attractive individuals owned both boys and girls mentioned that the attractive person owned expensive electronics such as computers, laptops, tablets (iPad), and mobile phones. The male participants indicated that the good-looking boy had video-games such Xbox and PlayStation, cars, buses, a bike, an airplane, a football, a bat, remote-control toys, and JCB branded toys (a popular construction equipment brand). Male participants stated that the less good-looking boy owned pictures of the devil, non-branded toys, broken toys, a knife, and things that resemble lizards or spiders". Similarly, according to female participants the pretty girl had Barbie dolls and cute stuffed animals whereas the less pretty girl owned dolls that were cheap, ordinary, and ugly. Both male and female participants emphasized that the attractive child had lots of money, lived in a big house, and slept in a cosy well-decorated room. By contrast,

the descriptive words used for the less attractive child was that they were poor, had very little or no money, and lived inside a hut.

CONCLUSIONS

The present research is the first to identify the types of material possessions children link with attractive and less attractive individuals. The present research is also the first to use drawings as a method to understand the relationship between physical attractiveness and perceived ownership of material possessions.

The first theme "things in the physical environment" is a novel finding that emerged from this research. Children in their pictures have depicted a perfect world for beautiful people and the opposite for those that are not so good-looking. One can presume that there are low chances of adults connecting things like balloons, ribbons, hearts, rainbows, and butterflies with attractive individuals and dry-lands, rain, pictures of the devil, insects, spiders, and lizards with unattractive individuals. But the drawing data demonstrates that children equate the above things to attractive and unattractive persons.
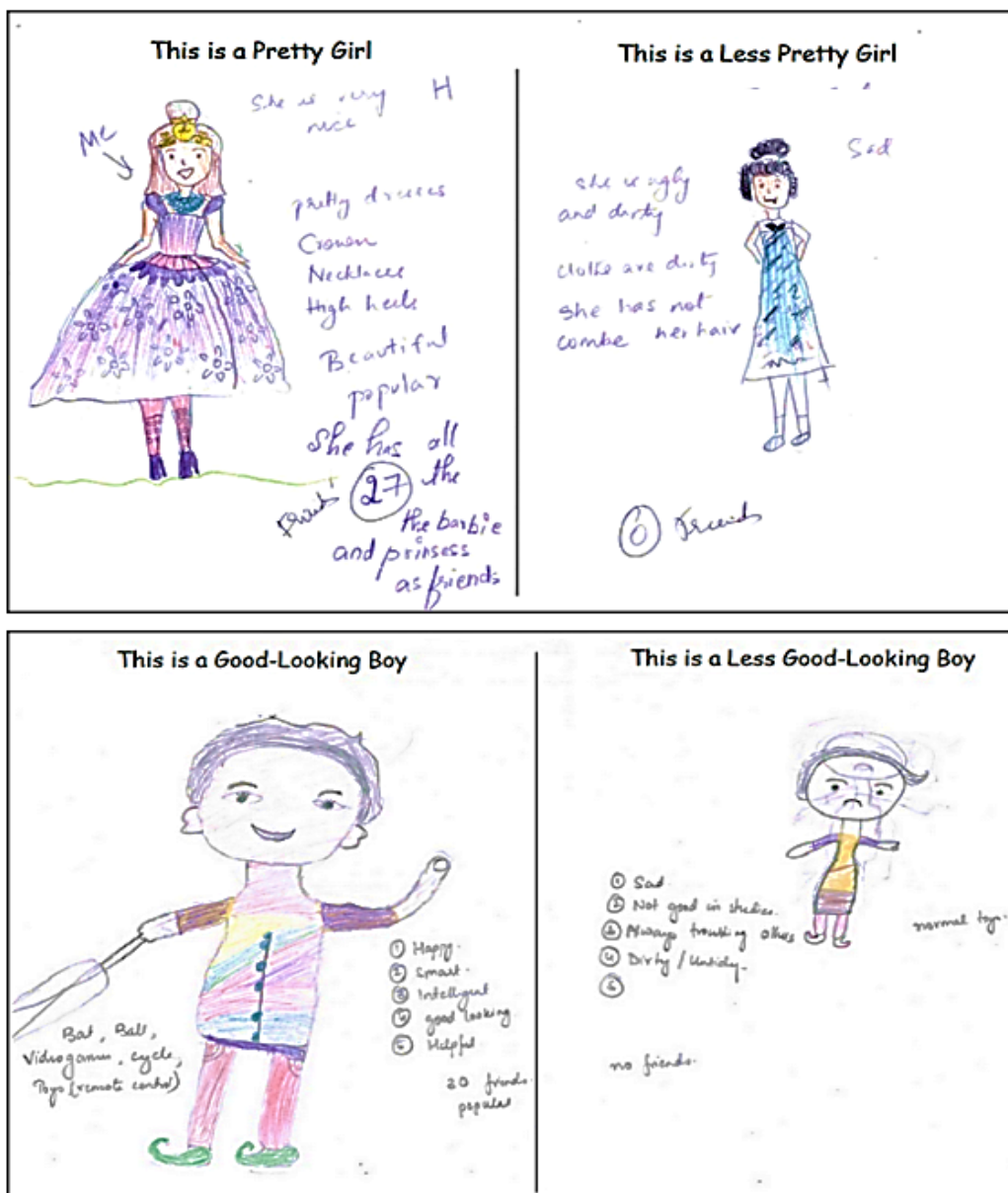
Figure 3 Anne and Kevin's Drawings Depict the Adornment Things Associated with Attractive and Less Attractive Individuals

Figure 4 Sarah's Drawings and Descriptive Words Depict Status Related Differences

This theme highlights the point that the halo effect or the beauty-is-good stereotype goes far beyond binary judgments.

The second theme "adornment things" align with prior work. For example, Bloch and Richins (1992) showed that people use adornment goods such as jewelry, makeup, clothing, shoes, and other accessories to enhance their physical appearance. The findings obtained from the present research illustrates that the adornment things children relate to attractive individuals are very similar to adults.

The third theme "status-related goods" tells us that children like adults' believe in the concept of the beautiful-material good life (Dittmar 2007). However, the findings reveal that the material possessions children consider as being luxurious are not the same as adults. For example, children view branded toys as high-status goods and perceive attractive individuals to own such goods. A reason why children consider branded toys as being high-status related may be attributed to the fact that branded toys are one of the most heavily advertised products in children's media (Fetters 2020). Even though few adults may have a hobby of collecting branded toys (e.g., Legos or Marvel characters) most adults do not use branded toys to feel superior to others.

The findings also show that children associate electronic goods with attractive people and consider it as a cue for high-status. Material parenting (Richins and Chaplin 2015) may perhaps be an explanation for this linkage. In many households' children are given

electronic goods as a reward or punishment for displaying good or bad behavior. For example, some parents say things like, "I'll give you the iPad if you finish your homework" or "I won't let you play with my phone if you fight with your little brother". Since children think of attractiveness as being a positive feature and the consumption of electronic items as rewards, they are possibly connecting the two together. Future research can examine the above relationships more explicitly.

The results obtained from this research are important because there is discrimination against people based on how they look. Research shows that stereotypes/biases in any form are found to be detrimental to children's growth and development (Bigler and Liben 2006). Interventions are therefore needed to change such perceptions in children. Children need to be taught to be accepting of others irrespective of the things they own and the way they look. Although the scope of this research was to identify the types of possessions children perceive with attractive versus less attractive others, the findings could imply that these are the same possessions children see as being significant for themselves. Future research needs to be undertaken to confirm this fact.

The limitations of this research are as follows. In the present study, girls drew pictures of girls and boys drew pictures of boys. Future research can look at reversing the condition, wherein girls draw pictures of boys and boys draw pictures of girls. This will al-

low us to understand what girls (boys) perceive attractive and less attractive boys (girls) to own. Lastly, this research does not provide the reasons why children hold beauty-material possessions related to stereotypes. Additional studies need to be conducted to answer this question.

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Understanding Beauty Stereotypes Using the Big Five Labels

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INTRODUCTION

Tom (not his real name) is a 9-year-old boy. He has drawn two pictures. The first picture is that of a good-looking boy and the second of a less good-looking boy. This is how Tom describes the characters that he has drawn. "*The good-looking boy is very handsome. He is very happy. All the girls come to him. He is a great dancer. He has fourteen friends. He loves to play videogames. I want to be this boy. He is me. The less good-looking boy does not do his homework. He does not listen to his mother. He likes touching bad things. He is unhappy. He has zero friends. He has no power. I do not want to be this boy*". Tom is one of the participants of this study (see Figure 4).

Past research shows that children like adults link positive traits with attractive people and negative traits with unattractive people, this bias is commonly known as the beautiful-is-good stereotype (Dion 1973; Dion and Berscheid 1974). Currently, we know at the surface level the traits children normally connect with attractive and less attractive individuals. However, there is still a need for further research to understand these traits at a deeper level. For instance, personality theories have not been used as frameworks to understand the beautiful-is-good stereotype in children. In other words, prior work reveals to us the general traits children relate with physical appearance, but these traits have not been organized and grouped in a structured manner to fully recognize the perceived personalities of attractive and less attractive individuals. Hence, the present research addresses this gap by examining beauty stereotypes in children using the big five labels i.e., (1) openness to experience, (2) conscientiousness, (3) extroversion, (4) agreeableness, and (5) neuroticism (Goldberg et al. 1992).

The present research is important for the following reasons. First, having stereotypes of any form is detrimental to a child's mental growth and can have an adverse impact on the kind of person they become in the future (Bigler and Liben 2006). Second, stereotypes can lead to discrimination, prejudices, and unfair treatment of others which can result in emotional and physical pain for the victim (Dovidio and Jones 2019). Lastly, perceptions of others are sometimes based on self-perceptions, referred to as the assumed similarity bias (Cronbach 1955). And so, if a child is associating positive personality traits with an attractive individual and the opposite with an unattractive individual it can also imply how the child is perceiving themselves. In other words, if a child thinks that they are attractive they may consider themselves superior to others and if they think they are unattractive they may perceive themselves as being inferior to others. Either of these thoughts are unhealthy for a child to have during their development.

In the example stated at the beginning of this paper, one can see that Tom not only aspires to be the good-looking boy ("I want to be this boy"), but he has also called himself the good-looking boy ("He is me"). The concerning part is that Tom has made it clear to everyone that he does not want to be associated or called as the less good-looking boy. Given the negative impact of stereotypes, a deeper understanding of the physical attractiveness biases is crucial for prevention, intervention, and bringing about changes in children's thinking and behavior.

THEORETICAL BACKGROUND

Physical Attractiveness Stereotypes

The extant literature on the beautiful-is-good stereotype in children is centered around friendships, peer popularity, and behavioral characteristics (e.g., Dion 1973; Griffin and Langlois 2006; Langlois and Stephan 1977; Rennels and Langlois 2014). For instance, children rate their attractive peers to be friendlier, kinder, smarter, and more popular than unattractive peers (Griffin and Langlois 2006; Langlois and Stephan 1977). These findings hold true even when attractive peers display aggressive behaviors. Prior research has also shown that when children are told to imagine a good and bad individual in their mind and then asked to identify which of the two individuals in their imagination is beautiful or ugly, children tend to refer to the good person as being attractive and the bad person as being unattractive (Ramsey and Langlois 2002). Overall, the beautiful-is-good stereotype literature reveals the positive and negative traits children associate with individuals based on their physical appearance. The present research extends prior work by providing a deeper understanding of the perceived personality types of attractive and unattractive people by organizing the general traits into categories using the labels from the big five.

The Big Five Labels

The big five framework of personality traits has been widely used by researchers to understand individual differences in people's thoughts, feelings, and actions (Cobb-Clark and Schurer 2012; Goldberg 1992; Komarraju et al. 2011; Roccas et al. 2002). The big five traits of personality consist of (1) openness to experience: individuals who are high in the openness to experience factor tend to think out of the box and are generally inspired and motivated to try out new things. Whereas individuals who are low on the spectrum are seen as being less creative and are prone to choose routine over variety. (2) Conscientiousness: individuals high on the conscientiousness dimension are likely to be goal-oriented, methodical, and responsible. But those that are low on the conscientiousness dimension are said to be unorganized, irresponsible, and impulsive. (3) Extroversion: individuals high in extraversion are talkative, gregarious, and social. They usually seem comfortable around others and are often regarded as the life of a party. However, those who are low on extraversion (high on introversion) tend to be thoughtful, quiet, and reserved. (4) Agreeableness: individuals high on the agreeableness factor are usually sweet-natured, helpful, sensitive, and affectionate towards family, friends, and even strangers. Individuals who are low on this spectrum are aggressive, insensitive, and cruel. (5) Neuroticism: Individuals who are high in neuroticism tend to be anxious, worried, sad, insecure, and emotionally unstable. Those low on the dimension are calm, happy, secure, and stable. This research uses the big five labels to understand the beautiful-is-good stereotype in children as it helps to organize the perceptions in a more structured manner

METHOD

A drawing method was implemented to understand physical attractiveness stereotypes in children. This technique has been successful in the past to understand children's inner most feelings and experiences (**Cherney et al. 2006**).

Participants: 122 girls and 100 boys took part in the study (M_{age} = 8.99). These children were from middleclass households. The study was ethically approved, and permissions were taken from required authorities.

Procedure: The study was conducted at the children's school. Each child was given a sheet of paper divided by a black line and then asked to draw pictures of an attractive person on the left and a less attractive person on the right. The gender of the characters in the pictures were of the same gender as the child. After the drawing activity was completed, children had to answer the following question "*Can you please describe the characters present in your pictures?*" Children were given a box of color pencils as an incentive for taking part in the study. Refer to Figures 2, 3, and 4.

Analysis: The data analysis was a back-and-forth process. The drawings and the descriptive words were coded based on an adaptation of Braun and Clarke's (2006) guidelines. An independent person coded 25% of the data to ensure intercoder reliability. To understand and make sense of the perceived personality types of attractive and less attractive individuals the descriptive words used by the participants were categorized and structured using the big five labels.

FINDINGS

Figure 1 reveals the perceived personalities of individuals based on their physical attractiveness using the big five labels

1. *Openness to Experience*: The participants perceived the picture of the attractive individual to be open to new experiences and the picture of the less attractive individual to be not. For instance, Ken's descriptive words for his picture of the good-looking boy were, "*he is interesting, adventurous, and fun-loving*". Similarly, Sam (see Figure 2) looked at his picture of the good-looking boy and said, "*he likes dancing, saluting, laughing, and playing games*". On the contrary, Sam described his picture of the less good-looking boy as "*he is weak, not energetic, and does not like to play*". Likewise, Sarah's description of her picture of the pretty girl was, "*she likes gardening and exploring new things*". In contrast, narratives used by Sarah for her picture of the less pretty girl were, "*she is gloomy, and she does not have interesting hobbies*".

2. *Conscientiousness*. The participants considered the picture of the attractive individual to be conscientious and the picture of the less attractive individual to not be conscientious. For example, Troy used the following words to describe his picture of the good-looking boy, "*he is good at geometry, reads a lot of books, comes first in class, finishes his homework on time, and watches news and other educational programs on TV*". On the contrary, the words he used to describe his picture of the less good-looking boy were "*he doesn't study, doesn't do homework, comes late to class, doesn't do well in exams, and likes watching cartoons and horror movies all day*".
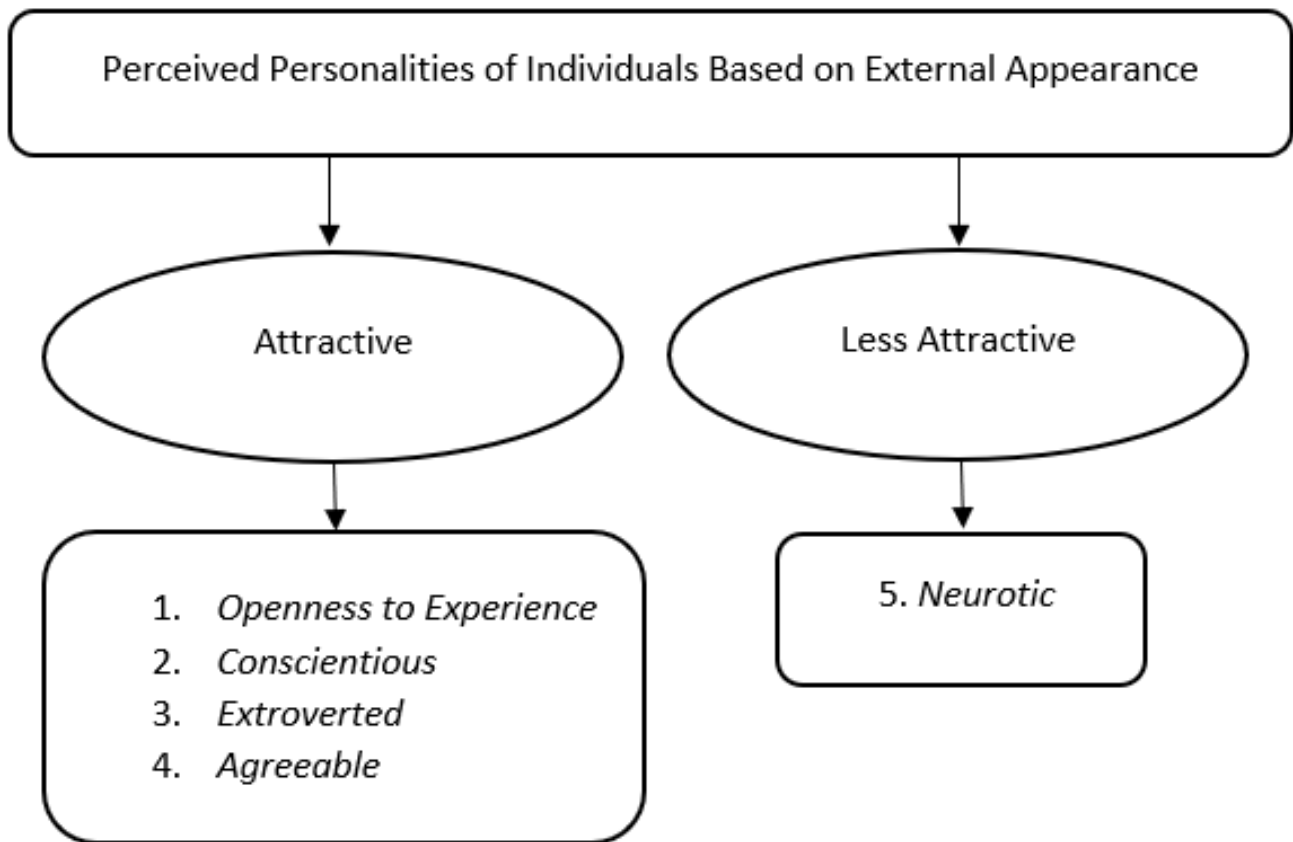
Figure 1 Children's Perception of Attractive and Less Attractive Individuals

Figure 2 Sam's Drawings and Descriptive Words

3. *Extraversion*. The participants linked extroverted behaviors with the picture of the attractive individual and introverted behaviors with the picture of the less attractive individual. For instance, Lily (see figure 3) described her picture of the pretty girl as "*popular, outgoing, and happy*". Lily also said that she wanted to be the picture of the pretty girl that she had drawn because the pretty girl is popular, has many friends, and is not sad. Likewise, Jim described his picture of the good-looking boy to be *cool, social and a ladies' man*". The participants used the following words to describe their pictures of the less attractive individual "*unpopular*", "*does not have any friends or has few friends*" and "*talks to self*", "*lonely*", and "*alone*".

4. *Agreeableness*. The participants considered the picture of the attractive individual to be agreeable and the picture of the less attractive person to be not agreeable. The words used by the participants to describe the pictures of the attractive individual were, "*she is kind*", "*she is helpful*", "*she is respectful*", "*he likes to share*", "*he listens to his parents and teachers*", and "*he has a good heart*". On the contrary, the pictures of the less attractive individual were referred as, "*she is mean*", "*she fights with everyone*" "*she is not nice*", "*he doesn't listen to his parents or his teachers*", "*he likes to jump and shout in class*", "*he is not helpful*", "*he is naughty and hits everyone*", and "*he likes troubling everyone*".
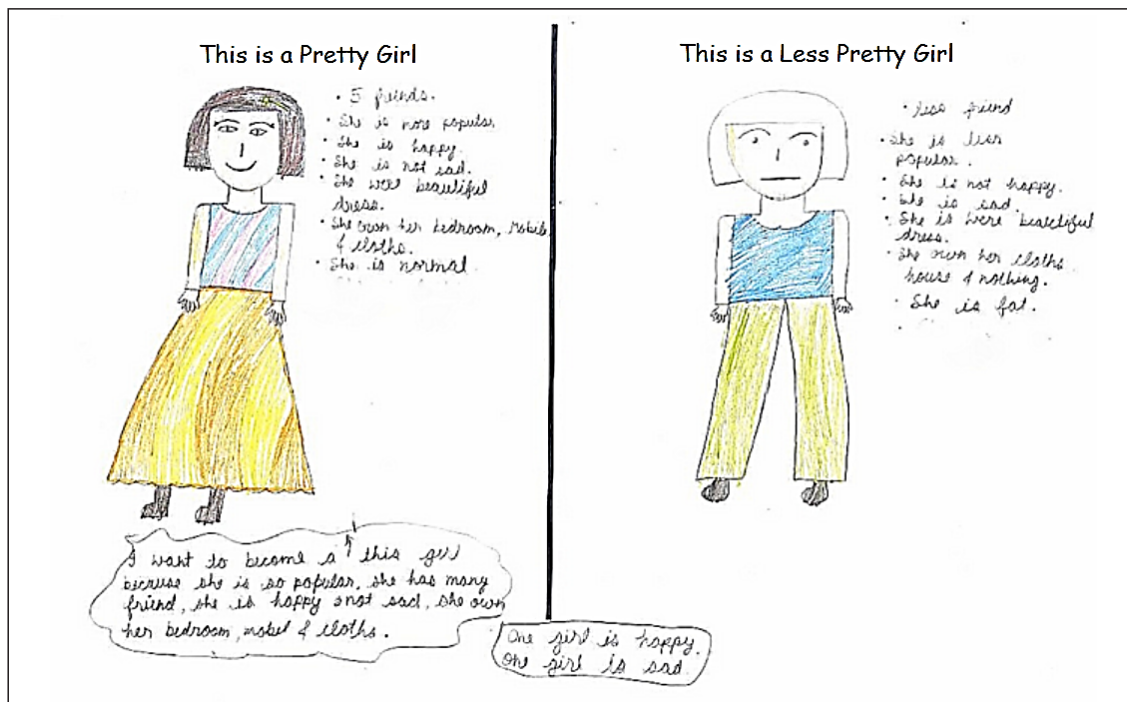
Figure 3 Lily's Drawings and Descriptive Words

Figure 4 Tom's Drawings and Descriptive Words

5. *Neuroticism*. The participants viewed their pictures of the less attractive individual to be neurotic and their pictures of the attractive individual to be not. The descriptive words used by the participants for the picture of the less attractive individual were, *"she's grumpy"*, *"she is sad"*, *"she is jealous"*, *"he is angry"*, and *"he throws tantrums when he is upset"*. The pictures of the attractive individual on the other hand were described as, *"he is happy, he smiles a lot, and he is full of joy"*, and *"she is cheerful and playful"*.

In summary, the findings reveal that children consider attractive individuals to be open to new experiences, conscientious, extraverted, agreeable, and not neurotic. The opposite was found regarding less attractive individuals.

CONCLUSIONS

The present research explored the personalities children associate with attractive and less attractive individuals using the big five labels. This paper contributes to existing theory in the following ways. Prior studies have identified the general traits children associate with physical appearance (Dion 1973; Rennels and Langlois 2014). However, these identified traits are (1) several, (2) at the surface level, and (3) not grouped into categories based on well-rooted personality theories to understand the perceived personality types of attractive and less attractive individuals at a deeper level. The present research addressed these limitations in the extant literature by (1) organizing the traits in a structured manner, (2) understanding the traits at a deeper level, and (3) recognizing the perceived personality types of attractive and less attractive individuals.

The results of the present research are significant for the following reasons. First, we live in a society that glorifies physical attractiveness and youthfulness. The "cosmetics and personal care" industry has been growing exponentially (Statista 2020). This industry is thriving because of the beautiful-is-good stereotype. Advertisements are filled with images of perfect-looking people who are desired by all and shown leading happy and successful lives (Ashikali and Dittmar 2012). Even though the present research did not directly measure the influences of traditional and digital media on beauty stereotype formation in children, based on the big five labels children assigned to attractive and less attractive individuals it could be inferred that the mass media may be held responsible for such associations. Future research needs to be conducted to confirm this fact.

Second, according to the assumed similarity bias (Cronbach 1955) perceptions of others are based upon self-perception. And so, when children are judging others based on external appearance it can also mean that they are judging themselves with the same labels. Research shows that negative self-relevant stereotypes can lower self-esteem and be detrimental to mental and physical health (Ambady et al. 2004). Lastly, passing unfair judgments over others can result in marginalization and stigmatization of targets. Therefore, understanding the beautiful-is-good stereotype becomes necessary to take actions that lead to changes in stereotypical thinking.

The current research also makes methodological contributions. Previous studies examining beauty stereotypes in children have mostly implemented quantitative techniques. Although dependent measures used in the past have rendered evidence for the existence of stereotypical judgments in children. The feelings and the experiential parts attached to these stereotypical judgments were missed out due to the quantitative nature of past studies. The qualitative technique employed in this research was able to counter these limitations. In the drawing study, children defined physical attractiveness by creating images and then assigned personality traits to their respective characters which were far beyond binary judgments. Hence, the findings obtained from the drawing data is richer and deeper compared to prior work.

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Anchors on the Move: Digital Nomads' Solid Footholds in Liquidity

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"I am rooted but I flow." Virginia Woolf, *The Waves*

INTRODUCTION

The permeation of technologies into consumers' lives has resulted in unprecedented opportunities for combining work and leisure while satisfying their *wanderlust* (Makimoto and Manners 1997). Digital nomads whose online work arrangements enable holistic freedom (Reichenberger 2017) embody the skill of adaptation to everchanging environments (Mancinelli 2020). Research has addressed that mobile consumers navigate the postmodern logics of today's marketplace in a fluid manner. Bardhi, Eckhardt, and Arnould (2012) and Bardhi and Eckhardt (2017) point to digital nomads' ephemeral, detached, and elastic relationship to materials. Others have used the context of voluntary lifestyle migration to illuminate the separation of consumers' utopias from the solid (Atanasova 2021) and the liquefaction of status and distinction (Eckhardt and Bardhi 2020).

Consumer research has portrayed digital nomads as role models living the stereotypical imperatives of liquid modernity. However, as Belk (1988) prominently demonstrates, materials may carry meaning for consumers and even become part of the extended self. Furthermore, studies depict digital nomadism as unfolding at the interplay between autonomy and structure/stability (Prester, Cecez-Kecmanovic, and Schlagwein 2019) or freedom and discipline (Cook 2019). Based on these hints that nomadic consumers' unsettled lives are not entirely liquid, we presume that their mobility projects are nourished by sources of solidity. Hence, this study shares the idea that by drawing upon the image of digital nomads as the vanguard of liquidity, researchers risk romanticizing the lifestyle of nomadic consumers (Korpela 2019). Embedded in the concept of anchoring and grounded in narrative interviews and netnography, this study uncovers digital nomads' social and material anchors across space and time.

THEORY

Consumer Mobility in Liquidity

In postmodern conditions of omnipresent change and precedence of "mobility and flow over stasis and attachment" (Cresswell 2006, 43), authors have introduced the nomad as the metaphor of a liquid world (Bauman 2000; Braidotti 2014). Sheller and Urry (2006) stress that recent decades have ushered in the emergence of a mobility paradigm where bodies and materials are on the move. As a consequence, scholars have shown rising interest in mobile consumers. Related studies have sparked discussion about individualistic pursuits (Tumbat and Belk 2011), detached relationships to objects (Bardhi et al. 2012), fluid notions of home (Bardhi and Askegaard 2008), and navigations across spatial and temporal dimensions (Figueiredo and Uncles 2015).

Bardhi et al. (2012) point to acculturation research having suggested that migrant consumers, who are driven by territorialized identities (Belk 1992), pursue anchors to former home places and attachments to the material that is imbued with symbolic value due to its reinforcement of connections to cultures and places (Joy and Dholakia 1991) and even social environments (Mehta and Belk 1991). Lifestyle migration research has emphasized that, unlike migrants, itinerant professionals such as digital nomads voluntarily follow inconsistent mobility trajectories (e.g., Bardhi et al. 2012). Detached from past and future narratives (Atanasova 2021), they assume a deterritorialized relationship to a locality's social and cultural practices (Bardhi et al. 2012). In their attempt to blur the line between acculturation and lifestyle migration research, Sharifonnasabi, Bardhi, and Luedicke (2020) underline the power of understanding traditional views on globalization more openly. For example, Askegaard and Kjeldgaard (2007, 145) state that while searching "for a centre that holds (Bauman 1990) in the middle of a turbulent period," globalized consumers satisfy their desire for stability through local products. This invites to "question the celebratory tone of the deterritorialization perspective" (Sharifonnasabi et al. 2020, 289) by investigating not only liquefaction but also solidification tendencies of lifestyle migrants. So, the question arises as to how digital nomads' mobility projects are anchored in sources of solidity.

Anchoring

Bauman (2000) portrays solidity as the counterpart of unstable and uncertain conditions produced by liquid modernity. However, research has recently highlighted the importance to study both liquidity and solidity as co-existing on a continuum (Bardhi and Eckhardt 2017). Proposing the conceptual framework of anchoring, Grzymala-Kazlowska (2016; 2018, 634) dissolves the dichotomy "between mobility and fixity." This theoretical approach introduces itinerants as establishing intangible (cognitive or emotional) and tangible footholds which provide stability and security during experiences of mobility (Grzymala-Kazlowska 2016). While the anchoring concept encompasses sources of solidity that relate to the social world, Grzymala-Kazlowska (2016; 2018) emphasizes that they can also be rooted in the material. Pradhan, Cocker, and Hogg (2019) draw upon this approach while studying migrant consumption. They stress that footholds offer these mobile consumers a sense of psychosocial balance and even contribute to identity projects, wellbeing, and imaginings. Thus, the concept of anchoring offers a powerful lens to investigate the role that sources of stability and security play in nomadic consumers' liquid lives.

METHODOLOGY

This study uses narrative interviews and netnography to gain a nuanced understanding of solid anchors unfolding in settings of postmodern liquidity. We studied digital nomads—technology-savvy consumers blending remote life and work practices (Mancinelli 2018). Participants were recruited virtually using maximum variation sampling (Patton 2014). The sample consists of 39 digital nomads with different genders, ages, nationalities, occupations, educational backgrounds, and mobility experiences—different pre-experiences of anchoring (e.g., ranging from slow to fast, single to family, and lightweight to van-life itinerants). We investigated their life-worlds (Kvale 1983) by conducting 31 in-depth online interviews from August 2018 until October 2020. Apart from engaging in observations and participating in discussions on diverse online platforms (Kozinets 2020), we focused on the textual captions of 1.932 Instagram posts published by eight nomadic consumers. We used social media as a naturalistic setting for an investigation to acknowledge the centrality of online platforms in itinerants' lives (Thompson 2019b). Following grounded theory, this study analyzed both verbatim tran-

scripts of interviews and Instagram data through the iterative process of categorization and abstraction (Spiggle 1994).

FINDINGS

Our findings show that digital nomads' lifestyle is characterized by an openness to "*go with the flow*" (Blayze-23-Canada) where "*the only constant is change*" (Tobias-32-Germany). Despite this appreciation of holistic freedom, our respondents reveal how they strive for integrating sources of solidity into their liquid lives. We found social and material anchors which do not constitute delineated categories but are rather overlapping.

Social and Material Anchors

Contrasting the view of postmodern itinerants as being individualized (Tumbat and Belk 2011) and embracing unstable networks (Kesselring 2008), our findings suggest that digital nomads are attached to social anchors (Bardhi 2006). Relationships among fellow itinerants are less transient than Thompson and Tambyah's (1999) study on expatriates implied. Reminiscent of migrants (Grzymala-Kazlowska 2018), nomadic consumers also use connections to non-nomads as footholds. While some of our respondents foster ties with locals, most digital nomads are not as eager to delve into unknown cultures as propagated by liquid modernity (Korpela 2019). Nomadic consumers further ascribe importance to traditional values such as marriage, which questions the detraditionalization of intimacy in globalization contexts (Giddens 1991).

Our findings add to studies on postmodern itinerants that emphasize the dematerialized nature of consumption (Bardhi and Eckhardt 2017; Bardhi et al. 2012). Unlike the elite digital nomads who are disconnected from their homelands (Kannisto 2016), our respondents curate connections to objects that potentially shape their (cosmopolitan) identity projects (Belk 1988). Despite favoring minimalism over material abundance, digital nomads choose the few possessions thoroughly, thus turning consumption itself into a fundamental everyday activity. Places and localities constitute another material anchor. Our findings go beyond the traditional consensus that cosmopolites do not belong anywhere (Friedman 1995; Hannerz 1992) showing that digital nomads establish (im-)mobile home bases, are passionate about countries conveying childhood memories, and return to travel destinations.

Social and material anchors can emerge in any spatial (here, elsewhere) and temporal (past, now, future) setting. While these footholds may carry functional values, our respondents appreciate them as they are imbued with symbolic meanings. To integrate the solid anchors into their liquid lives, nomadic consumers cross spatial and temporal boundaries in their bodies and minds. We identify and outline two forms of anchoring—embodied and imagined—each of which can involve both social and material sources of solidity (figure 1).
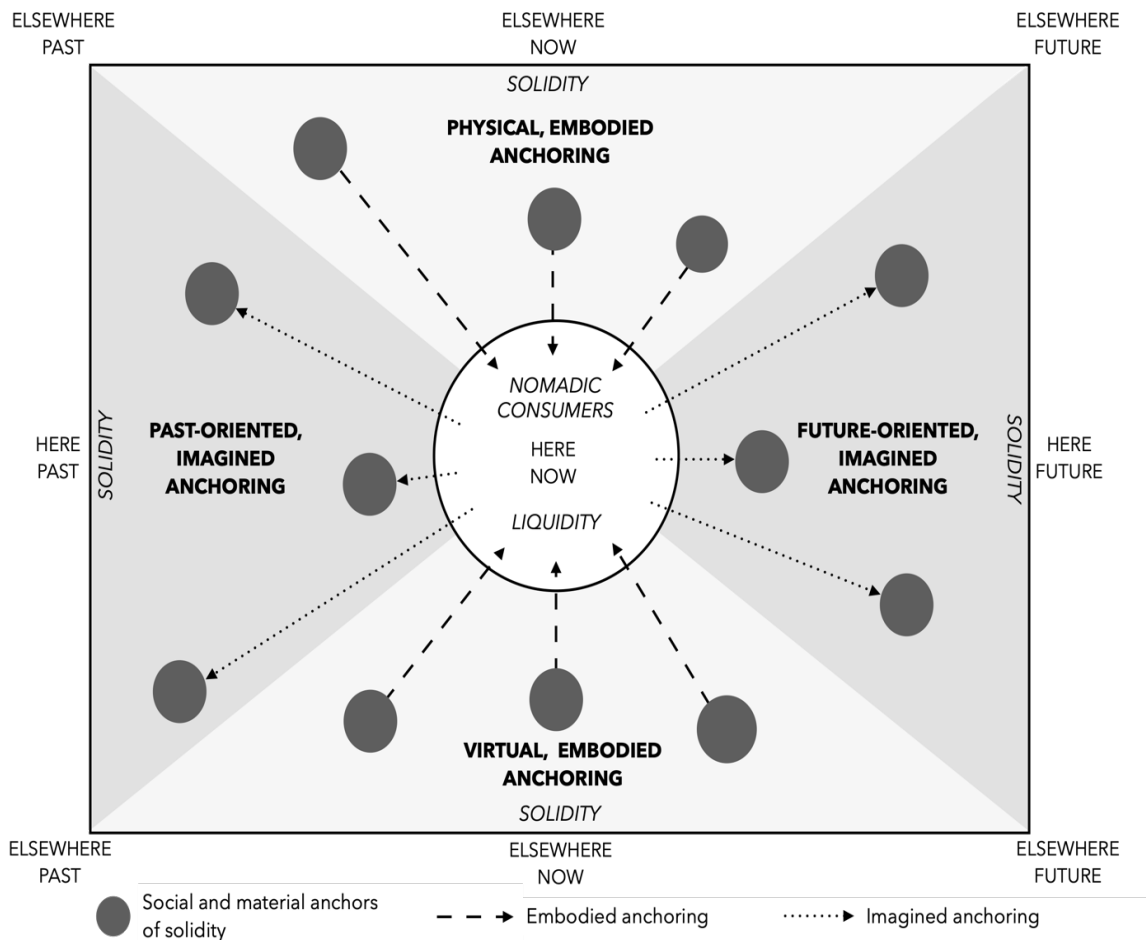
Figure 1: Nomadic Consumers' Anchors Of Solidity Across Space And Time

Embodied Anchoring

Based on Cruz and Buchanan-Oliver's (2020, 1331) definition of embodiment as "ways of performing and inhabiting the world in and through a body," we define embodied anchoring as nomadic consumers' incorporation of anchors into their present realities involving corporeal enactments and experiences.

Physical, Embodied Anchoring. Nomadic consumers are willing to cast aside their striving for individualism and minimalism as they invest time and money to establish long-term connections to people and materials. This continuity regarding certain social and material aspects in their lives is essential for sustaining a mobile lifestyle. Digital nomads fight social isolation and lack of community through embodied experiences with family members or partners permanently accompanying them as well as through physical homecomings and temporary reunions with family and friends.

> "*I'm lucky to travel as a couple. But not everyone does that, a lot of nomads are solo…But eventually, [they] may suffer about some kind of isolation and other kinds of psychological issues and I've seen that happening.*" (JR-41-Portugal)

Nomadic consumers carry along lightweight materials imbued with symbolic meaning. These objects remind the owners of people, places, or events and provide an anchor toward past familiarity. Most respondents do not dispose of their possessions but keep them, for example, in storage rooms where re-engagement processes (Epp and Price 2010) can take place. Furthermore, they rely upon homemaking practices (Bardhi and Askegaard 2009) which often involve materials to give formerly commercialized places, such as vans, a homey feeling.

Virtual, Embodied Anchoring. Embodied anchoring also occurs when nomadic consumers sustain social ties to people without geographical contiguity. They draw upon information and communication technologies to foster these relationships (Epp, Schau, and Price 2014), reducing the importance of being physically close to beloved ones (Kreuzer, Mühlbacher, and von Wallpach 2018). Alice (30-New Zealand) describes how she connects with non-nomadic family and friends via video calls in a way that allows them to do "*the same things that [they] would do if [they] were in the same room…[they] have a video call and then watch a movie together.*" It seems as if their mobile lifestyle potentially even facilitates fostering connections, as the following verbatim account shows:

> "*I have a MUCH better relationship with all my siblings and my mom…When I was in Chile, we were fighting all the time…And it's good because now that I am traveling, then every time we speak, [it] is positive. It is never negative.*" (Terry-30-Chile)

Social media applications such as Instagram also enable the establishment of new contacts, the maintenance of online communities, and the coordination of offline gatherings in new geographical locations among digital nomads (Thompson 2019b)

Imagined Anchoring

We define imagined anchoring as nomadic consumers' integration of anchors into their past or future realities which primarily takes place in their minds but nevertheless can influence actual behavior (Jenkins and Molesworth 2018).

Past-Oriented, Imagined Anchoring. When oriented toward the past, imagined anchoring can take the form of reminiscing about people and materials from pre-nomadic life. Particularly, digital nomads miss left-behind people and the related feeling of familiarity in situations when they would like to share special moments or are experiencing difficulties, such as health issues. Furthermore, remembering traditions involving beloved people, such as childhood Christmas celebrations with the family, links nomadic consumers to the past.

Our findings reveal that digital nomads also reminisce about materials from their homeland which they cannot consume in foreign countries, such as German bread. Also, positive experiences can cue memories, as Agata's quote about traveling to Slovenia, a country similar to her homeland, highlights:

> "*When we were crossing the border to Slovenia, I could see more traditions and more families and the villages and everything. You see that people have strong traditions and that gives me that cozy and warm feeling.*" (Agata-38-Poland)

Future-Oriented, Imagined Anchoring. Imagined anchoring also revolves around projections into the future (Figueiredo and Uncles 2015, 45) to pursue stable social networks. Challenging extant evidence that digital nomads are primarily aiming for "short-term pursuits of individualized desires" (Atanasova 2021), our findings support Mancinelli (2020) and Thompson (2019a) highlighting the difficulty of finding romantic love while being on the move. We identify this quest and the aim to establish a family as a social anchor toward the future. Many digital nomads can imagine sacrificing some of their liquidity to realize this dream even though they ultimately wish to continue living nomadically. The absence of materials in their present lives results in digital nomads' imagined anchoring toward a future that involves the consumption of materials like cars and even solid houses.

> "*My goal is to be a millionaire in the next few years. Because of course, a big part is, I'd love to have a big house, a fancy car, nice purses, nice shoes, like I am such a fashionista.*" (Blayze-24-Canada)

DISCUSSION

This study casts new light on the lifestyle migration of digital nomads. Our contribution to prior work on contemporary cosmopolitanism is threefold: First, we elucidate the bricolage of liquefaction and solidification tendencies in settings of voluntary mobility (Grzymala-Kazlowska 2016) and thus underline their co-existence along a spectrum (Bardhi and Eckhardt 2017). While corroborating earlier findings portraying digital nomads as the advocates of postmodern liquidity and holistic freedom (e.g., Atanasova 2021; Reichenberger 2017), this study explores consumer cosmopolitanism from an alternative angle. In illuminating the sources of solidity revolving around stability and security, we weaken the position that nomadic consumers are untied from footholds. Second, our study challenges earlier studies accentuating the functional value of materiality in liquidity (Bardhi and Eckhardt 2017; Bardhi et al. 2012).We unveil that even though possessions potentially threaten the mobility experience, materials serve as cherished companions imbued with symbolic meaning (Belk 1988). Additionally, this study makes the first step toward understanding the symbolic role others play in the constitution of cosmopolitanism. We show that stable social bonds stimulate the continuation of the nomadic lifestyle. Third, our findings question the prevailing image of nomadic consumers as the warriors of the here and now (Atanasova 2021; Bardhi et al. 2012). In uncovering nomadic consumers' fluid navigation between spatial dimensions, we foreshadow that globalization phenomena surpass the boundaries of deterritorialization (Sharifonnasabi et al. 2020). Furthermore, our findings substantiate the idea that digital nomads provoke the liquefaction of temporal constraints (Figueiredo and Uncles 2015) as they are pulled back and pushed forward to preceding and prospective times, respectively.

This study is limited as we acknowledge the intertwined character of social and material anchors without illustrating the overlaps between them. Future research could draw a more holistic picture of contemporary nomadism by delving deeper into the entanglements between the footholds in liquidity. Additionally, our findings indicate that nomadic consumers are caught between routes and roots. Subsequent studies should consider examining the negotiation practices nomadic consumers rely upon to navigate this tension. While we see considerable value in the avenues for research provided by studies on liquid consumption, this study initiates a debate about the revival of solidity within marketplaces in flux. Ultimately, the footholds anchoring digital nomads portend that these consumers are not so footloose after all.

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Table 1: Findings

Social and Material Anchors of Solidity	
Embodied Anchoring [SEP] Digital nomads' incorporation of anchors into their present realities involving corporeal enactments and experiences.	
Physical, Embodied Anchoring	"*It was a long time that I hadn't seen her, so, the fact that we were able to reconnect at that spot…the emotional impact of seeing my mom again after five years and actually be able to share that moment with her, that's what made it even more important because it is something we will always have together.*" (Ava-31-US) "*I did have my friends write me letters, before I left, and I carry those with me. So, if I'm ever like feeling really sad and, you know, I'm in a different time zone or whatever, I can read their letters. And I've collected a couple of, sort of sentimental things like that along the way that I carry with me.*" (Elena-31-US)
Virtual, Embodied Anchoring	"*Like it's always been a very, very big deal, Christmas morning, my grandparents, my mom, my sister like, we spent every Christmas together. It's something I look forward to every year…this past Christmas was my first Christmas away from home…I called them on Christmas and so chatted with them when they were together.*" (Blayze-23-Canada) "*I noticed that I grew very attached to my, um, to social media. And that was just because a lot of the time you don't have anybody to talk to or share your stories or adventures with…I started using social media MUCH more than before. Just to be able to, um, communicate with the outside world.*" (Vic-39-US/The Netherlands)
Imagined Anchoring Digital nomads' anchoring into their past or future realities which primarily takes place in their minds.	
Past-Oriented, Imagined Anchoring	"*[Grandma] said that I should go and explore and see the world and should come back with a cool guy (laughs)…You'll find a good man on your trip. [After she died], I was like, okay, let's do this, grandma (laughs). And I still wanted to do my divemaster. And grandma would say, go for it. We were like, okay, let's do this.*" (Travel_Ainy-30-Germany) "*Um, there's only one thing that I miss in my house, but it's really stupid to say….um (laughs), it's really stupid, um, it's a… bag. And I really love it. It's yeah but I am not going to take it on the van because I did never know if someone can rob it or anything. And so, I leave it at home.*" (Pilar-34-Portugal)
Future-Oriented, Imagined Anchoring	"*This is something I really need to actively work on. Or want to actively work on. Like I do hope…to have more stability in my life. Like maintaining deeper relationships with friends. And obviously, I do hope to have a family, which is hard. But yeah, so these are [the] things I would hope for.*" (Tobias-32-Germany) "*So, um, probably [I] will keep on traveling my whole life, the rest of my life I will be traveling. And because that's one of the things I love to do, but I also will probably buy my piece of land and have my house. Even though I will be traveling or not, I will have my house in the countryside, not in the city.*" (Pilar-34-Portugal)

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The Epistemic Cultures of Product Review Systems

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INTRODUCTION

The emergence of the product review has revolutionized the informational landscape consumers meet when they are searching for information about products and means that consumers do not have to rely on brands or prices as cues for product quality (Simonson & Rosen, 2014). However, the availability of product reviews has not ended consumers' struggles to determine the quality of goods. In the new information environment, consumers must navigate between different sources of product reviews, and these sources often employ different styles of reviewing. As a result, consumers are often presented with conflicting product quality assessments (Chen & Xie, 2008; de Langhe et al., 2016a). This observation begs the questions: why do product reviews often differ in their assessments? As product reviews are growing in influence on consumers' purchasing decisions, dissecting the information they provide is an essential task.

We pursue the question above by looking into how two different systems of product reviewing (i.e. socio-material arrangements designed to create and disseminate product reviews) generate product quality information. Specifically, we compare the creation of the expert reviews of the lead consumer organization in Denmark, *THINK*, with the creation of the online user reviews displayed on *Amazon. com*.

Our findings contribute to cultural consumer research on product evaluations (Arsel & Bean, 2013; Corciolani et al., 2020) and to recent discussions about the current state of the consumer information environment (de Langhe et al., 2016a; Kozinets, 2016; Simonson, 2016; Winer & Fader, 2016).

THEORY

From the Effects of Product Reviews to the Processes of Product Reviewing

Product reviews have in recent years attracted a lot of scholarly attention. A wealth of work has been dedicated towards uncovering the effects of product reviews. Myriad studies have tested whether product reviews have an effect on consumer demand and sales performance (Chakravarty et al., 2010; Chevalier & Mayzlin, 2006; Chintagunta et al., 2010; Dellarocas et al., 2007; Simonsohn, 2011), while others have studied the mechanisms through which such effects are achieved (Chen & Xie, 2008; Floyd et al., 2014; Hu et al., 2014; Jang et al., 2012; van Laer et al., 2019). The processes through which product reviews are created, however, have received relatively little attention.

Systems of Product Reviewing

For conceptualizing the evaluative processes of product review systems, I draw on the notions of 'epistemic cultures' and 'qualification'.

Cultures of Knowledge Construction

The concept of 'epistemic cultures' is based on the position that knowledge – even scientific facts (Latour, 2003) – is socially constructed and that knowledge takes its particular shape from the social processes of its construction. This position warrants looking at the "machineries of knowledge construction" (Knorr-Cetina, 1999, p. 3), that is, all the practices that scientists engage in when they are 'doing' science. Epistemic cultures refer to these clusters of practices (Knorr-Cetina, 1999) and is thus designed to help us move beyond understanding knowledge as 'given' – existing out there waiting to

be 'discovered' – towards understanding knowledge as contingent on the cultures in which it is created. For importing the concept to our context, it is useful to visit the notion of 'qualification'.

Product Reviewing as Qualifying Products

The concept of 'qualification' refers to processes of assigning qualities to goods (Çalışkan & Callon, 2010; Callon et al., 2002; Callon & Muniesa, 2005). Callon et al. (2002, p. 198) stress that the qualities of goods, much like facts, are not simply 'discovered' through mere observation. Rather, product qualities are constructed through "qualification trials" (Callon et al., 2002, p. 199). Qualification trials are often the subject of controversy, as actors may disagree on how to which qualities are relevant to products and how to rate these qualities (Callon et al., 2002, p. 199). How different systems of qualification qualify products depends in large part on the epistemic culture of the systems. If we are to uncover how different product review systems differ in attributing product quality, we must thus look into their epistemic cultures.

METHOD

For this purpose, we pursue a comparative case study strategy (Woermann & Rokka, 2015). We take our empirical point of departure in the cases of *Amazon.com*, a system of user reviews, and *THINK*, a system of expert reviews. We draw on a varied dataset, designed to capture both the symbolic and material structurings of these cultures.

The dataset used to shed light on the culture of Amazon.com consisted of 7 interviews with Amazon reviewers, 1 interview with a former Amazon employee, information on Amazon.com, news articles featuring statements from Amazon spokespeople, Amazon speeches and shareholder letters, and Amazon patents. The THINK dataset included 7 interviews with THINK employees, 1 interviews with a member of an international product testing organization, and product tests both THINK's website and magazine.

Our analysis led us to distill four constitutive elements of the epistemic cultures of product review systems: epistemic procedures, epistemology, epistemic aims, and epistemic devices (see Figure 1).

FINDINGS

EPISTEMIC PROCEDURES

'Epistemic procedures' refer to the explicit precepts, principles, and rules that govern how product review systems create product knowledge.

Expert Review Systems: Scientific Testing

THINK strive for the scientific principle of *rigor*. The data that underlie THINK's reviews are produced through highly formalized procedures where products are tested under controlled conditions in laboratories by trained test engineers. The engineers adhere to strict *test programs*, designed by THINK, when carrying out the tests. The use of test programs is emblematic for THINK's commitment to the principles of scientific testing such as rigor and reproducibility.

User Review Systems: Authentic Experiencing

The chief principle governing the review procedures of Amazon is *authenticity*. Amazon employ a set of guidelines and policies that are meant to ensure that Amazon reviews are based on authentic consumer experiences. Amazon have for example developed a set of 'Community Guidelines' that urge all reviewers to base their reviews

"on your own honest opinions and experience" (*Amazon.Com Help: Community Guidelines*, 2021). Further, Amazon only admit reviews from consumers who have spent at least $50 on Amazon.com using a valid debit or credit card, thereby seeking to ensure that reviews are made by a real users.

EPISTEMOLOGY

The 'epistemology' of the epistemic cultures of product review systems refers to how system members conceive of what counts as valid data for revealing a product's quality. The epistemological beliefs present in review systems are revealed by how their members warrant their knowledge claims and try to repudiate the claims of others.

Expert Reviews: Epistemic Technocracy

Today, every media covering consumer issues have an element they call 'test'. Unfortunately, far too many of them are based on a fragile foundation. […] At THINK, we call such tests 'reviews'. For us, a 'test' means much more. (THINK 2006)

The review system of THINK represents an epistemology of 'epistemic technocracy', where experts are elevated as the ultimate judges of product quality, enjoying privileged access to the 'true' nature of products.

User Reviews: Epistemic Democracy and Crowd Wisdom

In complete contrast to THINK, Amazon stress that their reviews are truthful exactly because they are *not* conducted by experts but rather by regular consumers, as for example argued by an Amazon spokesperson:

Amazon customer reviews reflect the feedback, tastes and concerns of real customers, not professional reviewers. That's what makes them powerful (Streitfeld, 2016)

Hence, Amazon employ an epistemology which grants epistemic weight to the experiences of ordinary consumers. Amazon review system represents an epistemology of 'epistemic democracy', as it encourages everyone to participate in the epistemic process and provides a platform for such collective participation.

EPISTEMIC VALUES

'Epistemic values' refer to the values that guide the knowledge-creating practices of product review systems. Whereas epistemology is concerned with what counts as valid knowledge, epistemic values is concerned with counts as valuable knowledge in product review systems.

Expert Reviews: Product Differentiation

In the review system of THINK, value is attributed to information that enables consumers to distinguish products. This epistemic value is clearly reflected in how THINK design their test programs. Test manager Grethe gives the test of child seats as an example of how the epistemic value of product differentiation shape the product reviewing practices of THINK:

Well, in a crash […] if the accident is violent enough, we break everything, no matter what chair it is. Then we can't see any differences because they have all been broken to splinters. […] And if you do it too gently, then they all make it without problems. So, we are trying to find, well, a level where we can actually see some differences, where we can separate the good from the bad. (Grethe)

User Reviews: Expectation Confirmation

In the review system of Amazon, information is not valued for how it makes products distinguishable but rather for its ability to let consumers predict if the reviewed product is likely to live up to their expectations. Users' expectations are often informed by product claims, and these claims therefore come to serve as tangible benchmarks for evaluating product performance:

the criteria that has to pass with me is, number one, it does what it says on the tin. […] What they claim is number one for me. If you're claiming something and it's true, I will say so, I will confirm it does this, it does that. If it doesn't, uhm well, that's no good for me. That's where you would lose the most amount of stars (Grant)

User reviews are thus not trying to facilitate comparisons of products and bring out their differences, and in fact the interviewed Amazon reviewers often explicitly refrained from basing their product reviews on comparisons. Take Tim, who "try to judge things as far as what they are", arguing that "*you can't compare everything to a Rolls-Royce*. It is what it is" (emphasis added).

EPISTEMIC DEVICES

'Epistemic devices' refer to the set of techniques and technologies that are employed to produce product reviews in product review systems. Two types of devices are involved: 'evaluation devices' and 'display devices'.

Evaluation Devices

Expert Reviews: Weighted Aggregation

THINK both rate products across individual parameters and assign products an aggregated score representing the overall quality of the product. In calculating the aggregated score, parameters are assigned different weights. The specific weights are determined by THINK's test managers drawing on their "experience" and "intuition" (Tobias).

User Reviews: Algorithmic Aggregation

Amazon also calculate an aggregated score, the star rating, but not all Amazon reviews are treated equally in calculating this rating. Amazon employ an algorithm that "give more weight to newer, more helpful reviews from Amazon customers" (Bishop, 2015).

Display Devices

Expert Reviews: Ideographic Ratings and the Comparative Table

THINK employ three main devices for displaying their test results: An aggregated rating from 0-100, an ideographic rating for each tested parameter, and a comparative table, which lists the aggregated and ideographic ratings for each tested product next to each other. The display devices are not merely devices for 'transmitting' information but rather construct the quality of products in a very particular way, of which the test managers are well aware. Consider for example Tobias who explains that the choice to assign an aggregated score risks blurring the differences between products:

"[…] sometimes we may be measuring too many parameters […] which can result in a somewhat murky overall result, right. Because the individual parameters can be contradictory, right. […] Then they [all the products] just become, like, 'good'. Then there aren't any that stick out completely in either end." (Tobias)

User Reviews: The Star Rating

The Amazon review system displays both individual user ratings as well as the aggregated star rating. The individual ratings are presented as a numerical score from 1-5 and are accompanied by a written review.

Next to the star rating, Amazon features the amount of user reviews products have. This is an important display device for warranting the aggregated star rating. Nigel, a former product category leader at Amazon, explains the reason Amazon actively work to accumulate reviews for their partners' products:

> If you go to a product and […] it has only had 3 reviews and they are all 5 stars, you just don't have certainty that that's a high quality product. Versus something that has 50 reviews and it's four and a half stars, you know, because that just kinda makes you go, "yeah, at least I know it's certain, whereas this one here, two of those are probably written by the manufacturer, so do I really believe..." (Nigel)

To convince people of the wisdom of crowds, you must first convince them that there is a crowd. Showing the amount of reviews helps perform this crowd.

DISCUSSION

In this paper, we shed light on how two product review systems, Amazon.com and THINK, qualify products. We argue that their qualifications are shaped by their epistemic cultures, which we show to be constituted by four elements: epistemic procedures, epistemology, epistemic values, and epistemic devices. We further show that these four elements differ across Amazon.com and THINK and suggest that the differences in their epistemic cultures provide a window into why they often reach divergent quality claims.

CCT and the Cultural Constitution of Utility

Our contribution to CCT is to turn attention to evaluations of goods in markets that are not centered around taste, which have been the focal evaluations in CCT research so far (Arsel & Bean, 2013; Corciolani et al., 2020; Maciel & Wallendorf, 2016). Where the exercise of taste has been demonstrated as the dominant mechanism of evaluation in systems of aesthetic evaluation, we find that taste captures poorly the evaluative processes in systems of functional evaluation. Instead, we show that epistemic practices, rather than taste-based practices, are central to the evaluation and construction of the functional quality of goods.

The Culture of Experts

We also contribute to the debate on the value of different types of products reviews. Our study underlines that product reviews are social and culturally contingent constructs, regardless of whether they are produced by users or experts, and the categories of 'objective' and 'subjective' are therefore poor for discussing how different review types differ (Chen & Xie, 2008; de Langhe et al., 2016a, 2016b).

The Expertise of User Review Systems

Our study also shows that user review systems, which are often criticized for their biases and misevaluations of product quality (de Langhe et al., 2016a; Godes & Silva, 2012; Jacobsen, 2015; Li & Hitt, 2008; Moe & Trusov, 2011; Schlosser, 2005), may be more expertise-based than conventionally thought. When seen as a system and not just a collection of reviewers, it is clear that the review system of Amazon.com, like THINK, represents an expert system (Giddens, 1990). Amazon for example deploy data science expertise for filtering user reviews. Considering Amazon.com as an expert system cautions us against drawing conclusions about the value of user reviews purely from studies focusing on users' reviewing behavior.

Tabel 1: Summary of Findings

Elements	Description	Expert reviews	User reviews
Epistemic procedures	Explicit precepts, principles, and rules	Scientific testing - Key principles: Rigor - Reflected in: Formalized test programs	Authentic experiencing - Key principles: authenticity - Reflected in: Community Guidelines
Epistemologies	Understandings of what constitutes valid data for generating product information	Epistemic technocracy - Only experts have access to the true quality of products	Epistemic democracy - The collective wisdom of consumers represents the true quality of products
Epistemic values	Understandings of what constitutes valuable product information	Product differentiation - Value of information grounded in its ability to help consumer differentiate products	Expectation confirmation -Value of information grounded in its ability to help consumers predict whether their product expectations are likely to be met
Epistemic devices	Technical tools for evaluating and displaying data	- Algorithmic processing of data - Ratings displayed via star-rating	- Weighted processing of data - Ratings displayed via ideographs and comparative table

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Unappreciated Practices Creating Value

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INTRODUCTION

Value is a concept widely researched in the areas of marketing and consumer behavior (Bagozzi, 1975; Belk, 1987; Holbrook, 1999; Holbrook and Hirschman, 1982; Humphrey and Hugh-Jones, 1992; Levy, 1959; Zeithaml, 1988) and can be defined as the benefit perceived by the consumer in relation to a person, an object or an activity (Figueiredo and Scaraboto, 2016).

Some researchers in the area of consumer culture have investigated how value is created (Gummerus, 2013). They have proposed considering the sign value in the discussion of value creation (Peñaloza and Venkatesh, 2006; Venkatesh et al., 2006); the sociocultural perspective of value (Karababa and Kjeldgaard, 2013); the creation of a practice theory of value and value as a result of practices (Arnould, 2013); the market value system, composed of exchange, use, meaning, sociocultural and environmental value (Venkatesh and Peñaloza, 2014); the ontology of value and an object-centered approach to understanding processes of value creation (Arsel, 2016); and, lastly, the creation of value from the consumer-centered journey of consumption (Akaka and Schau, 2019). Additionally, research has contemplated practices as a mechanism for creating individual value in consumer groups (Holt, 1995); routine actions involved in creating collective value and maintaining brand communities (Schau et al., 2009); unintentional, random, unique and diverse actions carried out independently by individual consumers who contribute to the systemic nature of value creation (Figueiredo and Scaraboto, 2016); and the role of platform-based networks in creating value at the level of individual, and collective experiences by means of networks (Figueiredo and Scaraboto, 2018).

We noticed a common characteristic in these studies: the consumption practices that create value have a positive or neutral social connotation. In this work, we investigate the creation of value related to a practice which historically has received a negative social connotation, but which has acquired a new symbolic profile: the lunchbox. This term refers to both the object and the practice of taking food from home to other environments.

The lunchbox, which is extensively connected with Brazilian rural workers (Garcia and Gomes, 2016; Freitas, 2018), has long been seen as evidence of social fragility, and cause for embarrassment and shame (Garcia and Gomes, 2016). The lunchbox has also been associated with the working class, for having to eat away from home (Martins, 2012). City workers have used the lunchbox as a political symbol during a rebellion stemming from unfavorable work situations (Ferreira, 2005). Until recently, lunchbox consumption was never linked to meanings such as pride or status, given that neither the object nor the practice ever received social praise (Martins, 2012).

However, there has been a gradual construction of a new social image for the lunchbox in Brazil. If, for a long time, taking food from home to work was a sign of poverty and an option only when financial resources were scarce (Garcia, 1997), the benefits of homemade food are giving the lunch box new meanings nowadays (Garcia, 1997; Martins, 2012). Some of the advantages of using the lunchbox are: agility and practicality in its preparation; cost reduction; and healthiness with regard to food (Garcia and Gomes, 2016). It has been pointed out that the number of entrepreneurs in the household

food business (including lunchbox) grew 142% from 2014 to 2020, reaching almost 250,000 in Brazil (Martin, 2020).

Lunchboxes are the subject of a Brazilian TV program for a subscription channel aimed at affluent consumers. We adopted an interpretive approach to analyze this cultural discourse which, in addition to being a means of consumption per se, guides people in making purchases and choosing products (O'Guinn et al., 1985). Analyzing this TV show helps the understanding of how a practice, historically related to aspects considered negative, has been gaining value and conferring value to consumers.

METHOD

We analyzed thirteen episodes from the first season of the TV show *Marmitas e Merendas* (Lunchboxes and Snacks) (290 minutes, approximately) (GNT, 2021). Each episode has a theme (Fitness Food, Veganism, Oriental Food, Salads, etc.) and the host follows the eating routine of Brazilian celebrities (C) and anonymous individuals (A). Our analysis, inspired by Hirschman (1988), sought to capture the movement of the narrative and how it was unfolding. We adapted the concrete categories of actor, action and result to "characters," "action" and "motivations/needs," apropos for the program's structure, in order to give contour to the perceptions, practices, motivations and expectations of lunchbox users. The participants refer to "the lunchbox" when dealing with lunch and dinner meals and to "snacks" for intermediate meals.

RESULTS

The unappreciated lunchbox

The negative associations related to the use of lunchboxes are openly expressed in the program. In the first episode, the presenter asks the celebrity: "Isn't it sort of tacky to come to the record studio carrying a lunchbox?" Throughout the episodes, mention is made of this condition ("it was a poor people's thing"). The anonymous person in episode 3 (A3) tells how she used to avoid possible embarrassment because of her lunchbox: "I have even eaten lunch in the bathroom."

The characters recognize the negative image historically related to the practice, but a few of them challenged social judgers: "…at a time when no one was using lunchboxes." Negative associations still persist and are not limited to the practice itself, but also to the type of food in the lunchbox ("There is still some prejudice, but it has to do with the type of food you bring"). According to A5, 'diet' or 'smelly' foods contribute to deprecating the lunchbox.

Appreciating the lunchbox: benefits, affluent consumers and common interests

The program shows that the use of the lunchbox seems to be gaining a new profile and attracting new audiences. C3 offers an explanation: "Prejudice toward the lunchbox is changing in the name of a healthier diet." The benefits of the lunchbox range from being a "way of being careful about one's food" and "having the right time to eat a balanced meal," to "avoiding buying junk food on the street" and "helping with weight loss." A4 extends the list of beneficial effects by suggesting that the lunchbox "helps balance physical and

emotional stress from work." Low cost, quality and practicality were also mentioned in order to enhance the use of the lunchbox.

Part of what gives value to the program's lunchbox practice seems to be related to the one who uses it. The characters are affluent consumers. Brazil is a hierarchical society, where affluence is socially valued (Da Matta, 1984). The signs of affluence appear when the characters introduce their maids (who prepare their meal); suggest that they contain expensive foods; refer to certain topics ("this discussion [about healthy food] hasn't yet reached the low-income neighborhoods"); or when they celebrities or belong to a certain profession. Characters linked to the low-income socioeconomic strata do not appear in the program. The exception may be A8, who was originally from a low-income neighborhood, but became a successful entrepreneur.

Among the female celebrities who participated on the program, actresses, TV hosts, digital influencers and journalists predominate. Other characters have their careers linked to today's widespread consumption trend. C9, for example, is recognized for preparing recipes in search of "balanced nutrition." C2 is considered "a fitness muse." C12 is the author of the book "*Diário de uma Vegana*" ("Diary of a Vegan") and host of a TV program on the subject. Male celebrities (actors and dancers) appear less often.

The themes covered in the episodes provide for the approximation of famous and anonymous characters who, in theory, experience different worlds, but who have common interests. Whatever the theme may be, celebrities and anonymous individuals describe their lunchbox routines. Another point that should bring the characters closer has to do with the cultural capital at their disposal and which adds to their affluence (Bourdieu, 1984). The academic backgrounds and occupations of the anonymous individuals (lawyer, advertiser, chef, producer of organic products, etc.) decrease their social distance from the celebrities in the program to a certain extent. At any rate, even if the lunchbox does not erase the distinction between the characters, it distinguishes them from another group: the "uninitiated," who do not use lunchboxes.

The lunchbox creating value: distinction

The program shows that the lunchbox has gained a certain status ("I think it's chic and modern to use a lunchbox") and is different from those prepared by workers. Some characters insist on demarcating their veteran status, indicating that they adopted the lunchbox "when it wasn't even fashionable." By setting themselves up as veteran users, the characters claim authenticity in the adoption of the practice, differentiating themselves from newer lunchbox users, whose insertion into this type of consumption comes from the spread of the practice.

The distinction appears at other times in the program. C2 prepares her lunchbox for several meals during the day and she uses foods that are not common to the Brazilian diet (Canesqui, 1988; Bleil, 1998) (e.g. Azuki beans and fresh coconut). Other characters have "differentiated" contents in their lunchbox: protein dumplings, a sweet potato snack, dehydrated pineapple, grilled palm heart, ghee butter, "7-grain" rice and pumpkin-flavored toast crackers, for example. Another difference from "traditional" lunchboxes introduced by the program is the separation of food into different containers and the use of a special bag for transporting the lunchbox. Not everyone prepares their lunchboxes for the main meals of the day. C1, for example, refers to her lunchbox as an "S.O.S" (something for moments of hunger outside regular mealtimes), which, in itself, confers an intra-group distinction.

The lunchboxes prepared on the program are different from traditional ones not only in terms of content, but also in terms of design

("I have lunchboxes of all sizes and colors"). In the past, the object was not associated with any brand specifically (CNRTL, 2018). In some episodes, it was possible to observe the use of "Bentô" lunchboxes, whose prices range from US$18 to $45, depending on the model (Bentô, 2021).

The lunchbox creating value: connecting the consumer to other meanings

Specific needs guide the use of the lunchbox, depending on the theme of the episode. However, the similarity resides in the characters' health concerns. The lunchbox allows to access better food; after all, "it's the only way you can know for sure what it is that you're eating." For some, the lunchbox carries "a reconnection with the home," where "the best food" is made, as opposed to "industrialized" food. Healthy eating is a recurring theme in the characters' discourse and, although this concept is not explored, it is sometimes alluded to ("the color [of the food] is [indicative of] healthy").

Food safety is also a meaning attached to the practice ("The most important thing is taking [food] from home and consuming what we know is safe"). The feeling of autonomy appears as a means of reversing a potential restriction ("If I go to a barbecue and can't eat what's there, I have my lunchbox"). The security and autonomy provided by the lunchbox indicates a certain agency about what is consumed (Eckhardt and Mahi, 2004) ("You become your own master when you eat what you yourself have prepared at home or when someone you know has prepared it").

Lunchboxes also make it possible to be concerned about one's own well-being and that of others ("taking lunch is having respect for yourself"; "it's a way of taking care of the other person"). A1 explains the collective dimension of the practice: "the lunchbox is not just for me [...] it's for everyone; if I take chocolate cake, maybe three people will come up to me and ask what it is and if they can have a bite." A4 indicates that this sense of communion can go beyond the simple sharing of food to reach a deep symbolic dimension ("Now and then, you can save someone else with your lunchbox"; "I've fed a lot of co-workers with my lunchboxes").

FINAL CONSIDERATIONS

This work adopted an interpretive approach to consumption and analyzed the use of the lunchbox as represented on a TV show. Lunchbox consumption, traditionally associated with low-income individuals, has recently attracted affluent consumers. By exploring the adoption of the lunchbox by a new consumer profile, we were able to identify a historically unappreciated object and practice that are gaining value, being progressively reframed and that, due to that new condition, are conferring value to the consumer – something difficult to capture when we analyze practices that *a priori* have a positive social connotation. Table 1 summarizes the results:

On the TV program analyzed, the lunchbox is represented in the context of affluent, famous, or anonymous individuals, whose realities are brought together by the way they fit into the themes of the episodes and by the cultural capital they supposedly have. The characters start with their love of healthy eating, a theme that has received increased attention in recent years in Brazil (Garcia and Gomes, 2016), and they add benefits to consumption: low cost, perceived quality and practicality in the preparation and consumption of food. In this study, the change in the view of affluent consumers for food and the demarcation of food themes, which are predominantly distant from the reality of low-income consumers, are particularly important for generating some value for the lunchbox and for giving it a new meaning.

Table 1. Conferring value to the practice and creating value for the consumer

The unappreciated lunchbox	The appreciation of the lunchbox	The lunchbox creating value	
		Distinction	**Other meanings**
- it's tacky - it's a "poor people's thing" - it causes embarrassment - it carries negative connotations according to the type of food	*The benefits* - makes for better nutrition; - entails lower cost, more quality and practicality; *Affluent consumers* - celebrities and anonymous individuals; - elements that give affluence to the characters (ex: maids preparing the food; use of products with high added value; themes and professions); *Common interests* - celebrities and anonymous people use lunchboxes, according to their needs and the proposed themes; - the characters are distinguished from the "uninitiated," who do not use lunchboxes.	- it's chic and modern; - it's different from those used by low-income workers; - veteran users vs. new users; - the use of foods that are unusual in the Brazilian diet; - the use of separate containers to separate the food; - the use of a special bag for carrying the lunchbox; - the lunchbox as an S.O.S.; - the use of lunch boxes with different designs and values.	- the lunchbox enables one to: - eat "the best food"; - have a "healthier diet"; - reconnect with the home; - feel safe knowing what one is eating - have autonomy; - be concerned for one's own well-being and that of others; - share with others.

Although it was not within the scope of this research to specify to what extent the lunchbox has been or is being reframed, it was possible to understand how its new status has been giving value to consumers. For some, using lunchbox is "chic and modern," a form of consumption that makes it possible to show differences (in terms of the food one eats; the many containers one has; the brands one can buy). Distinction is, then, the symbolic value highlighted in the program. It can be inferred that the characters on the show and the consumers – the users of lunchboxes who see themselves represented there – form a group of "initiates" who are distinct from other consumer groups. Other symbolic values are depicted on the program. The lunchbox makes it possible for consumers to show concern for their health, to "return home," so to speak, and enjoy the security it can provide; and to regain some control over what they consume. Moreover, consumers who seek their own well-being have, in such consumption, a practice that enables them to access other symbolic layers of consumption, for example, by feeding and saving someone else with what they bring in their lunchbox.

We believe that the findings of this study can serve as a starting point for other studies that seek to explore: i) lunchbox use in different cultures and social strata; ii) the socialization process for lunchbox users; iii) gender differences associated with the use of the lunchbox, since the practice of preparing meals has always been associated with the female universe (Lelis et al., 2012); and iv) this same context from other data sources – a limitation of this research – and theoretical framework.

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Depression in Consumer Research: An Integrative Review and Research Agenda

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INTRODUCTION

Currently, consumption is considered a basic condition of living in society, a way of satisfying personal values, giving meaning to life, generating and maintaining relationships, expressing identity, status, and lifestyles, in addition to allowing participation in social and political practices (Ribeiro *et al.* 2019). However, consumption does not only have positive consequences. Consumption behavior has already been linked to impulsiveness in shopping, compulsiveness, indebtedness, as well as mood disorders, such as anxiety and depression (Brook *et al.* 2015; Hirschman and Stern 1998; Hojman, Miranda, and Ruiz-Tagle 2016; Mueller *et al.* 2010).

Nevertheless, the relation between depression and consumer behaviors is a neglected research area, still incipient in marketing literature. Recently, in the overview of a session hosted at the Association for Consumer Research (ACR) Conference 2019, Cristel Russell and Ronald Hill stated that few studies have tied mental health and consumption behaviors, but that taking into account the number of cases of people with mental disorders in the world, marketing researchers should strive better to understand the relationship between mental health and consumer behavior. Answering that demand and focusing on depression, a disorder that affects over 260 million people worldwide (WHO 2021), this article analyzed how constructs related to mood, mental health, and depression have been studied in marketing and consumer behavior.

Depressive disorder as a research object was selected from the awareness that by 2030 depression will be the most common disease on the planet, ahead of cancer and some infectious diseases. Also, the number of cases of people living with depression has increased by 18.4% between 2005 and 2015, and it can lead to suicide (Vos *et al.* 2016; WHO 2011, 2021); but current organizations and management models are not ready to deal with depressive consumers, workers, and citizens. Furthermore, the COVID-19 pandemic has caused an increase in the levels of anxiety, stress, and depression around the world (Ding *et al.* 2021).

Hirschman and Stern (1998) were pioneers in the study of the effects of depression on consumption. Through a study published in the ACR conference proceedings, volume 25, the authors identified general aspects of consumption that are affected by mood disorders. They stated that depression is related to risk-taking, sensation seeking, product involvement, innovativeness, and hedonic consumption. Most consumers who have recurrent depression can live in society and spend most of their time operating within the 'normal' limits of human experience. However, this portion of consumers has constant mood swings and extreme sensitivity to other people and the environment (Hirschman and Stern 1998).

The purpose of this study is not to present an exhaustive review of articles but to expose the topics that emerged from the literature, what we can infer about them and how we can act from now on in order to use consumption as an emancipation and transformation tool for individuals with mental disorders, such as depression. Thus, in the following section, the method used to conduct this integrative review is presented, followed by findings, in which the main aspects are discussed. Subsequently, main findings and a research agenda will be presented in table 1. Finally, the authors review the main contributions of this conceptual paper in the final considerations section.

METHOD

An integrative literature review (Torraco 2005) of scientific articles in English published in prominent peer-reviewed marketing journals was carried out. The analyzed articles were collected in the following academic databases: Emerald, JSTOR, Science Direct, and Taylor and Francis Online. The search period covered all manuscripts available by the end of March 2021. There was no time restriction, as the intention was to obtain a broader view of the state of the art of scientific production on the themes in question. The literature search was based on keywords: 'depressive' AND 'consumer behavior.' The use of the word 'depression' was not satisfactory because of the ambiguity with the word depression in the economic sense. Besides, depressive either served for the depressive itself or for the use of the expression depressive disorder, more commonly used in scientific articles. Second, the word consumption has been tested, but the results have been limited. With the use of the expression consumer behavior, the articles were more directed to the area of interest of the literature review. Also, they included the agent, the consumer, since consumer behavior was not in quotes in the search.

Due to the low number of studies that focus on depression in the marketing literature, the authors decided to expand the scope of the review to mood and mental health, two broader constructs but that encompass depression.

After conducting the search, the authors read all the titles of the articles and selected those that had an affinity with the theme of mood, depression, mental health, and some aspect of consumption. After reading the abstracts of the open articles, those that had a connection with the themes of the integrative review were selected. Most of the articles were not related to the search topic, being of different areas or emphasis. From the 2,645 articles analyzed, 95 were selected for detailed reading by the researchers. Among the 95, 41 were eliminated because they did not meet the criteria of the second filter (articles in which 'mood' is defined as mood in colloquial language; articles in which depression was only mentioned, but not the focus; article in a journal or by an author not from Administration or Marketing). Thus, 54 articles made up the research corpus of this literature review. The articles were analyzed with the aid of NVivo 1.0.

FINDINGS AND DISCUSSION

First, all articles were added to Nvivo 1.0, and a word cloud was generated to visualize the main constructs addressed in the research corpus. Based on the word cloud and the 41 articles previously read by the researchers, 30 categories were defined to be investigated in the data analysis. The categories were (in order of importance in the research corpus): marketing, advertising, emotion, health, depression, well-being, mood, stress, compulsive, materialism, happiness, addiction, anxiety, mental health, Facebook / Twitter, coping, drug, therapy, spending, impulsive, self-esteem, food, hedonism, social media-SNS, loneliness, mental disorders, compensatory, smoking, social comparison, and envy.

After viewing the more and less addressed constructs in the analyzed articles, it was decided to focus on those that most represent the central theme of this integrative review. In this way, a heat map of underlying categories versus mental health, depression, and mood was generated, represented in figure 1. Therefore, it was verified how much a category was related to the main themes that guide this literature review, by the authors of the selected articles. This figure

was useful to analyze the primary constructs associated with depression and aspects of mood in the field of marketing and consumer behavior.

In the 'mood' category, the greatest association was with 'emotions' (10.68%). Then, 'mood' was associated with 'depression' (5.13%); 'hedonism' (5.06%) and 'food' (3.93%). In this sense, it is clear how emotions affect the mood of individuals and that studies of mood can act as a support for studies of depression. In terms of consumption specifically, the biggest associations were with hedonism and food. Thus, it can be inferred that mood tends to affect the consumption of products due to hedonistic motivation and pleasure, with food consumption being the most mentioned aspect. Hedonism is a construct largely related to depression because it provides the possibility of escape and pleasure for a person with negative feelings. In the field of food, Maddock and Hill (2016) analyzed how advertisements for food products use associations between mood and food. They found that although healthy foods can improve mood, they are not usually used as an advertising message. On the other hand, advertisements for foods that can depress mood often adopt messages of happiness and well-being (as is the case with snacks and unhealthy foods). The authors also point out that an unhealthy diet is a risk factor for individuals with mental disorders, especially depression and anxiety. Furthermore, advertising has the power to affect the consumer's choice of food. Food affects mood and general well-being and contributes to the prevention and treatment of specific mental disorders.

Similarly, Garg, Wansink, and Inman (2007) concluded, through experiments with university students, that people eat more hedonic foods when they are sad and more healthy foods when they are in a positive (happy) mood. However, this effect is alleviated when the product's nutritional information is present. According to the authors, pharmaceutical companies that sell antidepressants may consider adopting a warning that depression can lead to overeating and choose products and portion sizes wisely when taking medications.

Second, 'health' was the category with the highest association with 'mental health' (23.89%); followed by 'depression' (6.78%);

'mental well-being' (5.15%) and 'spending' (4.14%). It is clear that mental health studies in marketing also act as relevant to studies on depressive disorder. However, concerning consumption, 'spending' was the leading category related to mental health. The depressive person becomes a more vulnerable consumer because he or she has a tendency towards impulse or compulsive shopping behaviors, which leads to indebtedness. In this sense, Dahal and Fertig (2013) stated that individuals with low to medium depression tend to spend more on all types of products, especially non-durable ones.

Thirdly, with regard to the main theme of this integrative review, 'depression', the most significant associations were with the categories of 'health' (6.73%); 'anxiety' (5.72%); 'emotions' (5.5%); 'stress' (4.72%); 'compulsive buying behavior' (4.07%); 'drugs' (3.09%) and 'addictions' (3.01%). As already widely established in the academy, depression is associated with anxiety and stress and negative emotions tend to trigger depressive episodes (Sneath, Lacey, and Kennett-Hensel 2014). However, the main finding in this category is the evidence that studies of depression in consumer behavior still focus on aspects of compulsive behavior and consumption of products that cause addictions, such as drugs.

Seven studies adopted compulsive behavior as main construct. According to Hirschman (1992), the compulsive depressive consumer uses consumption as a way to escape negative feelings or to obtain control of himself/herself. Additionally, Faber *et al.* (1995) found that shopping to overcome boredom or depression may be significant in the development of compulsive buying, and presented a correlation between binge eating and compulsive buying. More recently, Sneath *et al.* (2014) examined individuals who were victims of a hurricane, and found how the natural disaster induced stress that impacted on depression, what increased their vulnerability to impulsive and compulsive buying behaviors. This latter finding may provide insights into the current pandemic context.

Lastly, it can be seen that other aspects of consumption appeared in the analysis of the research corpus, but that were not very significant to depression. In other words, they were not much approached by the authors of the articles in the corpus. Themes such as hedonism, impulsive shopping behavior, therapeutic consumption,
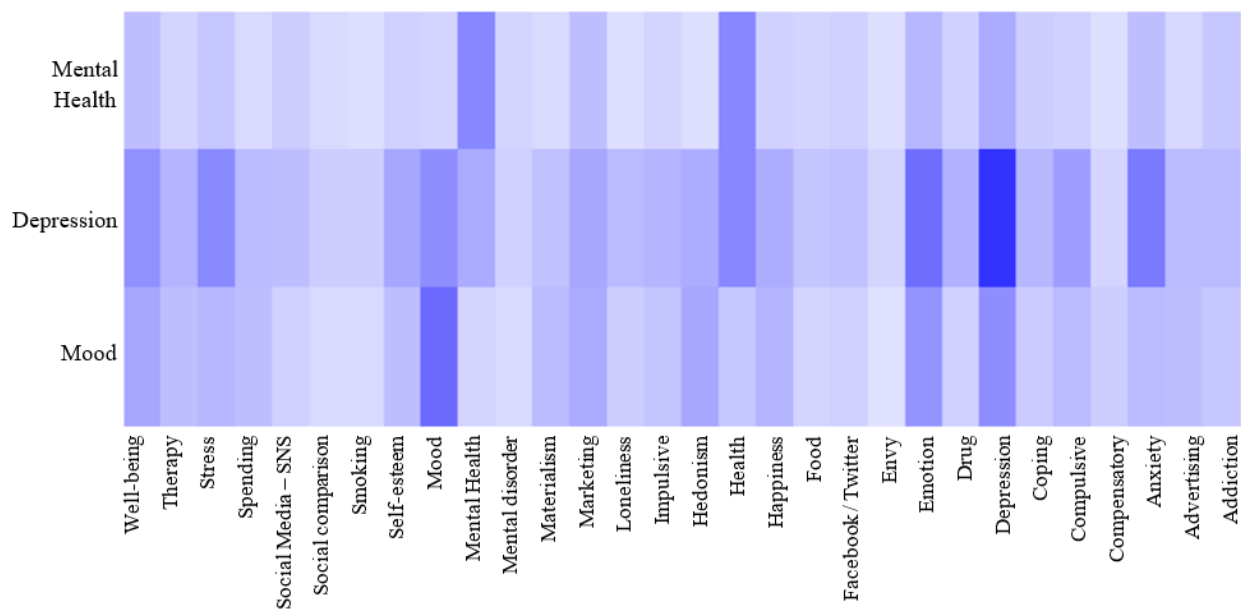
Figure 1: heat map of underlying categories versus mental health, depression, and mood

coping, and materialism can still be further worked on in relation to consumers with mental disorders in marketing.

Finally, it can be seen that there are already studies relating depression and consumption in the field of marketing. However, such studies do not delve into knowing the daily habits and consumption preferences of a depressed individual or the consumption changes faced by consumers themselves when living with the disease. In other words, there is a gap in the literature in the sense that putting the depressive consumer in the focus of the research, seeking not only relationships with addictions and products of a hedonic character, but with the consumption of everyday items in general. Furthermore, it is concluded that marketing studies addressing the issues of mood and mental health still focus on theoretical constructs disseminated since the 1980s. Compulsive consumption is still the main theme addressed in the studies. In this sense, the importance of discussing deeper the coping or therapeutic nature of consumption for subjects with depression is emphasized. Table 1 summarizes the main findings of this integrative review.

FINAL CONSIDERATIONS

Consumer research can make significant contributions to the study of health and the resolution of health problems (Moorman 2002). As asserted by Hirschman and Stern (1998), a significant por-

tion of depressive consumers live in society and spend most of their time interacting with everyday situations that involve the consumption experience. However, despite having the potential to act positively and improve the quality of life and well-being of this portion of the population, the depressive has not yet been focused on as a target for changes in the marketing strategies of the State or private companies. Through this integrative review, it was seen that marketing studies that use the depressive as a research object still focus on themes that highlight the negative character of consumption, such as the behavior of compulsive shopping, in addition to the relationship between depression and the consumption of addictive or hedonic products. However, in a transformative orientation, if consumption can bring positive changes for the individual with depression and if there are categories of consumption that improve people's moods or mitigate symptoms of the disease, why are such categories no longer disseminated in empirical research in area of consumer behavior?

Based on the theme of this conference 'what the world needs now', we propose a research agenda—presented in table 1—that intends to address the depressive consumer needs and reflect how marketing researchers can contribute to the well-being of this relevant portion of the population. The main proposition is that marketing, especially in its transformative nature, adds the depressive consumer to its research agenda. Studies can investigate consumption habits

Table 1: Integrative model of mood, mental health, and depression in consumer research

	Mood	Mental health (MH)	Depression
Main constructs related to the category in consumer research:	Emotions Depression Hedonism Food	Health Depression Mental Well-being Spending	Health Anxiety Emotions Stress Compulsive Buying Drugs Addictions
Constructs less related to the category in consumer research:	Envy Social comparison Social media – SNS Facebook / Twitter Mental Disorders (MD)	Materialism Smoking Loneliness Hedonism Self-esteem	Compensatory consumption Advertising Coping Therapeutic consumption Happiness
Main studies:	Gardner (1985) Garg *et al.* (2007) Kang and Johnson (2010) Keller, Lipkus, and Rimer (2003) Ko *et al.* (2015) Labroo and Mukhopadhyay (2009) Luomala (1998) Luomala et al. (2004) Maddock and Hill 2016 Maxwell and Kover (2003)	Dahal and Fertig (2013) Han, Yu, and Hyun (2020) Machin *et al.* (2019) Nisar *et al.* (2019) Wyllie and Carlson (2018) Yeh, Jewell, and Thomas (2017)	Callaghan *et al.* (2013) Csikszentmihalyi (2000) Guzman, Barredo, and Caillan (2020) Donohue and Berndt, (2004) Hirschman (1992) Keller, Lipkus, and Rimer (2002) Sneath *et al.* (2014)
Research agenda:	1) The role of SNS (e.g., Facebook and Twitter) in consumer's mood; 2) How social media can be a positive tool for individuals with MD during lockdown; 3) How consumption can be a tool to generate positive mood for consumers with mental disorders.	1) How materialistic behavior affects an individual's mental health; 2) How hedonic consumption can harm consumers' mental health; 3) Consumption as tool to alleviate loneliness and increase MH during Covid-19 pandemic.	1) What is the meaning of compensatory and therapeutic consumption for individuals with depression; 2) How consumption can be a tool to cope with depressive disorder; 3) How advertising can better address the vulnerabilities of the depressive consumer.

of individuals with depression and other mental disorders; analyze the influence of depressive disorder on the consumption behavior of depressed individuals (i.e., therapeutic consumption, compensatory consumption, materialism, and coping strategies); in addition to investigating the role of emotions (e.g., envy, loneliness, and happiness) and social media in the consumption habits and mental health of individuals with depression.

Finally, the exploration of the idiosyncrasies of the depressive consumer and their relationship with consumption is not only relevant but urgent. It is predicted that in 2030 depression will be the most common disease on the planet (WHO 2021). More than 260 million people are affected by depressive disorder, and this number may be even higher after the incidence of the COVID-19 pandemic. For this reason, we highlight the role of investigating how marketing scholars can contribute to reducing the negative impact of consumption on depressed subjects and how employers and family members can be alerted in fighting the disease through something ubiquitous and inherent to life in society, consumption.

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Transformative Social Marketing: Sharing "Swedish Dads" with the World

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INTRODUCTION

How can Transformative Social Marketing (TSM) campaigns addressing global complex sociocultural issues connect with local stakeholders? This study aligns with this year's ACR call by tackling how consumer researchers, governments, non-profit organizations and corporations together can enhance consumer welfare. The paper is positioned within TSM (Lefebvre 2012), studying the Swedish foreign policy brand *Swedish Dads'* (SD) global promotion of paternal parental leave policies – a sociocultural issue considered radical in many countries. Gender inequality is one of many problems the world faces that requires fundamental changes in frameworks of knowledge and behaviors for a more sustainable world (UN 2030, n.d.). Sweden sees gender equality as a prerequisite to achieve its broader foreign policy goals - peace, security and sustainable development – and is the first country in the world to declare a feminist foreign policy agenda that also aligns with the UN 2030 Sustainable Development Goals (SDG) (Swedish Government, n.d.). The paper contributes with an operationalization of Lefebvre's (2012) conceptual TSM model by introducing the concept *malleable toolkit.* The concept stems from computer science and captures interfaces that must serve a heterogeneity of users and contexts (Egan 2017). We define the TSM malleable toolkit as a marketing strategy designed to interact and align with heterogeneous stakeholders, thereby enabling local partnership, local co-creation, and leveraging local conversations. In doing so, we also answer Kopp and Kim's (2018) call for a more global outlook on public policy and marketing. The paper delineates the TSM malleable toolkit's key characteristics and suggests practical guidelines on how to approach global TSM campaigns.

THEORY

Social marketing includes a wide variety of perspectives (Gordon, Russell-Bennett and Lefebvre 2016). We position our study within Lefebvre's (2012) conceptual TSM framework, focusing on the assumption that multiple stakeholders, including local governments, corporations, civil society and target groups, co-create value to "do good" for society. In operationalizing Lefebvre's conceptual model for this study we delineate the following key TSM processes: 1) having empathy with multiple stakeholders' motivations and values; 2) creating exchanges with those multiple stakeholders; and 3) participating in their ongoing local conversations to co-create value to achieve social goals. We also identify a need to understand social marketing across culturally diverse environments (Kim and Kopp 2018) and therefore extend the TSM model by drawing on Hall's (1980) communication theory that explains how various stakeholders encode and decode communication events. According to Hall (1980), raw events are facts encoded by a sender via a particular ideological apparatus, including certain frameworks of knowledge, into a meaningful communicative story. The target group then decode the communicative story according to their local frameworks of knowledge which may not always align with those of the sender. In sum, our operationalization responds to calls for more research considering a global outlook of public policy and marketing (Kopp and Kim 2018) that includes aspects such as power, gender and a multiple stakeholder value co-creation perspective (Gordon et al. 2016; Lefebvre 2012).

Figure 1 depicts our operationalization of the TSM model in the form of a TSM malleable toolkit in line with Lefebvre (2012) and Hall (1980). We applied it to analyze how stakeholders in three dif-
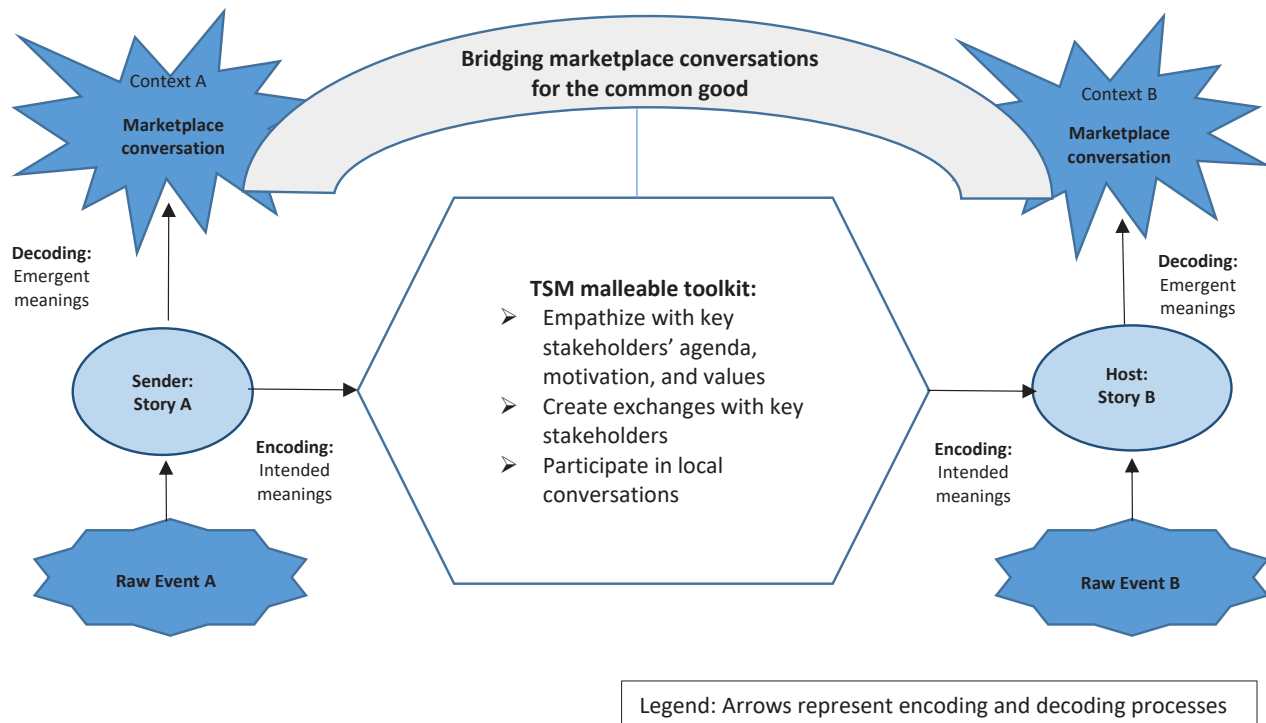
Figure 1. Elements involved in a TSM malleable toolkit applied in a global context

ferent countries engaged in the SD campaign, using what we identify as the SD malleable toolkit to encode and decode the campaign into different local marketplace conversations.

METHOD

We applied a single case study design (Yin 2009) of the case *"Swedish Dads"* in three embedded units of analysis: Shanghai, China; Bosnia and Herzegovina; and Australia. The three embedded units of analysis provided rich data that allowed us to identify common themes as well as variation across the units (Creswell 2007).

The "Swedish Dads" Case. Swedish Dads (SD) started as a grassroots marketplace event in 2015 with a photo exhibition and a book launch by the established Swedish photographer Johan Bävman (http://www.johanbavman.se/swedish-dads/). The raw event in Sweden was data indicating that some 14 percent of Swedish dads choose to share the parental leave that they have an equal right to with their partners (Bävman 2015). Bävman encoded this raw event into a communicative event (book and exhibition), tapping into Swedish marketplace conversations on shared parental leave and arguing that more fathers should consider it. The event went viral in the news and social media.

In 2016, The Swedish Institute (SI, a branch of the Swedish Ministry for Foreign Affairs) bought the rights to Bävman's photo exhibition and incorporated it into its Sharing Sweden international communication program. The program offers marketing toolkits for themed events **designed for an international audience. SD quickly became its flagship brand, to date shown in** 78 countries. The toolkit allowed stakeholders to adapt the event to local audiences in ways aligned with TSM's three key processes 1) empathize; 2) co-create; and 3) participate. We chose three embedded cases to explore how the projects played out in different contexts.

Embedded cases. Both authors have followed the evolution of SD closely from the fall of 2015 to 2019. Due to the exceptional speed with which SD disseminated across nations, we consulted the SI to make a short list of some 10 countries likely to provide rich data and variation across countries. Following three sampling criteria: i) geographical spread; ii) variation across sociopolitical and cultural contexts; and iii) variation across key stakeholder engagement (state, corporations and civil society) we sampled three case countries: China (more specifically Shanghai), Bosnia and Herzegovina (BH) and Australia. These three countries represent three continents, different sociopolitical and cultural contexts as well as different stakeholder engagements. Each project emphasized the importance of engaged fathers but for different reasons. The Chinese government focused on leveraging the new two-child family policy, in BH non-profit organizations engaged in leveraging gender equality by questioning gender stereotypes and promoting active fatherhood and in Australia leading corporations focused on leveraging corporate profit through parental leave policies.

Table A1 in Appendix 1 gives an overview of the data sources and describes the analysis.

FINDINGS

The raw event in China/Shanghai is the declining fertility rate, in Australia it is the ranking as the least generous paid parental leave policy scheme of all the OECD countries and in BH it is the lowest ranking among European countries on the Global Gender Gap Index. Each hosting country used SD's malleable toolkit as a means (communication technology) to encode their own gender data (raw event) into communicative events to stimulate local marketplace conversations. We have organized the analysis of the three cases according the three co-creation strategies depicted in Figure 1.

Chinese Babas (Chinese dads): Leveraging the two-child state policy

Empathizing with key stakeholders and their motivations and values. Since the introduction of the one-child policy in the 1980s China has experienced declining birthrates and an aging population. To curb this development China rolled out its two-child policy in 2016 aimed at encouraging increased childbirth. Chinese women still seem hesitant to have more than one child, causing extensive discussions about the problem of balancing work and family life after the second child. Fathers, however, have been more or less absent in these discussions (Bloomberg News 2020, Zhou 2019, Embassy interview 2019).

Creating exchanges with key stakeholders. When presented, a year after the roll out of China's new two-child policy, SDs fatherhood theme enabled local government stakeholders to highlight the two-child policy in a way that would ease the burden on women by encouraging fathers to be more involved. The Swedish Consulate in Shanghai cooperated with two local government arms: The Shanghai People's Association for Friendship with Foreign Countries (SPAFFC) promoting mutually beneficial exchanges and cooperation with foreign countries and the Shanghai Women's Federation (SWF) working for the advancement of women. Launched on the International Women's Day, the SD communicative event opened with a photo competition inviting Chinese men, women and children to contribute with photographs that represented Chinese Babas (Chinese Dads). Of the 15,000 Chinese submissions, 25 photographs were displayed side by side with 25 SD photographs in public spaces. IKEA in Shanghai also contributed by showing the Chinese Babas in their store (Embassy emails 2017; Embassy interview 2019).

Participating in ongoing local conversations. Given the goal to promote gender equality and bring fathers into the two-child policy conversations, the SWF were supportive of the SD project's efforts to initiate a debate around the role of fathers to increase gender equality. The idea was a broad outreach with the help of local arms of the government. The numerous submissions of Chinese Baba photos from local families along with the media coverage suggest that the campaign tapped into important local policy and consumer conversations.

BHtate (BHdads): Leveraging gender equality with the help of non-profit organizations

Empathizing with key stakeholders and their motivations and values. The rise of patriarchal nationalism in the beginning of the 1990s and the devastating civil war 1992-1995 was followed by more traditional gender norms and a backslide for women's rights (Hadziristic, 2016). Improvements in gender equality is considered key among those involved in the reconstruction of BH (Care International Balkans 2013; UN Women BH n.d; USAID 2016), in particular the Swedish government which is one of the contributors assisting BH to fulfill the requirements for EU integration (Swedish Government, BH 2018a; 2018b).

Creating exchanges with key stakeholders. In the aftermath of the war and its ethnic tensions some argue that BH has set up a complicated system of government (Nardelli, Dzidic and Jukic 2014). According to representatives for the Embassy of Sweden in BH (interview 2019), non-profit organizations are important operational partners, not least thanks to their PR skills and networks all over the country. In the case of SD, the Swedish Embassy collaborated with Care International Balkans and Infohouse in 2017. The project took on the local name BHtate (BHdads) to emphasize that local fathers were key to the event, functioning as norm-breaking pioneers that could open up for new types of conversations around masculinity. In

social media, local fathers were encouraged to send in photos of their experiences as engaged fathers to promote these BHtate photos side by side with the Swedish dads.

Participating in ongoing local conversations. Rather than promoting Swedish dads' long-term caregiving the Swedish way, the SD event aimed at co-creating marketplace conversations enhancing public awareness of the ability for men to stay home at all and their role in promoting gender equality. Via active fatherhood, traditional gender stereotypes were to be challenged. Indeed, the Embassy (interview 2019) described BHtate as a tool to develop and keep conversations on active fatherhood going, in both social and traditional media. The Facebook page BHtate was still active four years after the event (BHtate).

Aussie Dads: Leveraging corporate profits via paid parental leave

Empathizing with key stakeholders and their motivations and values. The Australian government's paid parental leave policy scheme is the least generous of all the OECD countries and only 1 in 50 Australian fathers take paid parental leave (Australian Human Rights Commission 2014). Parents at Work (PAW) is an Australian-based social enterprise focused on working parents. In 2017, after ten years of advocacy and education of corporations and families, PAW found no increase of men on paid parental leave. Looking for collaboration and possible help from abroad, PAW found that Sweden stood out on the global scene in both government policy schemes and in connecting parental leave policy with business profitability (interview with CEO of PAW).

Creating exchanges with key stakeholders. Together with the Swedish Consulate in Canberra PAW set up a SD project. From 2017 to 2018 PAW and the Swedish Consulate joined forces on a 12-month education and preparation plan to engage corporate stake-holders and build momentum for the launch of Aussie Dads showing caring Australian fathers side by side with the Swedish dads (archival documents and interview). PAW received backing from leading corporations including KPMG, Deloitte, Westpack, McQuaire Bank, HSBC, Australian Men's Health and the Swedish Australian Chamber of Commerce. It was the first time the exhibition took place in a workplace environment.

Participating in ongoing local conversations. The aim was to continue the marketplace conversations and education on profitability beyond the events. PAW hired Bävman to make an exhibition of Aussie dads alongside the SD exhibition next to the Sydney Opera House. The exhibition, workshop events and podcasts involving CEOs and HR managers from the sponsoring corporations generated a lot of news and social media coverage. The exhibition travelled to Melbourne and one year later to London *(interview CEO Parents at Work)*. The marketplace conversation starting with the Aussie Dads project continued locally with PAW in the driver seat. Together with business partners, PAW developed the Advancing Parental Leave Equality Network (APLEN) as part of the commitment to "lead UN global gender equality efforts to advocate and advance parental leave equality in Australia" (APLEN n.d.). They were also a public voice in initiating and participating in media conversation on how CO-VID-19 impacted parental roles and new work-family arrangements (PAW 2021).

DISCUSSION

How did the global SD TSM campaign apply the malleable toolkit to connect with local stakeholders? We found three co-creation strategies: 1) Equal and localized partnerships; 2) Co-created events empowering consumer voices; 3) Leveraging locally relevant issues. Our findings show how these three strategic elements that align with Lefebvre's (2012) TSM framework can contribute to con-

Table 1. Transformative Social Marketing strategies of the Swedish Dads foreign policy campaign using a TSM malleable toolkit.

TSM Strategies:	Chinese Babas	Cases: BHTate	Aussie Dads ➡	Bridging conversations
Empathizing with key stakeholders' motivations and values	**Government roll out** of its two-child policy campaign	**NGOs advocating** gender equality in the post-war reconstruction of BH	**Local business awareness** campaign of family friendly work-life.	**Equal and localized partnership**
Creating exchanges with those multiple stakeholders	The Swedish Embassy, consulates and global brands (IKEA) co-creating events with local Chinese governments and consumers Chinese Babas amateur photo competition.	Swedish Embassy collaborate with Care International Balkans and Infohouse and consumers. BHtate(s) amateur photo competition.	Swedish Embassy/consulate in collaboration with Parents at Work and sponsored by a consortia of leading corporations and consumers. The SD and Aussie Dads exhibitions integrated and displayed in business and public venues.	**Co-creating events and empowering consumer voices**
Participating in ongoing local conversations	Leveraging the two-child policy and initiating a debate around the role of fathers to create a more equal society.	Leveraging gender equality by fighting gender stereotypes and creating active fathers.	Leveraging corporate profits via paid parental leave.	**Leveraging locally relevant issues.**

nect people across nations to engage in a common social good. By design the SD malleable toolkit emerged as a platform, making resources available for local stakeholders to communicate their own gender and family policy agendas. This was in line with the principle of Swedish Feminist Foreign Policy to tap into and uncover local voices of gender equality (Aggestam et al., 2019). A large part of the capacity of the SD project was in its imagery. Like "hero shots" (Molander et al. 2018) challenging existing marketplace conversations, the local photo competitions empowered local voices by bringing them to the center of the events in the foreign policy project (Aggestam et al. 2018). Due to the transformative capacity of the imagery (Molander et al. 2018), these marketplace conversations lingered in the marketplace for a long time.

Our research responds to Lefebvre's (2012) call to operationalize social marketing approaches that address multiple stakeholders as co-owners who co-produce a better world. It also fills a gap in the social marketing literature on global social communications projects by offering a theoretical and practical framework that guides the communication process. By constructing the SD project as a malleable toolkit SI created a gender equality brand platform (Bertilson and Rennstam 2018) that functions as an interactive framework within which the various stakeholders could meet to co-create value. Aligning with the UN 2030 SDG and offering this interactive framework, our contribution is a step towards dealing with ethnocentricity and power issues largely ignored in the social marketing literature (Brace-Govan 2015; Gordon et al. 2016; Tadajewski et al. 2014). Moreover, our study offers a highly warranted empirical case of, and practical framework for, how foreign policy can align with and support the UN 2030 SDG agenda. Though not exhaustive, Appendix 2 exemplifies the formulation of practical guidelines in SD's malleable toolkits.

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Doing VanLife: A Social Practices Perspective on Traveling with a Camper Van

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INTRODUCTION

Traveling with recreational vehicles (RV's) is a vacation practice that has a long tradition among North American and European consumers. In recent years this trend has gained momentum under the blurring of work-life boundaries (Land and Taylor 2010), the emergence of digital nomadism (Bardi et. al. 2012), the increasing demand for flexibility (Bardhi and Eckhardt 2017), and the search for authentic travel experiences (Reckwitz 2016). A common practice among consumers is to buy a regular, second-hand transporter and transform it into a customized camper van. Once upgraded, it can be used for spontaneous weekend trips, holiday trips, or as a temporal, mobile home base for nomadic VanLife episodes. Within the European market, the Volkswagen camper van (VW Bus) has gained enormous popularity among young urban consumers. Since the so-called VW Bus has dimensions of a regular car, it provides the flexibility to be used as a vehicle in daily life, and enjoying the freedom of using it as a tiny, yet a fully equipped RV for traveling. To study how VW Bus owners, use their bus provides a fruitful empirical background for a better understanding of the contemporary consumer trend VanLife.

This study draws on practice theory (Reckwitz 2002; Warde 2005; Shove, Pantzar and Watson 2012) in order to explore the consumption practices that evolve around the use and ownership of VW camper vans. The study addresses the research questions of: (1) What cognitive, discursive and motivational behaviors do owners develop in the use of their camper van? And, (2) how is the social praxis of VanLife constituted through a combined and coordinated bundles of practices? The findings reveal how VanLife is constituted by three distinct, yet interrelated bundles of practices, that together resemble a recurring, authentic and singularizing travel experience.

THEORETICAL BACKGROUND

Practice Theory

Practice theory suggests that consumption is a 'doing' that is linked to multiple social levels. A recurrent question of a practice perspective is: What do consumers do? This sets the focus on what practices VanLife comprises. This question focuses upon those specific, situated practices that VW Bus owners engage in when they are living in their camper van. This empirical study draws on the differentiation into three elements of practice theory: *practices, practitioners* and *praxis* (Jarzabkowski, Balongu and Seidl 2007).

The first analytical element are *practitioners*. In this particular study, practitioners are defined as VW Bus owners, that are consumers who own and use a VW Bus, and thus develop distinct ways of behaving, thinking, coordinating and adopting their use of the VW Bus. The second and primary analytical element of this study are *practices*. Practices are „routinized types of behavior which consist of several elements, interconnected to one another: forms of bodily activities, forms of mental activities, ‚things 'and their use (…) “ (Reckwitz 2002, 249). The term ‘practice’ refers to both, the situated actions individual consumers perform (micro practices), and to socially defined practices (macro practices) that shape consumers in their individual actions (Warde 2005). This sets the analytical focus on activities that are associated, accomplished and developed around using and owning a VW Bus. From a practice theory perspective VanLife is a situated, socially accomplished activity that comprises actions and interactions with other actors and objects (Reckwitz

2002). Hence VanLife comprises all activities that are associated with buying, owning, using a camper van, with the goal of spending longer episodes living in the bus. ‚Owning a VW Bus’, is a consumption practice that is constructed as a flow of actions and interactions of multiple actors, practices and objects they draw upon (Jarzabkowski et al. 2007). Within this framework a camper van becomes a materially represented practice, a thing in terms of Reckwitz (2002), as it is used in a relatively routinized way.

The third analytical element are social *praxis*. In this case praxis is refers to the whole of human action related to VanLife *(*Jarzabkowski et al. 2007). The social practices of VW bus owners are situated within a wider social praxis of leisure time, vacation and automobile ownership. VanLife comprises dispersed consumers, and the social institutions within which these consumers act, and to which the contribute. It is the social praxis owning and camping and occurs as the nexus between these three elements.

METHODOLOGY

This study is based on a qualitative case study research design (Stake 1995; Flyberg 2006) employing multiple data collection techniques. Over a period of one year, the researcher conducted participant observations during mutual weekend trips, as well as participant-driven photo-elicitation interviews (Rose 2012). The participant observations of Volkswagen bus owners’ behavior and practices were an important data resource. Here the first researcher wants to state, that he does not own a camper van, so this research project was approached from an outsider perspective. Insights gained through extensive field observations served as a basis for in-depth interviews with VW Bus owners. The researcher conducted twenty-five participant-driven photo-elicitation interviews. Participants were selected based on the criteria of owning a VW Bus which they modified for camping, and that trips with their bus played an important role in their life. The VW Bus was chosen because it has an enormous popularity on the European market, and this was considered as an interesting phenomenon.

The interviews aimed at uncovering stories, memories and experiences that participants had with their busses. The photo-elicitation technique is especially well-suited, as “images evoke deeper elements of human consciousness that do words” (Harper 2002, 13) and helped to paint a clearer picture of the different behaviors and practices enfolding around the use of a VW Bus. Secondary data was an important resource for the analysis, including community forums (i.e. http://www.thesamba.com/vw/), VW Bus subreddits (i.e. https://www.reddit.com/r/VWBus/), Instagram posts (i.e. #vwbus), do-it-yourself YouTube videos, as well as national and international media coverage. The data analysis followed an inductive coding approach in order to identify emergent themes and patterns (Flyvbjerg, 2006). Following Eisenhardt’s (1989) methodological principle of ‘enfolding literature’, emerging themes were refined in the light of the practice theory perspective.

FINDINGS

Within the data three interrelated bundles of practices emerged: a) owning, b) traveling, and c) decelerating.

Owning

Personalizing. VW Bus owners are notoriously fond of their cars. This fondness becomes apparent in practices that aim to per-

sonalize their van. A common practice is to modify the interior and exterior of the van. Many consumers go as far as buying a bus without interior and building the entire camping equipment in a do-it-yourself fashion. This includes the construction of a kitchen, a bed and wardrobes as well as the exterior. This personalization of the van has a key role in establishing strong emotional bounds to the VW Bus. The customization of the VW Bus is often shared, presented and discussed with friends. Social media and online forums are used as a platform for inspiration and discussion with other owners.

Personifying. Practices of personification involve naming the van with a nick name, emotionally and verbally adopting the bus into the family, displaying pictures of the bus and taking intensive care of their van. The emotional attachment with the van was also apparent in the interviews, where participants described their VW Bus using names, gender specific pronouns and human traits such as strong, fragile, bitchy and iffy, persevering, down to earth or moody and fickle. The VW Bus is humanized by describing it with human features such as friendly eyes (headlights) and big smiles (radiator grill). Narratives often involve success stories about teamwork with the bus, the bus as a friend and faithful companion, or as a savior.

Community. VW Bus owners represent a subculture (Schouten and McAlexander 1995) with communitarian bounds (Muniz and O'Guinn 2002). For instance, when a VW Bus driver sees another VW Bus driver, he or she salutes and honk. This is especially the case, if the van is an older model. Stories about helping out, when another VW Bus on the side stripe needs help were regularly reported in the interviews. Online activities, such as posting pictures in social media, participating in online forums and following social media accounts of other VW Bus owners, resemble aspects of an online mediated brand public (Arvidsson and Caliandro 2016).

Travelling

Freedom. Traveling with the camper van was associated with the feeling and desire for freedom and adventure. These feelings of freedom and adventure are enacted through the routinized practice of weekend trips. These overnight trips resemble bundles of practices which are a complex combination of entangled elements that are encountered together (Woermann and Rokka 2015). Practices that involve structural elements of the bus involve cooking in the bus, reading in the back of the bus, sleeping in the bus and enjoying the landscape. These short trips involve a specific material-setup of the camper van and a range of bodily routines and skill elements (Woermann and Rokka 2015), such as searching for a perfect spot and how all daily activities are adopted to the spatial requirements of the van. Weekend trips are often combined with sport and leisure activities, that require skilled elements, such as climbing, surfing or mountain biking. The VW Bus serves as a mobile home that allows the freedom to enjoy spatial mobility and being closely related to the nature.

Spontaneity. Participants stated that a fundamental aspect of being on the road with a VW Bus is, that trips are planed only rudimentary, and that travel decisions are taken spontaneously along the way. Bus owners find themselves far from home and reliant on their Volkswagen camper van, a major, often very time-consuming and potentially frustrating aspect of a VW Bus trip is to search for the perfect camping spot. Spontaneity also means that the VW Bus allows surfers to go where the waves are best, or climbers to switch locations when the conditions change. Overall, VW Bus owners displayed a strong motivation for self-sufficient, independent traveling. Traveling with the van allows to escape time pressures and social obligations, and therefore to enjoy traveling without boundaries and constraints.

Risk taking. The bus can serve as a motivational factor for owners to be more adventurous and risk taking during their trips than in their ordinary life. Stories about getting lost in nature, breakdowns in remote areas, and dangerous encounters with local animals, or unplanned and uncomfortable overnight stays were reported proudly in the interviews. These experiences were recount with a sense of pride and praises for their adventurous spirit.

Bundle of Practices	Example quotes
Owning - Personalizing - Personifying - Community	"He (the bus) was seriously rusty and was a real grandpa. He was really cool, don't get me wrong and I loved him [...] Me and my dad, we did a lot of work on him, it was time consuming […] we did the entire interior by our self, the bed, the kitchen, everything." (Participant 10, f) "When you are so far away from home, you develop a real relationship with your bus and a unique dependence. I was not worried about my girlfriend back at home or my parents. There was only my bus. Is he parked safe? Is he locked? Is the battery charged? Worries that seem mundane [...] but if you are literally at the end of the world, it becomes clear how much you depend on the bus." (Participant 2)
Travelling - Freedom - Spontaneity - Risk Taking	"There are days when I leave in the morning, return in the evening and simply park somewhere with my bus. Just let the day pass and prance around (…) I just cook something and then open the hatchback, read and enjoy the view of the lake and the mountains" (Participant 2 m) "The fact that we could park wherever we wanted was the best thing in Norway. It was also this feeling that we enjoyed so much while travelling with the bus. We were not dependent on highways or public transport. We could camp wherever and whenever we wanted to. And we saw the most beautiful sunset next to a tiny road in some Fjord." (Participant 8 m)
Decelerating - Ritualization - Decelerating - Daydreaming	"When I get into the bus it needs to rattle and clatter. You need a big window because it is similar to a cinema. The world goes by your windows, time passes and you don't care. You drive slowly on the road and are deeply relaxed while enjoying the whole experience" (Participant 19 m) "Whenever I sit at the university, I always think about future traveling possibilities and where I want to go with my bus. These thoughts are my anchor for stressful days, because I know that I will have some free time soon and I can drive away with my VW bus" (Participant 16 f)

Decelerating

Ritualization. Participants describe how preparing and starting a trip becomes a ritualistic activity for them. Packing their stuff and preparing the bus for the planned trip becomes an integral part of the traveling experience, often starting days before the trip starts. The interviews contained extensive accounts of describing the feeling of stepping into the bus, sitting behind the wheel and starting the engine. As soon as the owners hear the roaring of the engine, feel the vibration of the bus, and smell the fuel burning, the trip begins and stress fades away. When the participants arrive at their destination, the have developed specific routines of occupying the spot and transforming it into their temporal home-base. First, they search for the perfect spot, then park their bus (preferred is a remote and secluded spot with a scenic view, not at a camping ground), open the hatchback, take out their cooking and leisure appliances, pose with the bus and take picture, and then start enjoying the surrounding landscape and their vacation.

Driving. Participants describe driving the bus as a calming ritual, that alters the way how they experience the flow of time (Husemann and Eckhardt 2019; Woerman and Rokka 2015). The bus is driven slowly and enables to decelerate from their accelerated daily life. Driving a VW bus is associated with the sound of the engine, listening to music or tune into a radio station. Also, in everyday life, driving the VW bus becomes a short retreat, a spiritual and relaxing experience, associated with the materiality of the bus. The deceleration through driving the VW bus is associated with elements of listening to music, voluntary slowing down the speed, driving on scenic country roads and avoiding highways. Driving the bus was described as an experience of deceleration, an activity in which all stress and worries fades away. In the bus, there are no obligations and no time pressure. The journey becomes driving the bus. The description of the role of material components, such as the distinct feeling of the driver seat, the big steering wheel, the big windows and nice views, the loud, yet relaxing sound of the engine, and the natural speed limit of older VW camper van models, played a key role in establishing the feeling of deceleration. This spiritual experience of driving transfers to everyday commuting. For instance, one participant was late because he was driving his bus and enjoying the road too much.

Daydreaming. When VW Bus owners are not able to travel, all reported to engage in the cognitive practice of daydreaming about the bus and future trips. VW Bus owners mentally plan the next weekend or summer trip, or recall past experiences to satisfy their need for travel and adventure. Photos of the bus are treasured and often help in recollecting memories. Pictures featuring the bus are shared on social media, and owners follow social media influencers.

CONCLUSIONS

This study provides an empirical inquiry into consumption practices that develop around the use of the VW Bus camper van in order to understand the trend of VanLife. Drawing on practice theory (Warde 2005; Reckwitz 2002; Jarzabkowski et al. 2007), the analytical focus was set on understanding what owners do with their VW Bus. This study addresses the first and the second research question: (1) What practices do owners develop in their use of the VW Bus? And, (2) how are different practices combined and coordinated into bundle of practices that constitute the social praxis of VanLife? The overall finding of this study reveals how VanLife is constituted by three distinct, yet interrelated bundles of practices: (1) owing, (2) traveling, and (3) decelerating with a camper van. Each of these three social practices consists of a bundle of combined and coordinated, yet distinct actual routinized behavior. Together they resemble a recurring, authentic and singularizing travel experience.

The findings contribute to our understanding of consumer- object relationships (Holt, 2002), the consumption patterns of liquid consumers (Eckhardt and Bardhi 2017), that seek authentic and singularizing consumption experiences (Reckwitz 2016), as well as the role of objects in structuring the temporal experience of consumers (Husemann and Eckhardt 2017; Woermann and Rokka 2015). Whereas current research on consumer-object relationships has pointed towards the declining role of solid possessions for liquid consumers (Bardhi and Eckhardt, 2012; Bardhi and Eckhardt, 2017), the current study clearly shows how persistent and recurring consumption practices can constitute a strong and enduring consumer-object relationship.

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Controlling the Uncontrollable: Consumer Voluntary Risk-Taking amidst the Covid-19 Pandemic

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INTRODUCTION

The global spread of the highly infectious lung disease Covid-19 transformed consumption activities involving contact with other consumers into high-risk endeavors. Formerly mundane consumption activities, such as going to the gym, meeting friends for dinner, or going on vacation, now involve risk of infection with a potentially deadly virus. As a response, governments worldwide implemented Covid-19 policies and disseminated expert health advice enforcing social distancing and hence anti-consumption. While social distancing measures reduced risk of infection with the SARS-CoV-2 virus (WHO 2021), an increasing number of consumers disregard expert health advice and Covid-19 policies to pursue consumption and social activities (The New York Times 2020).

Recent consumer research investigating socially undesirable behaviors amidst the Covid-19 pandemic reveals the individual level factors (Zhang, Mathur, and Block 2020) and the type of media reporting (Huang, Lu, and Rajagopal 2020) leading to non-compliance behaviors. Yet, prior research suggests that consumers' pursuits of consumption activities despite the risk of contracting a disease can also be a form of voluntary risk-taking (Belk, Østergaard, and Groves 1998; Bishop and Limmer 2018). While voluntary risk-takers know about the potentially deadly consequences of their risk-taking behavior, they do not perceive themselves at risk and emphasize their refined skills and knowledge allowing them to control risk (Celsi, Rose, and Leigh 1993; Lyng 1990).

During the Covid-19 pandemic even experts struggle to control risk of infection, hence, the question arises: How do ordinary consumers come to the belief of being able to control risk of infection? To explore this question, this study conceptualizes consumers' pursuits of consumption and social activities despite elevated risk of infection with Covid-19 as a form of edgework (Lyng 1990). Specifically, it intends to explore Lyng's (1990) notion of an "illusion of control" (Lyng 1990, 873), which allows voluntary risk-takers to act as if they could control largely chance-based events in their high-risk activities (Laurendeau 2006; Lyng 1990).

THEORY

Consumer Non-Compliance with Expert Health Advice

Prior research emphasizes consumers' tendency to avoid infection with contagious diseases (Griskevicius and Kenrick 2013; Huang and Sengupta 2020). Paradoxically, one can witness an increasing number of consumers defying preventative health measures during the Covid-19 pandemic (Huang et al. 2020; Zhang et al. 2020). Recent consumer research suggests that such non-compliance with expert health advice can have its roots in the consumer's personality (Zhang et al. 2020), in consumers' exposure to increasingly dehumanized death reports (Huang et al. 2020), but also in ineffective responzibilization efforts of firms and policy makers (Aboelenien, Arsel, and Cho 2020).

In addition, earlier studies on consumer risk perceptions show that consumers are less likely to follow health advice when they do not perceive themselves at risk of the disease (Menon, Block, and Ramanathan 2002). These studies emphasize the role of cognitive biases and simplifying heuristics in consumers' health risk (mis)-judgements (Menon et al. 2002; Raghubir and Menon 1998). Thompson (2005) and Wong and King (2008) criticize such a cognitive perspective and highlight that risk perceptions and risk understand-

ings are not universal, but culturally constructed. From this point of view, seemingly risky health behaviors or consumption choices can also represent alternative ways of risk reduction. Further, Belk et al. (1998) illuminate how a combination of cultural values, gender roles and emotions can motivate consumers to take heightened health risk. The authors also indicate that especially western consumers may understand their risk-taking as a form of high-risk sport. Yet, Belk et al. (1998) do not provide an in-depth understanding of how these consumers go about their voluntary risk-taking.

The Illusion of Control in Voluntary Risk-Taking

A prominent concept that explains why and how consumers voluntarily take risk is Lyng's (1990) edgework. Typical edgework activities are high-risk activities requiring voluntary risk-takers to negotiate the edge between life and death. Successful edge negotiations elicit heightened feelings of control and transcendence, allowing voluntary risk-takers to escape the unbearable institutional constraints of contemporary society (Lyng 1990, 2005). Edgework activities studied in consumer research are high-risk leisure activities, such as skydiving (Celsi et al. 1993), motorcycling (Murphy and Patterson 2011), or the consumption of illicit drugs (O'Sullivan 2015). Further, the concept has been used to explore risky health behaviors across disciplines (Cronin, McCarthy, and Collins 2014; Gailey 2009). These studies include investigations into the risk-taking behavior of male sex tourists, who purchase sex despite risk of infection with potentially deadly diseases (Bishop and Limmer 2018).

While all previously mentioned edgework activities "involve a clearly observable threat to one's physical or mental well-being or one's sense of an ordered existence" (Lyng 1990, 857), voluntary risk-takers do not perceive themselves at risk when negotiating an edge. Instead, they emphasize their expert skills and knowledge enabling them to control risk (Celsi et al. 1993; Lois 2001; Lyng 1990). However, Lyng (1990) highlights that there is never total control in high-risk activities and suggests that voluntary risk-takers construct an "illusion of control" (Lyng 1990, 873) allowing them to act as if they could control the chance determined aspects of their risk-taking (Laurendeau 2006; Lyng 1990). This notion of an illusion of control appears particularly relevant amidst the Covid-19 pandemic. In times when even experts struggle to control risk of infection, ordinary consumers may construct an illusion of control providing them with a sense of being able to "control the seemingly uncontrollable" (Lyng 1990, 872) when breaking health recommendations and Covid-19 policies.

SAMPLE, METHOD & ANALYSIS

This study draws on data from a qualitative diary study (Arnould 1998; Patterson 2005) with German and Austrian consumers. Starting with the first stay-at-home orders in March 2020, the respondents kept a diary of their pandemic experiences for at least 7 days, most up to 2-4 weeks. The diaries had an exploratory character with an inspirational set of questions, which asked for consumers' everyday experiences, feelings, emotional peaks, and consumption behavior. In November 2020, shortly before the second lockdown in Austria and Germany, I approached the same sample again and asked for a written follow up essay. In total, I included 14 consumers between the age of 25 and 69, who repeatedly reflected on their own and other consumers' non-compliance behavior.

Data analysis followed a grounded theory approach and took place throughout and subsequent to data collection. I applied open, axial, and selective coding, using MAXQDA to identify relevant themes (Charmaz 2006). In several rounds of data analysis, codes and themes evolved while I moved iteratively between data and literature (Corbin and Strauss 1990).

FINDINGS

Escaping the Emotionally Challenging Pandemic Reality

From the onset of the pandemic onwards, Austrian and German consumers were aware of the threat the Covid-19 disease poses to their individual and societies' collective health. However, over time prolonged social distancing measures increasingly challenge consumers' emotional well-being and ignite their desire to escape from their highly restricted everyday lives. Charlotte entrusts her diary with the emotional challenges of social distancing, and details how she feels torn between adhering to and breaking with Covid-19 policies and health recommendations. On the one hand, she is scared to infect herself and people that are more vulnerable; on the other hand, she is worried to grow lonely and allows herself *"some degree of freedom"*. As the pandemic progresses, consumers increasingly reflect on their intentions to and experiences with defying official health advice. Helen reminisces about her vacation in fall 2020. Despite governmental recommendations to abstain from international travels, she spent a one-week vacation in France and highlights the emotional relief she experienced. Similar to Husemann and Eckhardt's (2019) elaborations on contemporary consumers' attempts to escape their increasingly accelerated lives, it seems that pursuing consumption and social activities provides pandemic-plagued consumers with a much desired escape from their highly restricted, radically decelerated and hence emotionally challenging pandemic reality.

Controlling the Uncontrollable Risk of Infection

The diaries suggest that consumers only defy preventative health advice and current Covid-19 policies when they feel to possess the knowledge, skills, and means that allow them to control risk of infection. However, in times when even experts struggle to understand and control virus transmission, total control is impossible. Alternatively, I find risk-taking consumers to construct an illusion of control through the strategies of *contrasting, rationalizing, obscuring,* and *burying* (see table 1). The illusion of control allows voluntary risk-takers to sustain their belief of acting responsibly and to feel in control over the seemingly uncontrollable risk of infection.

Contrasting distinguishes the consumer's own voluntary risk-taking behavior from the behavior of the irresponsible and unreflected "other" consumer (Campbell, Sinclair, and Browne 2019; Giesler and Veresiu 2014). Voluntary risk-takers focus on the apparent wrongdoings of others to create feelings of superior competence, which they use to legitimize their own behavior. During the initial phases of the pandemic, Jakob wonders about elderly consumers doing extensive grocery shopping and criticizes their irresponsible risk-taking. Yet, he is less critical about his own behavior and emphasizes his knowledge about virus transmission, the course of disease, and misleading Covid-19 reporting. As an engineer, Jakob does not possess medical expertise, but derives his feelings of competence from his subjective experience with the disease, conversations with friends and family, online research as well as critical reflection on media reporting and governmental health advice. His belief of being more knowledgeable than other consumers does not match actual expertise and rather seems to be a byproduct of his constant exposure

to Covid-19 media reporting and policy makers and firms intensive responsibilization efforts (Aboelenien et al. 2020; Giesler and Veresiu 2014).

Rationalizing puts consumers' voluntary risk-taking into perspective and retrospectively frames it as responsible behavior (Campbell et al. 2019; Laurendeau 2006). Rationalizing involves deep reflection and produces seemingly understandable reasons, which allow consumers to (self-) justify their voluntary risk-taking. This provides voluntary risk-takers with feelings of control and eases fears of social disapproval. In her diary, Sarah rationalizes why she broke with Covid-19 policies to attend a BBQ party:" *[...] [our neighbors] invited us to a BBQ in the evening, because we live in the same house anyways [...]. I did not want to be so narrow-minded and we decided: okay let's go outside and have a look who is there. [...] they told us, that one guest visits them every day, so it does not make a difference [...] and the other one is a colleague from work, who they see every day, so it was okay [...]."* Sarah details the personal connections between the guests to conclude that risk of infection was under control. Other consumers report similar rationalizing and emphasize the reasons that lead to their risk-taking. This includes highlighting the inconsistency of policies, claiming that risk of infection was low, risk-taking unavoidable, or necessary to offset more immediate risks.

When *obscuring* consumers adopt and combine alternative preventative behaviors to mask their voluntary risk-taking. Independently from the actual risk reduction qualities of the selected behaviors, obscuring facilitates feelings of control and combats fears of social disapproval. In March 2020, Leo notes how he obscures with washing hands before visiting a café. Similarly, Charlotte writes: *"[...] although, it is prohibited at the moment [...] my friend visited us today [...]. But we kept distance and it was outside, she [also] gifted me a self-sewn mask."* Hence, while obscuring seems to be similar to skydivers' safety procedures before jumping from a plane (Celsi et al. 1993), it appears that voluntary risk-takers amidst the pandemic do not necessarily value obscuring for its risk reduction qualities, but more for its symbolic qualities allowing them to appear responsible and legitimize their risk-taking.

Burying permits voluntary risk-takers to access feelings of control and safety from pre-pandemic times (Holbrook and Schindler 2003). Voluntary risk-takers bury by participating in pleasurable pre-pandemic activities, but also by deconsuming news and social media to avoid confrontation with the pandemic reality. Jakob notes how he buried when breaking Covid-19 policies in April 2020: *"[...] there were six of us today, and we played Frisbee [...] after 2 hours I noticed that it's illegal what we are doing. [...] when you are doing [...] sport [...] then all that stuff is far away and really forgotten and that's actually a nice thing."* Similarly, Helen writes about the emotional relief she experienced when ignoring stay-at-home orders in March 2020: *"[I] left my cell phone at home, met a friend at 8 o'clock to go hiking [...]. This day gave me so much strength and made me forget the whole chaos for a few hours."* Despite its obvious restorative qualities, the illusion of control resulting from burying is a very fragile construct. As soon as voluntary risk-takers (are forced to) re-enter the pandemic reality the illusion of control dissolves.

DISCUSSION

This study conceptualizes consumers' non-compliance behaviors amidst the Covid-19 pandemic as a form of edgework. Findings reveal that consumers pursue consumption and social activities involving elevated risk of infection to escape the highly restricted, decelerated and thus emotionally challenging pandemic reality.

Table 1 – Controlling the Uncontrollable Risk of Infection to Escape the Pandemic

Escaping the Pandemic Reality	
	*"You do not want to infect anyone, and you certainly do not want to infect yourself! [...] The only solution would be to withdraw and isolate oneself from [any social contact]! I do not want that. Thus I have to live with the remaining risk, and hope, that it [the disease] will not hit me too hard." **(Walter, 69, Retiree, November 2020)***
	"Sometimes I am afraid that I could infect my parents and that they would show a serious clinical course of the disease. In addition, I do not see any changes coming within the next few months; even though there has been some progress concerning a possible vaccine. However, I am convinced that it will take months until we can return to some degree of normality. [At the moment] I feel torn between adhering to the measures and creating myself some degree of freedom, so I do not become lonely." **(Charlotte, 26, Pharmacist, November 2020)**
	"In contrast to March, I personally do not strictly comply with the measures anymore. I don't want to minimize the few social contacts I still have. Virus or not, my mental health is also important. I think that I behave responsible and rational. Even though, this may go beyond governmental policies in some respects." **(Helen, 25, University Student, November 2020)**

Construction of an Illusion of Control		
	Contrasting	*"[...] there are a lot of older people doing their groceries. Especially people that belong to the high-risk group, who do [...] extensive grocery shopping. It surprised me that their risk awareness appears to be extremely low [...] it looked like they were chatting quite extensively [...] I think that was weird. However, I still met with my friend to play drums in our rehearsal room. Well, I did not really meet people or a number of people, but I still met with someone." **(Jakob, 31, Self-Employed Engineer, March 2020)***
		"What shocked me, a friend told me, that her handball club wants to do something good, which is nice. They want to organize a neighborhood help to support older people with doing their groceries [...]. Now they want to meet up tomorrow, with fifty people. They ignore all the warnings that one should not meet in big groups. Apparently, the rationale was that they want to organize it together. Well, we live in the 21st century, digitization is everywhere, and you can organize everything via e-mail, WhatsApp, or social media and then meet in small groups. No, you do not have to meet in groups of fifty. They don't take it seriously, as far as I understand it." **(Paula, 27, Financial Accountant, March 2020)**
	Rationalizing	*„My consumption behavior has not changed too much because of Corona. The only slip, if you want to call it that, was my vacation in Greece, with the excuse that the risk of infection was lower, than it was here."* **(Walter, 69, November 2020)**
		"Yesterday evening I drove to Innsbruck. At the border, I only had to show my commuter confirmation, although the conformation is only valid for Salzburg. In the evening, I still met a friend, even though it is still prohibited. Today I went hiking with my roommate and another friend. Actually, we wanted to drive with separate cars, but it did not work out and we drove together in one car. You feel a bit guilty, but on the other hand, I think it does not make sense to meet nobody, especially in the long term I think it is better to meet fewer people for a longer period of time, than not meeting anyone and not being able to do this for a longer period of time. Nevertheless, I always feel guilty." **(Charlotte, 26, Pharmacist, April 2020)**
	Obscuring	*"After a "virtual" day at work I call the café to ask if they are open. Is a visit okay and acceptable in these times? [...] After thoroughly washing our hands, we take our bikes [...] to get there."* **(Leo, 31, Engineer, March 2020)**
		"Today a girlfriend of mine visited us in our garden, although, it is prohibited at the moment, I think. It is hard to distinguish what we are allowed to do in Austria and what we are allowed to do in Bavaria [Germany]. But we kept distance and it was outside, she [also] gifted me a self-sewn mask." **(Charlotte, 26, Pharmacist, March 2020)**
	Burying	*"I just came back from the park and there were six of us today, and we played Frisbee, laughed a bit in the sun, and at some point we had the idea to play a round of Ultimate [Frisbee]. Three against three and we completely escalated, so we played two hours of really, competitive Frisbee. [...]. You are really just running and guarding each other, so that is really exhausting and after 2 hours I noticed that it's illegal what we are doing. [...] so I was actually breaking Corona rules, I can take credit for that now. I very rarely do anything illegal, I am a very, very loyal, law-abiding citizen, but today I just completely escalated, I feel a little crazy, but I think I can still sleep tonight. [...] Actually, it is a good sign that it [the measures] do not influence our normal ways of thinking. Therefore, when you are doing some kind of sport, you are outside, then all that stuff is far away and really forgotten and that's actually a nice thing.* **(Jakob, 31, Self-Employed Engineer, April 2020)**
		"Today was a beautiful day - like on holiday. [I got up] at 7 am, left my cell phone at home, met a friend at 8 o'clock to go hiking [...], then we brunched, sunbathed on the balcony, did yoga, a workout and we relaxed. In the evening [when] I went home [I was] happy and satisfied. This day gave me so much strength and made me forget the whole chaos for a few hours. Almost everything was like it used to be." **(Helen, 25, University Student, March 2020)**

However, consumers only accept risk of infection when feeling in control. This study illuminates how voluntary risk-takers construct an illusion of control to sustain their belief of being able to control risk of infection via the three strategies of contrasting, rationalizing, obscuring, and burying.

The contributions of this study to consumer research are two-fold: First, it complements prior research on risky health behaviors by emphasizing the emotionally enriching nature of voluntary risk-taking. Especially during radically decelerated and restricted pandemic times, pursuing consumption and social activities involving heightened risk of infection may free emotional energies similar to the emotional energies of decelerating consumption activities in highly accelerated pre-pandemic times (Husemann and Eckhardt 2019). Secondly, it enriches literature on voluntary risk-taking with an in-depth investigation of how consumers come to the belief of being able to control risk. Prior research on high-risk consumption activities highlights that consumers (Celsi et al. 1993; Murphy and Patterson 2011; O'Sullivan 2015) and service providers (Arnould and Price 1993; Tumbat 2011) feel in control over risk due to their superior physical skills, knowledge, and emotion management capabilities. This empirical analysis shows that in the context of the Covid-19 pandemic consumers' beliefs of being able to control risk are not necessarily rooted in actual expertise. Instead, consumers derive their feelings of control from constructing an illusion of control.

This is a challenging situation; voluntary risk-takers know about the potential consequences of their non-compliance behavior, but perceive themselves as responsible and highly knowledgeable consumers (Aboelenien et al. 2020; Giesler and Veresiu 2014) possessing the ability to control risk. Policy makers and firms, who aim to maintain or increase compliance, should thus pay increased attention to consumers' emotional well-being and the conditions that create emotionally challenging situations. Consequently, the role of seemingly mundane consumption activities such as restaurant visits or travelling as means of escape should not be underestimated (Cova, Carù, and Cayla 2018).

While this study focused on milder forms of voluntary risk-taking, further research should explore more extreme non-compliance behaviors, such as travelling despite travel bans or joining illegal parties. More extreme cases may be less motivated by consumers' emotional challenges and more rooted in their reflexive doubts towards expert risk management (Beck 1999; Thompson 2005).

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'Going' Green? Nomadic Consumers' Paradoxical Journey Toward Sustainability

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INTRODUCTION

"The world is waking up. And change is coming, whether you like it or not." In her speech at the 2019 U.N. Climate Action Summit, teen advocate Greta Thunberg challenged political leaders to further the global movement toward sustainability. However, introducing new understandings of consumption experiences (Tezer and Onur Bodur 2020), the growing discourse on *going green* also invites consumers to pay closer attention to the environmental repercussions of materializing tendencies. In times where mobility is celebrated as an indispensable feature of postmodern societies (Bauman 2000), studies have alluded to the potential of exploring the demand for sustainability in the context of travelers (e.g., Orel 2021)—liquid consumers.

The explosion of online technologies allows digital nomads to combine work and travel (Hart 2015). Mirroring the vanguard of a mobile lifestyle revolution, they escape from traditions propagated by the settled (Reichenberger 2017). Recent consumer research has initiated a dialogue about liquid marketplace interactions (Bardhi and Eckhardt 2017; Eckhardt and Bardhi 2020). While consumption in conditions of linear mobility such as migration or expatriation assumes linking value (Belk 1992; Thompson and Tambyah 1999), nomadic consumers celebrate flexibility, immateriality, and functionality since ownership poses a potential threat to lightweight movements. Thus, their detachment from the marketplace is a manifestation of neither market alienation nor consumer resistance (Bardhi and Eckhardt 2017).

Nevertheless, research has hitherto overlooked to refine the role environmental sensibility plays in nomadic consumers' encounters with the material world. Put differently, studies placing the concept of liquid consumption under the umbrella of sustainability—"meeting the needs of the present without compromising the ability of the future generations to meet their own needs" (UN/WCED 1987)—remain scarce. Regarding the topicality of sustainable mobility, this study examines how nomadic consumers negotiate the paradoxes of liquid consumption in crafting their narrative of environmentally sensitive travelers. Drawing from a paradox lens, in-depth interviews and Instagram posts reveal that digital nomads use rationalizing and fragmenting strategies to realize self-imposed sustainability agendas.

THEORY

Consumer Sustainability

The current movement for climate action has sparked more and more protests that call for concerted efforts to address environmental justice. With the accumulation of movements promoting messages to save the planet (Schlosberg and Coles 2016), the imperative of adopting sustainable lifestyles has increasingly been thrust into the public spotlight. As this interest in the consolidation of nature and the human has permeated research across disciplines (Rockström, Bai, and deVries 2018), recent years have witnessed a more widespread academic discourse on the socio-economic facets of environmentalism. Translated into the realm of marketing research, the idea of sustainability has undergone a revival in the study of consumerism (e.g., Lim 2017). Scholars have made attempts to develop more nuanced insights into a plethora of concepts including environmental consciousness (Mataracı and Kurtuluş 2020), moral competences (Valor, Antonetti, and Merino 2020), or green altruism and thinking (Ali et al. 2020). Others have situated the consumption model of the sharing economy in the trajectory of sustainability research (e.g., Plewnia and Guenther 2018). Lim (2017) summarizes debates from both within and outside academia and points to the threefold theoretical concepts of mindfulness, responsibility, and anti-consumption that crystallize in sustainable consumerism.

Similarly, a growing body of research has drawn attention to environmentally sensitive consumer behavior in contexts of postmodern mobility. Rokka and Moisander (2009), for example, highlight the critical role of global travelers' online communities in fostering an environmental dialogue. Alternatively, in their studies on contemporary nomads' de-materialization and pilgrims' deceleration, Bardhi et al. (2012) and Husemann and Eckhardt (2019) emphasize the importance of investigating the phenomenon of de-(or anti-) consumption in more detail. This quest for sustainable consumerism constitutes the flip side of multiplex and accelerated conditions (Bauman 2000; Rosa 2013). Thus, prior research has foreshadowed the ambivalent nature of consumption in liquidity where "everything is mobile, uncertain, temporary" (Bauman and Bordoni 2014, 88) and hinted at the power of illuminating the inherent paradoxical tensions.

The Paradox

Recent work outside of consumer research has gleaned further insights into the paradoxes of (de-)materialization, acceleration/deceleration, and (de-)consumption accompanying digital nomads. Studies from the field of information technology and tourism have implied that unsettled lifestyles are not only marked by minimalist and slowing-down tendencies but also nourished by material consumption facilitating immersion in ever-changing cultural contexts (Hannonen 2020; Mancinelli 2020). This suggests that digital nomads, who uniquely blur career and mobility trajectories (Hart 2015), find themselves *betwixt and between* these opposing quests of liquid consumption while feeding their narrative of environmentally sensitive travelers.

We aim to produce an all-encompassing picture of nomadic sustainable consumerism by reconciling the tensions unfolding in liquid conditions. This study therefore embraces the co-existence of polarities within consumer research (Firat and Venkatesh 1995; Mick and Fournier 1998) and carves out how nomadic consumers negotiate the "two sides of the same coin" (Lewis 2000, 761) on their journey toward sustainable working and traveling. We recognize the fruitfulness of the paradox lens as a perspective for describing postmodern phenomena (Brown 1995), and, more specifically, illuminating sustainability concepts from an angle that dissolves either/or divisions (e.g., Van der Byl, Slawinski, and Hahn 2020).

METHOD

Framed along an interpretive paradigm, this study draws upon narratives from interviews and social media posts to explore how digital nomads negotiate the paradoxes of liquid consumption to realize self-imposed sustainability agendas. We defined nomadic consumers—the poster child for liquid marketplace actors (Bardhi et al. 2012; Bardhi and Eckhardt 2017)—as lifestyle designers whose fluid working-while-traveling existence is nourished by digital technologies (Hart 2015; Reichenberger 2017). We applied heterogeneous purposive sampling to virtually select 17 interview participants with varying ages, genders, nationalities, professions, and mobility backgrounds. In-depth online conversations followed a semi-structured

guideline (McCracken 1988) and revolved around the role sustainability plays for nomadic consumers. We also studied online communication contexts netnographically (Kozinets 2020) to gain a more multifaceted picture of how digital nomads respond to the global call for *going green*. Considering the high priority that digital nomads attach to social media (Bonneau and Aroles 2021), we purposively selected four nomadic consumers, whose lifestyle blogs repeatedly picked up the debate on sustainable mobility, and paid closer attention to the written material (textual captions including hashtags) of overall 304 corresponding Instagram posts. We analyzed interview transcripts and online content through the iterative process of categorization and abstraction, using an inductive and constant comparison approach (Spiggle 1994).

FINDINGS

This study unpacks the paradoxes around liquid consumption, shedding light on the imperative of acting sustainably. Revealing mobile consumers' growing appetite for both de-materialization (Bardhi et al. 2012) and deceleration (Husemann and Eckhardt 2019), the findings show that they pursue de-consumption not only to travel lightly but also to realize self-imposed sustainability agendas. Our respondents' cosmopolitanism is accompanied by the appreciation of minimalism—"*you do not need a lot of things in this world to be happy*" (Mel-31-Australia)—and the rejection of fastness—"*you realize that sooner or later, that you need to slow down*" (Franz-

Table 1: Overview of Findings

RATIONALIZING AND FRAGMENTING STRATEGIES
used to reconcile the paradoxes of liquid consumption—(de-)materialization, acceleration/deceleration, and (de-)consumption—in nomadic pursuits of realizing self-imposed sustainability agendas
RATIONALIZATION = declining responsibility for unsustainable actions that align with the nomadic lifestyle
Stressing Values "*[Sustainability] plays a huge role for me. [But] I know that I cannot take on a long-distance journey without flying. Also, I am aware that planes are not really good for the environment… My concept of living was just not built upon [this idea of] staying in Germany for an eternity.*" (Caro-47-Germany)
Blaming External Factors "*In Panama and Costa Rica, it was just awful, the amount of plastic that was wasted. That made me feel sick and depressed. We felt like in these countries, we were forced to use more plastic in three or four months than we would in one whole year at home.*" (Michael-39-Germany)
Neutralizing Implications "*I know that flying is just one drop in the bucket…And that consuming animal-based products tremendously destroys [sustainable living]. I am not even talking about the underlying moral aspects. So, in this regard, I try to live environmentally friendly.*" (Max-35-Austria)
FRAGMENTATION = assuming responsibility for sustainable actions that align with the nomadic lifestyle
Balancing Trade-Offs "*I am vegetarian, would love to be vegan but that kind of doesn't seem to work out…I do not produce a lot of trash. I really am conscious. I do not consume unnecessary stuff. I do not buy leather products. But we travel a lot, which is for sure not sustainable.*" (Nora-30-Austria)
Choosing Alternatives "*I've started like [to carry] a water bottle with me…I kind of have converted a lot of like my stuff in our house, like into being a little eco-friendlier…We have tons of like terrycloth reusable towels and cloth napkins and, you know, just little things like that.*" (Brandy-31-US)
Minimizing Routines "*We have given a lot of thought to the fact that we fly more than most people and we do not like that, so we are trying to travel more regionally, [sustainably] …You know, we do fly three, four times a year and we would like to minimize that.*" (Claude-55-US)
Advocating Initiatives "*I worked in a natural reserve for one month…I was volunteering there, so we would pull out trees that shouldn't be there, because they were killing other vegetation and the animals shouldn't be eating them. And we would plant new trees.*" (Mel-31-Australia)
Promoting Initiatives "*If we can educate a few people to use their reusable shopping bags, I think that's helpful… And we, um, try to show, talk about some of these sustainability issues on our blog. And we've started a new business as well to help raise awareness.*" (Patricia-30-New Zealand)

35-Germany). Nevertheless, the findings also unveil that mobile conditions do not produce complete detachments from the material and the fast (Hannonen 2020; Mancinelli 2020). Nomadic movement depends on certain objects serving as strategic resources (Bardhi et al. 2012)—*"my laptop is my most important tool…basically, everything comes down to the laptop*" (Kerstin-34-Canada)—and coined by re-immersion in experiences of acceleration (Husemann and Eckhardt 2019)—"*I can't imagine staying at one place forever…I am just enjoying my [unsettled] self too much*" (Rickey-51-US). These accounts underline that digital nomads find themselves torn between (de-)materializing and accelerating/decelerating tendencies, rather than entirely escaping from consumerism. We further unveil that in their pursuit of crafting the narrative of environmentally sensitive travelers, nomadic consumers resolve the tension between these opposing quests by engaging in rationalizing and fragmenting strategies (table 1).

Data analysis reveals that the premise of sustainability—in this case, considering the environmental repercussions of consumer actions—runs like a continuous thread throughout digital nomads' lives. We therefore accentuate that "the display of social, environmental, and cultural knowledge" becomes the new token of liquidity (Eckhardt and Bardhi 2020, 93). Digital nomads feel responsible for "*keeping an eye on sustainable practices*" (Taba-26-Austria) and sometimes even try "*to encourage an open discussion and a big debate about all this*" (Claude-55-US). However, nomadic consumers also confess that aligning their lifestyle with self-imposed sustainability agendas poses a challenge since "*traveling is not as environmentally friendly as [they] would like to think*" (Andi-31-US).

Rationalization

The mobile existence of digital nomads is inextricably tied to materialized and accelerated consumption not serving sustainability goals, such as serial aerial transportation and innovative technological applications. We find that our respondents harmonize environmentally sensitive beliefs and discrepant behavior by drawing upon rationales "used to produce a notion of reason, and thus legitimation for one's own interpretation" (Kallio, Nordberg, and Ahonen 2007, 49). When falling into the seductive trap of accepting unethical offerings (Eckhardt, Belk, and Devinney 2010), nomadic consumers decline responsibility for acting unsustainably.

That is, our respondents engage in strategies of economic rationalization where actions are justified by prioritizing personal utilities (Eckhardt et al. 2010)—**stressing values** drawn from them. As exemplified in the case of consuming plane tickets, digital nomads "*flying around the whole bloody world*" (Kim-49-Denmark) reiterate that their mobile existence is contingent on long-haul traffic—"*I try to avoid aerial transportation. But how else should I travel from Europe to Asia*" (Taba-26-Austria). Moreover, our respondents consider **blaming external factors** to rationalize environmentally insensitive behavior. The findings point to consumers who attribute accountability to aggravating circumstances when assuming that actions are beyond their self-control (Kaptein and van Helvoort 2019). Michael's (39-Germany) account underlines this strategy: "*I am forced to live with plastic [bottles]…unlike when being at home in Europe, during my trips, I cannot just drink fresh water directly from the tap.*" Additionally, consumer narratives reveal that our respondents refer to rationalizing strategies by **neutralizing the implications** of their actions. The findings cast light on the claim of relative acceptability where justification is based on the argument that others act worse (Henry and Eaton 1999). Max (35-Austria), for example, stresses that nomadic transportation emissions are comparably in-

significant as "*70 percent of the greenhouse gases stem from animal husbandry [anyway].*"

Fragmentation

Digital nomads depend on materialized and accelerated consumption to carry out their mobility projects. This forces them to violate, to some extent, the environment (Orel 2021), which sparks feelings of guilt about "*traveling in a decadent way*" (Claude-55-US). The findings reveal that to balance environmentally sensitive beliefs and discrepant behavior, nomadic consumers seize opportunities for actively adapting the latter. Our respondents celebrate a fragmented "series of small wins" to tackle the problem (Weick 1984, 43) of unethical traveling, gradually taking responsibility for sustainable actions (O'Connor and Keil 2017) which align with their liquid existence.

One manifestation of these fragmenting strategies concerns the attempt of **balancing the trade-offs** between environmentally (in-)sensitive behavior. Digital nomads report making amends for their ecological footprint by renouncing from certain unsustainable experiences, such as using heating during European winters, purchasing counterfeit products, or possessing cars. Consumer narratives also emphasize the quest for **choosing alternatives** (Edbring, Lehner, and Mont 2016) to curate a nomadic yet environmentally sensitive lifestyle. Our respondents deliberately opt for the versions that seem to be most in accordance with the tenets of sustainability, exhibiting a preference for local over online shops, electronic over printed books, or natural over non-recyclable wrappings. Fragmenting strategies are further rooted in pursuits of **minimizing routines** that are considered environmentally insensitive. Digital nomads set limitations to corresponding behavior, such as in the form of temporal and spatial boundaries. For example, our respondents report taking advantage of slow traveling options by extending their stay in particular localities (Sales Oliveira 2020). Consumer narratives further unveil the attempt of **advocating initiatives** that address environmental issues (Schlosberg and Coles 2016) by contributing to the maintenance of natural resources. Examples are voluntary participations in beach clean-ups or programs for the protection of wildlife sanctuaries which outweigh the damage sometimes even caused from within the own tribe. Similarly, our respondents feel accountable for **promoting initiatives** (Marquardt 2020) of sustainable development to fellow travelers and local communities alike. Corresponding consumer narratives revolve around fragmenting strategies where online platforms (Rokka and Moisander 2009) (e.g., #zerowastelifestyle, #savetheplanet) and offline gatherings are used to communicate the urgency of environmentally sensitive living.

DISCUSSION

This study offers a novel account of digital nomadism in liquid times of unprecedented change and ambivalence (Bauman 2000; Bauman and Bordoni 2014). We contribute to recent literature as follows: Recognizing the potential of unpacking phenomena of sustainability in the context of contemporary mobility (e.g., Orel 2021), this study picks up the debate on environmentalism within consumer research. We add to Rokka and Moisander's (2009) study on global travelers by revealing that they encounter the opposing quests for (de-)materialization (Bardhi et al. 2012), acceleration/deceleration (Husemann and Eckhardt 2019), and (de-)consumption to realize self-imposed sustainability agendas. The findings describe digital nomads as consumers who adopt an environmentally sensitive mindset and identify themselves "as a 'good' group of travelers" (Agyeiwaah et al. 2020). Nevertheless, since nomadic living entails consumption that does not always comply with the tenets of sustain-

ability, this study challenges the assumption that attitudes, expectations, and values—the intangible—are tied to sustainable behavior—the tangible (Lim 2017; Sheth, Sethia, and Srinivas 2011). The findings echo Eckhardt et al.'s (2010) picture of consumers taking advantage of rationales to reconcile beliefs and discrepant unethical—in this case, environmentally insensitive—behavior. However, reminding of Festinger's (1957) cognitive dissonance theory, this study emphasizes that nomadic consumers also perform adaptations to actively work toward compensating this gap in fragments. This study suggests that digital nomads either decline or assume responsibility for *going green*, depending on whether either environmentally insensitive or sensitive actions align with their unsettled lifestyle. Ultimately, we introduce the idea that digital nomads negotiate the tension of being *betwixt and between* sustainable orientations and unsustainable actions by engaging in a cycle of taking from and giving back to the environment. Thus, the findings point to a rather paradoxical nature of nomadic consumers' journey toward crafting their narrative of sustainable travelers.

This study comes with limitations since we neglected to touch upon the role of the SARS-CoV-2 pandemic in digital nomads' pursuit of environmentally sensitive mobility experiences. Follow-up studies could adopt a longitudinal study to refine the long-term implications of the current upheavals for mobile consumers and their sustainability agendas. Additionally, future research should pay closer attention to the interwovenness between rationalizing and fragmenting strategies. In doing so, studies could elaborate in more detail on how they mirror the quests for (de-)materialization, acceleration/deceleration, and (de-)consumption. Overall, we aim to initiate a discussion about sustainable consumerism in settings of nomadic liquidity. This is a phenomenon worth studying—after all, something that the world needs now is *going green*, which can never be as literally embodied as by travelers themselves.

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Value-ing Biodiversity in the Garden

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INTRODUCTION

Sustainable consumption practices have a long research tradition in consumer research, providing valuable insights about the role of the consumer in effecting sustainable social change, the barriers individual consumers face, as well as connections between sustainability and consumer identity (Beverland 2014; Connolly and Prothero 2010; de Burgh-Woodman and King 2013; Gollnhofer 2017; Holt 2012; Prothero et al. 2011). One of the latest sustainability concerns under debate in broader society relates to biodiversity. Public actors, companies as well as media dedicate growing attention to biodiversity concerns, addressing issues such as soil depletion or significant losses of insect populations across the world but especially in Western countries (Goddard, Dougill, and Benton 2010; van Heezik, Dickinson, and Freeman 2012).

Our focus in this paper lies on investigating how sustainable consumption trends centred on biodiversity reconfigure consumers' relationship to nature and how such a reconfiguration shapes consumers' value regimes, the arrangements reproducing value(s). Existing research suggests that increased attention to humans' harmful impact on the world's climate and nature may lead individuals to question human dominance over nature and result in changed values about interactions with nature (Buijs 2009; Cielemęcka and Daigle 2019). Yet the consumption consequences of such changed values as promoted by social actors, and in particular their influence on value regimes for sustainable consumption, are incompletely addressed, especially when it comes to the dilemmas this may pose for consumers. We contribute to filling this gap through an analysis of media discourses about sustainable gardening practices in private gardening magazines.

LITERATURE REVIEW

Sustainable, and particularly, green consumption has been discussed on both macro- and microsocietal level. Macro level studies address the question of responsibility for consumers, market place or policy makers (Boström and Klintman 2017; Connolly and Prothero 2008; Dolan 2002; Giesler and Veresiu 2014), including sustainable ethics (Cielemęcka and Daigle 2019; de Burgh-Woodman and King 2013; Holt 2012) and environmental, social, and political solutions (Boström and Klintman 2017; Connolly and Prothero 2008; Gollnhofer 2017). On the micro level, a focus on individual consumers identifies barriers to sustainable consumption (Connolly and Prothero 2003; de Burgh-Woodman and King 2013).

A recurring discussion at the macro level is how individual responsibilization on the one hand empowers consumers to make a difference through personal choices and actions, while on the other hand creating an unrealistic assumption that consumers alone can and must solve environmental problems (Boström 2012; Boström and Klintman 2017; Connolly and Prothero 2003, 2008; Dolan 2002). As seen in de Burgh-Woodman and King (2013), companies adopt this - for them convenient - assumption of consumer responsibility when using green marketing to provide motivation for sustainable consumption, while obfuscating an actionable sustainable agenda. Current research questions this consumer-centric view, critiquing the emphasis on the consumer and aiming to capture the complexity of sustainable consumption as well as its ethical notions of responsibility (Boström and Klintman 2019; Cielemęcka and Daigle 2019).

Sustainable (environmental) consumption strongly relates to value regimes about reshaping human-nature relations. Early consumer research showed how such consumer values draw on a critique of humanity's isolation from nature (Thompson and Troester 2002), echoing ecofeminist theories (Dobscha and Ozanne 2001; Radford Ruether 1995). A cultural turn in recent years regarding value(s) in marketing has opened new avenues for approaching these value and values from a consumer cultural angle. Based on Graeber's (2001) theory of value, recent research sheds light on the cultural, meaning- and practice-based articulations of value (Arnould 2014; Karababa and Kjeldgaard 2013). It connects them to value regimes, arrangements that reproduce value(s) through the interaction of higher-order values, exchanged objects and broader governance steering these values (Appadurai 1988; Gollnhofer, Weijo, and Schouten 2019). While existing research explains the interconnection between value(s), ideologies and norms, and consumption, the existence of contradictory value regimes underlying consumption practices such as gardening is less explored when it comes to the coexistence of human-centric and nature-centric value regimes as exist in sustainable consumption.

Private gardens' importance for sustainable consumption remains largely unexplored in consumer research. Yet with an increased focus on sustainability and climate change, the study of green spaces is at the center of the exploration of human-nature relationships (Bhatti and Church 2001; Buijs 2009; Canniford and Shankar 2013; Descola 2005; Dobscha and Ozanne 2001; Doody et al. 2014; Mansfield 2003). Gardens as social spaces are studied in light of urban community gardening, where the impact on social relationships, healthy food practices and environmental education is examined (Almers, Askerlund, and Kjellström 2017; Garcia et al. 2018). Human and non-human agencies (Bhatti and Church 2001) and the performance and management of other's impressions of the garden (Cloke, May, and Johnsen 2008) are linked to the front yard and neighborhood relationships (Blomley 2005; Doody et al. 2014).

Garden and sustainability research intertwine in the search for consumer influence on the biodiverse agenda (van Heezik et al. 2012; Winkler, Maier, and Lewandowski 2019). Private gardens can improve biodiversity by increasing wildlife-friendly habitats, contributing to environmental conservation, and battling the climate crisis through raised awareness and potential behavioral change (Galani-Moutafi 2013; van Heezik et al. 2012; Winkler et al. 2019). These changes in attitudes and practices are vital for environmental protection (van Heezik et al. 2012; Winkler et al. 2019). However, while the garden is an interesting space for researching societal transformation, garden research still lacks a fundamental discussion of consumer influence and responsibility, widely debated in sustainable consumer research as seen above. Conversely, consumer research has mostly addressed the enchanting effect of community-based gardening and agriculture (Thompson and Coskuner-Balli 2007), which differ from private gardening initiatives in the value regimes which are drawn upon. This article integrates the insights of these two fields, exploring biodiverse consumption within the garden itself, but also in relation to the co- and reconstruction of biodiverse garden trends by broader society, and how this societal transformation translates in garden consumption and value regimes.

METHOD AND CONTEXT

To answer the research question, we analysed consumption discourses in gardening magazines, which offer a valuable resource for investigating changing discourses about consumption over time (Galluzzo and Gorge 2020; Gollnhofer and Bhatnagar 2021).

The dataset for the preliminary discourse analysis consisted of articles from two major garden magazines in Denmark: *Isabellas* and *Alt om Haven* (respectively 138.000 and 146.000 readers). Gathering articles from the largest national players within the field of gardening allowed us to investigate the emergence of gardening trends and the staging of human-non-human relationships within each of these trends. We selected the sample for this paper in three rounds.

First, we used literature-based keywords relative to garden types to find articles showing the development in trends over time. Articles featuring garden trends and maintenance offered interesting statements about what is valued and not in the private garden. In order to be included in our sample, an article had to either feature a garden owner, trend or practice. Articles that had a clear sales purpose, were superficial or too short were not included. An initial read-through of the articles brought the largest points of conflict in relation to plant and animal life in the gardens forward. The second round used the keywords characteristic of these conflicts, for example "weeds", "insects", and "lawn", to find and select additional articles. By using keywords related to relations between human and non-human entities, we were able to find articles depicting garden practices during that period in time. This resulted in 1.624 articles published between 2011 and 2021. Third, we sorted articles after type of content, and selected 246 articles for in-depth analysis. A first reading of each article reduced the final sample to 195, sorting out articles with content lacking depth or commercial texts.

To analyse the data, we developed a codebook based on a hermeneutic screening to identify discursive patterns that might prove useful when selecting key elements for the categorization of content and emerging trend patterns. Rereading and coding a subsample of 26 articles, selected based on publication year and garden trend to maximize variety, enabled us to explore the boundaries of the first codebook, making adaptions and additions when the outlined framework could not capture interesting conflicts or evaluations of human-non-human relationships. New codes were included such as type of garden trend, relationship with plants and animals, evaluation of value, and conflicts. We then used the updated codebook on the entire sample, diving deeper into the discursive construction of trends and human-non-human relationships within the garden.

FINDINGS

Our findings indicate that over the course of the last 10 years, gardening trends increasingly exchange a human-centric value regime with a biosocial value regime. What we define as human-centric value regime has dominated garden owners' view of the garden, evaluating its value based on human needs and likings. This regime centres on higher-order aesthetic, recreational, and productive values. A new value regime emerges in two waves; the first wave in 2015-2018 includes organic garden trends and the second in 2020 - continuing into 2021 - based on biodiverse garden trends, progressively shifting the focus from human-centric to nature-oriented. The resulting biosocial regime builds on higher-order biodiversity and animal friendliness values.

Magazines present and promote both value regimes in turn, featuring garden owners who aim at living up to both regimes but experience challenges due to the conflicting practices required by these regimes. The magazines present two ways for garden owners to cope with this ambiguity: (1) facilitating value coexistence within

the garden and (2) redefining biosocial values to fit the human-centric value system.

A human-nature shift in value regimes

Our findings indicate that gardening magazines increasingly (re)present contrasting value regimes for gardening practices over time, shifting from a focus on the gardens' human inhabitants to a broader welcoming of nature and biodiversity.

A human-centric value regime based on symbolic and use value. Traditional, dominant garden trends are characterised by green lawns, lush flowerbeds, patios with garden furniture and sometimes a vegetable garden. The garden caters to the garden owner's needs based on a human-centric value system, articulated through aesthetic, recreational, and productive value. The garden owners construct their garden to be useful when satisfying a personal human need, whether that is being pleasing to senses, creating a ground for relaxation, or producing vegetables and herbs. All value is evaluated based on how useful entities are to the garden owner's needs (please see excerpt 1 in table 1).

Organic gardening trends with human-centric values. From 2015, articles on organic gardens emerge in the magazines. These still adhere to the human-centric value system, bringing forward health, taste, and price to give legitimacy to a trend that breaks with common garden practices regarding pesticides and fertiliser use (see excerpt 2 in table 1).

With increasing acceptance of organic gardens' legitimacy, novel gardening techniques grow in popularity within the next few years. Self-providing gardens, forest gardens, permaculture gardens, animal friendly gardens, and wild gardens multiply. Most of these new, nature-oriented trends borrow the human-centric value discourse to claim legitimacy and a place among accepted, useful garden trends (see excerpt 3 in table 1).

Shifting to a biosocial value regime. From 2020, new values based on a biosocial value system strenghten within the nature-oriented trends. The biosocial value system replaces human needs with non-human needs to benefit nature instead of satisfying the garden owner's needs. The articles express value based on biodiversity and/or animal friendliness (see excerpt 4 in table 1). As these biosocial values spread, they challenge the dominating, human-centric value system. It creates a conflicts of garden ownership as a new user is recognized, who also lays claim to the garden space and adds non-human needs to the garden's purpose. The conflict that arises in the garden mostly appears in the gardening methods, where opposing gardening practices creates a dilemma of how to approach different challenges. We find that the garden magazines promote these trends without explicitly addressing the dilemmas that opposing value regimes might create.

Resolving the dilemma

The nature-oriented trends described in our data create a dilemma for consumers when it comes to value regimes. In the magazines, garden owners, who adopt the new garden trends and the associated biosocial value regime, do not dismiss the human-centric value regime. They do not want to relinquish the gardens' human-centric values, yet at the same time, want to promote biodiversity, which can be difficult to achieve simultaneously as one might rule out the other. The former values indeed advocate for thorough garden maintenance, while the latter requires partial neglect of the garden to allow other lifeforms to thrive. Two ways for gardeners to navigate the ambiguity inherent in these opposing value systems appear.

Firstly, magazines display examples of consumers who allow opposing values to coexist within the garden, illustrating how for in-

Table 1: Findings

Data excerpt	Interpretation
Traditional gardening trends building on a human-centric value regime 140 Articles published between 2001 and 2021	
Excerpt 1	
"We have designed the garden spaces to make them harmonize in colour, radiating tranquillity. When you are stressed, it is important that there is something for all senses, and that you are allowed to simply be without having to do anything else but relax and find inner peace. From one of the many seatings in the garden it is possible to stimulate all senses, because the flower bed in beautiful and smells nice, and you can hear the sound of water." ("Sensing the Therapeutic Garden", Isabellas, 03/2015, p. 70)	As excerpt 1 shows, the values associated to the garden reflect aesthetic values expressed in terms of pleasing colours and sensual experiences, both focused on the human experience of the garden.
Organic and other nature-centred gardening trends building on a human-centric value regime 40 Articles published between 2011 and 2021, of which 36 articles published 2015-2019	
Excerpt 2	
"When organics emerged, it revoled around nature considerations. But today it is not only about nature and animal welfare – it is about health, taste, and especially the price, that we as consumers must pay for organic produce. Here we will give you four experts view of whether it is beneficial for you to shop organic." ("Organic in the Kitchen – Does it payoff?" Isabellas, Country life, 01/2015, p. 42)	Excerpt 2 demonstrates how gardening magazines reframe the organic gardening in terms of human health, taste and price, all three connected to human-centric values such as healthism, hedonism and thrift.
Excerpt 3	
"This is why you must attract bees and insects. Bees and butterflies pollinate plants, who are then able to grow flowers and thus fruits and berries. Insects are fighting vermin in the garden. For example the lady bug eats aphides, the dragonfly eats flying bugs, and ground beetles eat snail eggs and small snails. Insects will also attract birds and hedgehogs, who in turn will eat vermin and snails." ("Create life in your garden", Alt om Haven, 03/2020, p. 24).	Excerpt 3 illustrates the reframing of sustainable consumption trends in light of human-centric value regimes, bringing forward the "use value" of lady bugs, bees and butterflies.
Nature-oriented gardening trends building on a biosocial value regime 15 Articles published between 2020 and 2021	
Excerpt 4	
"It is not illogical to believe that a garden in itself is beneficial for nature, as long as something green is growing in it. And it is correct, that a green corner is more luxuriant than an asphalt parking lot, but seen from nature's point of view, there is a big quality difference from one garden to the next. For example, there is much more biodiversity in a flowering field than in a lawn, and organic fertilizer gives room for more life in the soil than chemical fertilizing pellets." ("A greener form of green", Alt om Haven, 03/2020, p. 3)	In contrast with previous excerpts, excerpt 4 illustrates the growth of discourses about nature for nature's sake in the magazines, advocating "nature's point of view" and offering corresponding consumption solutions.
Excerpt 5	
"In garden book author Annemette Olesen's' garden, wild plants are not seen as weeds but as important, useful plants. Many of them are beautiful, full of vitamins and rich in flavour, so they fit right into an ordinary, healthy diet." ("When weeds are given due credit", Isabellas, 04/2020)	Excerpt 5 depicts a way for consumers to navigate the dilemma between human-centric values with their definition of plants versus weeds, and biosocial values of tolerance towards weeds, by articulating the usefulness of these garden components in terms of human health.

stance fertilizer can be less harmful to the environment (see excerpt 4 in table 1). Here the solution is to adapt garden consumption by choosing products more compatible with the new, nature-oriented value regime while maintaining the traditional garden practice. Secondly, magazines help consumers reconstruct the new trends to fit the human-centric value system. This is happens by selecting a part of the garden for biodiversity, thus creating physical boundaries for each value regime represented in the garden, or by redefining biodiverse values in terms of human use value, for example assigning usefulness to wild plants seen as weeds or seing annoying insects as useful against destructive vermin (see excerpt 5 in table 1).

CONCLUDING DISCUSSION

When a new value regime challenges the dominant one, consumers can experience dilemmas in their consumption practices. Beyond focusing on individual consumers, our research demonstrates how media actors enable consumers to maintain human-centric value regimes while respecting biosocial values, resolving the dilemmas they themselves created through the introduction of new gardening trends in the magazines. These insights provide an important contribution to research about sustainable consumption in illustrating how social actors promote sustainability by offering ways for consumers to respect both human-centric and biosocial values. While these insights cannot avoid but confirm the consumer responsibilization as demonstrated in other studies on sustainable consumption, it contributes to existing knowledge by highlighting the co- and reconstruction of biodiverse garden trends in broader society, and how this societal transformation is negotiated in discourses shaping consumers' value regimes.

In addition to contributing to research about sustainable consumption, the findings of this paper also offer insights for a better understanding of value in consumer research, in particular the shift from human-centric values to biosocial values, which pose new challenges to consumer research by drawing attention to non-human subjects in the study of value regimes.

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Arousal Reduces the Availability of Internal Reference Prices in Fairness Judgments

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INTRODUCTION

Buying a product involves evaluating the price, and in doing so, making an emotional judgment of the fairness of that price (Xia et al. 2004). Consumers care that the prices they pay be "fair," and may have visceral emotional reactions to "unfair" prices which impact their purchase decisions and evaluations (Kahneman et al. 1986; Peters et al. 2003; Heussler et al. 2009). Evaluating a price's fairness involves weighing it against a "reference price," some subjectively appropriate or otherwise salient point of comparison (Thaler 1999). Generally, prices which are higher than the reference are seen as unfair while prices which are the same as or lower than the reference are seen as fair (Kahneman et al. 1986; Campbell 2007). Consumers' use of reference prices is automatic in purchase contexts, yet the processes by which references are selected, generated, or anchored on are not fully understood (e.g. Vaidyanathan and Muehling 1999; Xia et al. 2004).

A fruitful distinction exists between external references, such as prices posted in the environment, and internal references, namely prices stored in memory (Thaler, 1999; Xia et al., 2004). Even so, consumers may be simultaneously exposed to many external price cues and/or have access to many internal references, including recalled market prices or the most recent price they paid (Vaidyanathan and Aggarwal 2001). Manipulating which reference a consumer "selects" from among many possibilities is a fundamental principle of retailing (Kan et al. 2014). For example, retailers may host a sale event in which deceptively high "original" prices are made salient, which entices consumers to use these as their reference.

Reference price selection is susceptible not only to contextual cues, but to preexisting mindsets or affective states (Vaidyanathan and Aggarwal 2001; Campbell 2007), which follows from the affective nature of price fairness judgments. The current project examines one such affective state, namely incidental arousal, and its capacity to moderate consumers' selection of external versus internal reference prices. Arousal describes the level of engagement, energy, or physiological stress that an emotional state entails (Russell et al. 1989; Loewenstein 1996). For example, feelings of anger and excitement are high arousal, while feelings of sadness and peacefulness are low arousal. High arousal has several implications for consumer price judgments: it can magnify the effects of positive or negative emotional reactions (e.g., Menon and Kahn 2002), it can reduce cognitive processing by impairing or loading working memory (e.g., Eysenck 1982; Leith and Baumeister 1996), and it can lead to a myopic focus on decision criteria which are perceived as most relevant (e.g., Pham 1996). Leveraging these myopic tendencies of high arousal states, as well as the observation that information in the environment tends to be more accessible than information in memory unless that memory has been cued (Lynch and Srull 1982), it is predicted that high arousal consumers should be more (less) likely to base price fairness judgments on external (internal) reference prices as a result of arousal-induced myopia and load.

Four studies explore the impact of arousal on price fairness judgments. Studies 1 and 2 test a managerially relevant paradigm, and support the prediction that high arousal leads to greater reliance on external references. Studies 3 and 4 show that this effect arises due to arousal reducing the availability of internal reference prices.

STUDY 1: PRICE FAIRNESS

This study examined price fairness judgments in a context mimicking the managerial situation of interest. Participants were exposed to external reference prices which were much higher than market prices to set up a conflict between external and internal references. This conflict allowed for a simple test of the prediction that high arousal leads consumers to increase (decrease) reliance on externa (internal) references. If this is the case, fair price judgments should be higher under high arousal. This can also address an alternative hypothesis suggested by the preceding theoretical background that because arousal magnifies emotional reactions (Menon and Kahn 2002), fair price judgments could be generally lower under high arousal. Knowing whether either of these effects occur would be managerially useful as they have opposite implications for the efficacy of reference price promotions.

Methods

Participants on Amazon Mechanical Turk (N=150, M_{age}=30.0, 49% female) completed a four-minute autobiographical essay task based on Arousal condition (High vs. Control): High Arousal participants wrote about a time when they had an intense emotional experience, and Control participants wrote about their surroundings.

Participants then completed a "hypothetical shopping" task in which they viewed a series of 6-pack paper towel products ostensibly from Amazon.com which varied by brand with prices averaging to $15 (approximately double or triple the market price for similar products). Participants then identified a fair price for a single roll of unbranded paper towels.

Results and Discussion

High arousal was associated with higher fair price judgments (M_{high}=$2.35, SE=$0.08, $M_{control}$=$1.90, SE=$0.07; $t(148)$=2.51, p<.01), thus offering initial support for the claim that arousal leads to greater reliance on external references rather than increasing price fairness sensitivity.

STUDY 2: EXTERNAL VS. INTERNAL REFERENCES

This study provided a more nuanced view than the first by having participants explain their price judgments and then self-code their explanations to indicate whether they relied on external and/or internal references. A similar method has been used in thought-listing tasks (e.g. Cacioppo and Petty 1981).

This study used physical exercise to manipulate arousal (e.g. Pham 1996).

Methods

Participants (N=126, M_{age}=21.1, 59% female) were recruited via a campus behavioral lab for a workout study and were assigned to one of the two Arousal conditions (High vs. Low): Low Arousal participants completed four minutes of a "Deep Breathing" yoga routine on the Wii Fit, while High Arousal participants completed five minutes of a "Free Step" program on the Wii Fit at the maximum pace with the Wii Fit board elevated on an aerobic step. Prior to starting their activity, participants were shown how to measure their heart rate using a finger pulse oximeter. Participants recorded their heart rates after their Wii Fit activity in order to begin the rest of the study.

Participants completed a similar shopping task as in study 1 which randomly used either 6-packs of paper towels or 50oz bottles of laundry detergent to eliminate category-specific biases. They then indicated a fair price for an unbranded 6-pack or 50oz bottle, following which were asked to write an explanation for that fair price. Next, they completed a self-coding task of their responses. Participants were instructed to "select all that apply" to their written explanation from a list of possible reference sources, including "the prices shown" and "my emotional reactions" (external references) and "the last price I paid" and "the price I usually pay" (internal references). These code items were partly informed by Vaidyanathan et al. (1999, 2001).

Participants next completed a series of 100-point scales measure emotional arousal and valence adapted from the Affect Grid (Russell et al. 1989), and a questionnaire about their familiarity with the products, including how much they paid the last time they purchased a product from the same category (to serve as a measure of their internal reference price).

Results and Discussion

The arousal manipulation was validated against participants' heart rates (M_{high}= 84.29bpm, SE=1.31; M_{low}=71.20bpm, SE=1.46; $t(124)$=5.59, p<.001) and their arousal as measured with the Affect Grid (M_{high}=45.38, SE=1.74; M_{low}=-12.16, SE=5.02; $t(124)$=3.89, p<.001).

Recalled internal reference prices were significantly lower than the \$15 external reference prices (M=\$9.95, SE=0.29, $t(135)$=-17.15, p<.001), thus successfully putting these references in conflict. Participants' fair price judgments were predicted on the basis of both arousal and their internal reference prices using a linear regression, which revealed a strong effect of the internal reference (B=0.83, $t(122)$=4.57, p<.001), a marginal effect of arousal potentially suggesting that high arousal may be associated with greater reliance on external references (B=0.07, $t(122)$=1.69, p=.093), and a marginal interaction between arousal and internal reference (B=-0.01, $t(122)$=-1.83, p=.069). Decomposing this interaction, the internal reference predicted fair prices under low arousal (B=0.87, $t(57)$=5.25, p<.001) but not high arousal (B=0.73, $t(61)$=1.68, p=.098), suggesting that high arousal reduced participants' usage of recalled prices.

To investigate this further, the external and internal self-coding responses were tallied and individually predicted on the basis of participants' internal reference prices and arousal using Gaussian regression. There were no differences in the reported reliance on external references (B=-0.00, $t(122)$=-0.19, p=.852), but high arousal was marginally associated with reduced reported reliance on internal references (B=-0.01, $t(122)$=-1.95, p<.054). This is instructive but not conclusive evidence that arousal is shifting reliance away from internal reference prices.

STUDY 3: HIGH VS. LOW EXTERNAL REFERENCES

This study replicated and broadened the findings from study 2 by manipulating external reference prices to be either higher or lower than market prices. This created a paradigm in which participants were expected to rely more (less) on external references when the stimulus prices were low (high), thus moderating of the effects in previous studies to show that high arousal leads participants' price fairness judgments to track external references.

Methods

Participants on Amazon Mechanical Turk (N=748, M_{age}=32.5, 45% female) completed an expanded autobiography task from study 1 based on Arousal condition (High vs. Low vs. Control): High Arousal participants wrote about an experience of feeling "excited" or "angry," Low Arousal participants wrote about an experience of feeling "peaceful" or "sad," and Control participants wrote about geography. Affective valence was varied only to control for it as an alternative explanation in the analyses.

Participants then completed a shopping task for paper towels as in prior studies except that prices that were either 50% higher or 50% lower than market prices as determined by Price condition (High vs. Low). They then completed the same price fairness and self-coding tasks as in study 2, and similar final questionnaires.

Results and Discussion

Linear regression predicted fair price judgments on the basis of the arousal and price manipulations as well as participants' reported internal reference price. The price condition was the most significant predictor (M_{high}=\$8.71, SE= \$0.12; M_{low}=\$2.93, SE=\$0.04; B=5.79, $t(741)$=45.04 p < .0001) followed by participants' internal reference (B=0.03, $t(741)$=2.31 p < .022), while arousal was non-significant (B=0.02, $t(741)$=0.19, p=.851) and did not interact with price (B=0.10, $t(741)$=0.67, p=.503). These results do not suggest a direct effect of arousal, thus analysis of the self-coding data is used to explore indirect effects of arousal on this process.

Confirming the directional result in study 1, Gaussian regressions predicting the self-coded use of external and internal references on the basis of the manipulations found that high arousal participants were significantly less likely to report using internal references (B=-0.07, $t(745)$=-2.14 p < .034) with no corresponding increase in usage of external references (B=0.01, $t(745)$=0.35, p=.728). While there was no direct effect of arousal on fair price judgments as reported above, linear regressions predicting fair prices with the self-coding data found that reliance on external references predicted higher price judgments in the high price condition (B=1.41, $t(739)$=5.93, p<.001) while reliance on internal references predicted higher fair prices in the low price condition (B=-1.15, $t(739)$=7.34, p<.001), consistent with our predictions. Thus, a bootstrapped mediation analysis (5000 iterations, bias corrected) found that high arousal's suppression of the use of memory-based references led to lower price fairness judgments in the low price condition (95% CI[-0.034,-0.003]) and higher judgments in the High Price condition (95% CI[0.007,0.059]). There were no equivalent indirect effects through the use of stimulus-based references (95% CI[-0.007,0.017] and 95% CI[-0.038,0.023]).

This result suggests that arousal impacts price fairness by reducing reliance on internal reference prices without necessarily increasing reliance on external reference prices. Extant models of the ways in which consumers switch between environmental and recalled information suggest two possible explanations: either the availability of internal references (i.e., the ease with which they come to mind) is being suppressed and/or the diagnosticity of external references (i.e., their perceived importance or relevance) is being enhanced (Lynch and Srull 1982). Because this study's measure of reliance on external versus internal references is the sum of self-coded use of such references, which captures their availability but not their diagnosticity, we cannot disentangle these explanations. Thus, two independent judges read participants' fair price explanations and used a 5-point scale to rate the degree to which each participant emphasized the diagnosticity of the reference(s) on which they relied (Cronbach's alpha=.69). A linear regression found no differences in diagnosticity on the basis of arousal (B=0.01, $t(742)$=-0.60, p=.549), thus the mechanism driving the findings appears to be reduced availability of internal references rather than some increase in the availability or diagnosticity of external references.

STUDY 4: REPLICATION

This study replicated study 3 using a different population. It is briefly summarized here.

Methods

Participants in a campus behavioral lab (N=541, M_{age}=22.3, 55% female) completed the same paradigm as study 3. Once again, two independent judges rated participants' written price fairness explanations for discussions of reference diagnosticity (Cronbach's alpha=.77).

Results and Discussion

Study 3 was successfully replicated. There was no main effect of arousal on fair price judgments (B=-0.25, t(536)=-0.65, p=.258) but a significant interaction between arousal and external price (B=0.47, t(536)=1.69, p<.046).

Self-coded usage of internal references was reduced under high arousal (B=-0.13, t(536)=-3.36, p<.001) but there was no effect on use of external references (B=-0.01, t(536)=-0.49, p=.311). The indirect effect on price judgments through these self-codes replicated in the high price condition (95% CI[0.101,0.785]) and marginally in the low price condition (95% CI[-0.263,-0.000]). Arousal did not predict any differences in the diagnosticity indicated in written explanations (B=0.02, t(536)=0.99, p=.160). Taken together, these results support the conclusions derived from study 3, namely that high arousal leads consumers to be less attentive to internal references.

GENERAL DISCUSSION

This research has investigated the role that affective arousal plays in consumers' price fairness judgments, and found that it appears to make consumers less likely to rely on internal reference prices. While the net effect of this is an apparent increase in sensitivity to external reference prices, the results do not support the claim that arousal increases the availability or the diagnosticity of external references themselves. As such, a remaining question posed by this research is whether there is an unobserved factor or resource that "goes up" as availability of internal references "goes down." Regardless, the results provide a sufficiently granular view of the role of arousal as to provide managerial recommendations, namely that promotions providing high external reference prices should induce high arousal (e.g., with sensory input, such as music) or target consumers on the basis of high arousal (e.g., with online sentiment analysis), especially when consumers are likely to have internal references.

This research furthers the literature on affective and emotional impacts on consumer decision-making, much of which has traditionally focused on valence rather than arousal (e.g. Menon and Kahn 2002; Heussler et al. 2009), as well as work in the domains of price fairness and the use of reference prices.

Table 1: Summary of Results

High Arousal		High Stimulus Price			Low Stimulus Price		
		Control	Low Arousal	High Arousal	Control	Low Arousal	
Study 1 (N=150)	Fair price	$2.35 ($0.08)	$1.90 ($0.07)	n/a	n/a	n/a	n/a
Study 2 (N=126)	Fair price	$11.05 ($0.43)	$10.83 ($0.34)	n/a	n/a	n/a	n/a
	Self-codes (external)	0.89 (0.04)	0.85 (0.05)	n/a	n/a	n/a	n/a
	Self-codes (internal)	0.25 (0.06)	0.37 (0.06)	n/a	n/a	n/a	n/a
Study 3 (N=748)	Fair price	$8.89 ($0.19)	$8.67 ($0.18)	$8.45 ($0.30)	$2.95 ($0.05)	$2.90 ($0.08)	$2.92 ($0.08)
	Self-codes (external)	0.86 (0.05)	0.82 (0.07)	0.87 (0.05)	0.99 (0.03)	0.97 (0.06)	0.98 (0.04)
	Self-codes (internal)	0.78 (0.07)	0.83 (0.10)	0.83 (0.07)	0.33 (0.06)	0.49 (0.09)	0.54 (0.05)
	Diagnosticity	3.03 (0.02)	2.92 (0.03)	3.02 (0.02)	3.00 (0.02)	2.89 (0.02)	2.99 (0.02)
Study 4 (N=541)	Fair price	$6.62 ($0.41)	$5.70 ($0.45)	$6.35 ($0.33)	$2.22 ($0.41)	$2.23 ($0.20)	$2.59 ($0.53)
	Self-codes (external)	0.79 (0.03)	0.83 (0.04)	0.79 (0.03)	0.92 (0.06)	0.80 (0.04)	0.87 (0.07)
	Self-codes (internal)	0.13 (0.03)	0.21 (0.04)	0.17 (0.02)	0.04 (0.04)	0.29 (0.05)	0.43 (0.11)
	Diagnosticity	2.96 (0.02)	2.92 (0.04)	2.97 (0.03)	2.97 (0.02)	2.93 (0.05)	2.94 (0.03)

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How to Lose Friends and Influence No One: The Documentation Penalty in Social Experiences

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INTRODUCTION

Performers, organizers, and concertgoers have continually lambasted documentation behaviors as diminishing the live event experience. In this sense, the use of smartphones for documenting events seems, by most people, to convey a state of distraction (Kushlev & Dunn, 2019). Here, distraction suggests attentional conflict (Kupor & Tormala, 2015), where diminished attention to the live event reduces cognitive and emotional processing of the event itself (Petty & Wegener, 1999). In essence, then, the documentation of experiences may signal lower engagement and presence to the same extent as would playing Candy Crush or texting during the event. Consistent with this notion, "phubbing" has emerged as pejorative slang to describe individuals who cannot stay present in social interactions due to smartphone usage, resulting in negative impressions and ostracism (David & Roberts, 2017). Documentation, like many other technology-centric behaviors, has thus been described as another instance of the "present-absent paradox" (Mick & Fournier, 1998), whereby people are physically present with others but mentally absent as they become preoccupied with their devices.

However, as noted earlier, people can experience increased presence and enjoyment as a direct result of their documenting behavior. Of note is the role of *presence*—the extent to which someone is (mentally) present, immersed, or engaged in an ongoing experience (Diehl et al., 2016; Tonietto & Barasch, 2020). Consistent with this notion, prior work has shown that increased presence induces positive affect (Escalas, 2007; Green & Brock, 2000) and the experience of psychological flow (Csikszentmihalyi, 1990), which in turn enhances enjoyment.

A noteworthy distinction between documenting and other technology-related behaviors, then, is the focal stimulus demanding attentional resources. Namely, whereas other technology-based activities like gaming and texting are focused on stimuli that are obviously tangential to the live event, documenting centers the social experience—the show, the event, or the gathering—as its focus, thereby increasing immersion (Tonietto & Barasch, 2020). Despite these personal benefits, however, we contend that documenters who experience the event *primarily* through a recording device—which characterizes the behavior of most documenters—will be perceived as having an impoverished experience that others recognize and judge accordingly. As such, observers might infer that the documenter has a decreased sensory experience when documenting is the predominant behavior, thus leading to lower perceptions of presence. As a result, variation in perceived presence exhibited by documenters is likely to determine how others judge them, whether others would want to affiliate and attend future events with them, and so on.

To provide preliminary evidence for our predictions, we conducted a retroactive recall pilot study that gauged respondents' memories of concerts that they attended with an actual friend. 250 participants were asked to recall the extent to which their friend was taking photos and videos during this concert before indicating how much they would want to attend another concert with the same friend in the future. Finally, they were asked to indicate how close they were with this friend. Regressing interest in attending future concerts with this friend on documentation degree and relational closeness revealed a significant and expected simple effect of relational closeness ($p<.0001$), and importantly, a significant simple effect of documentation ($p=.0096$), where participants expressed lower interest in attending future concerts with their friend when this person engaged in more documentation during

the previous concert. While only correlational in nature, these findings shed initial insights into the potential negative interpersonal consequences of documenting social experiences.

We contend that documentation can evoke varying perceptions of presence, in turn shaping impressions of the documenter with downstream social consequences. Documentation is predicted to generate negative impressions and diminished social connectedness when others perceive lower presence—a "documentation penalty". However, based on our conceptualization, documentation need not be universally negative, as these negative judgments should be attenuated if documentation does not ostensibly detract from the individual's ability to remain engaged with the social experience. The inherent irony of documentation is therefore clear—people may feel more personally present and engaged as a result of documentation, and yet others around them are likely making directly opposing inferences about their behavior, potentially to the detriment of friendships and future affiliation intentions.

Study 1 (N=282) identifies the documentation penalty and provides initial underlying evidence in a 2(documentation method: self vs. outsourced) × 2 (behavior: enact vs. abstain) design. Participants read a passage about attending the concert of their favorite musical artist with a friend. In the self-documentation condition, their friend was constantly using their phone to take photos and videos of the concert (vs. put away their phone and did not check it during the event), whereas those in the outsourced-documentation condition encountered a vendor selling official live recordings after the concert (Abendroth and Diehl 2006), and their friend decided to buy (vs. not buy) the recording. Subsequently, we assessed impressions of their friend and their perceived presence.

Results revealed a significant main effect of behavior ($M_{enact}=5.02$ vs. $M_{abstain}=5.82$; $p<.0001$), qualified by a significant 2-way interaction ($p<.0001$; Fig. 1). Whereas participants formed more negative impressions of their friend when this person engaged in self-documentation ($M_{self, enact}=4.34$) versus not ($M_{self, abstain}=6.23$; $p<.0001$), impressions did not differ whether their friend outsourced documentation (vs. not) by purchasing the concert recording ($M_{outsourced, enact}=5.71$ vs. $M_{outsourced, abstain}=5.42$; $p=.1589$). Finally, moderated mediation analysis (Model 8; Hayes 2017) revealed that perceived presence mediated impressions in the self-documentation condition (CI=-1.97, -1.03), but not the outsourced documentation condition (CI=-.17, .17).
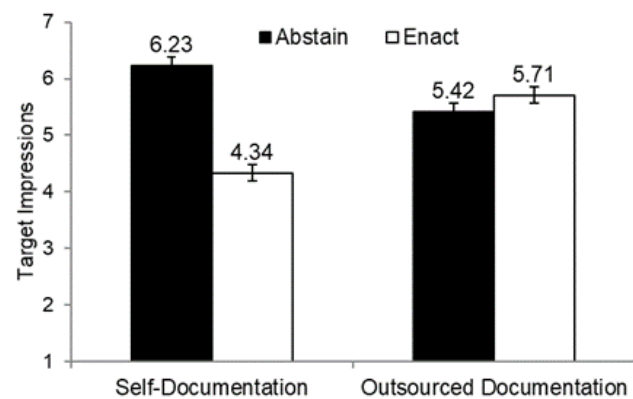
Fig. 1: Documentation Method × Behavior on Target Impresions

In study 2 (N=213), we examine how observers respond to varying amounts of documentation. Specifically, we introduce more nuance to

documentation, because short of banning access to recording devices altogether, some level of documentation is to be expected. A such, we examine reactions to a minimal level of documentation in a 3-cell (behavior: documentation vs minimal capturing vs. no documentation) design, and predict that the documentation penalty will be attenuated to the extent that this behavior hinders perceived presence to a lesser extent. Participants read a similar passage as study 1, where they were attending a concert with their friend. The documentation and no documentation conditions were identical to those of study 1 in the self-documentation groups. In the minimal capturing condition, their friend used their phone to take a few photographs and record part of a particularly good song, but then put it away and did not check it for the rest of the event. Subsequently, participants competed the same measures capturing impressions of their friend and perceived presence.

A one-way ANOVA on target impressions revealed a significant main effect of behavior ($p<.0001$). Participants formed more negative impressions of their friend when this person engaged in documentation compared to no documentation ($M_{documentation}=3.93$ vs. $M_{no\ documentation}=6.25$; $p<.0001$) or minimal capturing ($M_{minimal}=5.82$; $p<.0001$), suggesting the documentation penalty was attenuated when this behavior disrupts perceived presence to a lower extent. Although impressions were more negative when this person engaged in minimal capturing as opposed to no documentation ($p=.0487$), this difference was substantively smaller in magnitude. Finally, multi-categorical mediation analysis (Model 4, Hayes 2017) revealed that perceived presence mediated impression for both the documentation versus no documentation (CI=1.57, 2.61) and documentation versus minimal capturing comparisons (CI=1.27,2.24).

In study 3 (N=218), we provide additional insight into the underlying process by directly manipulating the mediator, perceived presence, in a 3-cell (behavior: documentation vs minimal capturing vs. tripod) design, thereby demonstrating process via moderation. Specifically, we show that even if documentation behavior were held constant, the documentation penalty can be attenuated if the behavior does not ostensibly detract from the documenter's ability to stay present. In so doing, we address an alternative explanation based on the creation of a distracting environment for other attendees, because documentation should be equally distracting for others regardless of the documenter's own perceived presence. Participants were presented a scenario where they were attending a firework show with their friend. In the documentation condition, their friend was constantly using their phone to record the event, whereas in the minimal capturing condition, their friend used their phone to record a particularly good segment but then put it away and did not check it for the rest of the event. In the tripod condition, their friend brought a tripod to help record the event on their phone, but was the tripod was set up, they did not touch their phone again for the rest of the event. Subsequently, participants competed the same measures capturing impressions of their friend and perceived presence. Additionally, they indicated their interest in future interactions with this friend.

A one-way ANOVA on target impressions revealed a significant main effect of behavior ($p<.0001$). Participants formed more negative impressions of their friend when this person engaged in documentation compared to minimal capturing ($M_{documentation}=3.58$ vs. $M_{minimal}=5.29$; $p<.0001$) or documentation facilitated by a tripod ($M_{tripod}=4.71$, $p<.0001$), suggesting that the documentation penalty is attenuated when documentation does not ostensibly reduce the person's presence during the experience. The same analysis on interest in future interactions the same significance and pattern of results ($p<.0001$), such that participants expressed lower interest in future interactions with their friend when this person engaged in documentation compared to minimal capturing ($M_{documentation}=3.24$ vs. $M_{minimal}=5.71$; $p<.0001$) or docu-

mentation facilitated by tripod ($M_{tripod}=4.88$, $p<.0001$). Finally, multi-categorical mediation analysis (Model 4, Hayes 2017) revealed that perceived presence mediated impression for both the documentation versus minimal capturing (CI=.73, 1.39) and documentation versus tripod comparisons (CI=.57, 1.19). The pattern of mediation results for interest in future interactions was also significant in the same direction.

In study 4 (N=220), a 2-cell (behavior: documentation vs. minimal capturing) design, we focus on individuals' responses to their actual friends' documenting behavior, thereby enhancing external validity while exploring downstream social consequences with this friend. As such, study 4 assesses the judgments of targets with whom respondents already had established relationships. Participants were first asked to provide the names of three non-familial and non-romantic friends before indicating how close they were to each one. Next, participants completed a similar scenario task as in study 3, where they were attending a firework show with a friend who engaged in documentation or minimal capturing. Importantly, the scenario featured the actual name of the third friend that participants had provided earlier. Next, participants were told to suppose they were planning to attend an upcoming outdoor concert and were asked to indicate how likely they would be to invite each of their three friends to join. Subsequently, they indicated how interested they would be in future interactions with the focal friend from the scenario. Finally, participants completed the same index capturing perceived presence.

A 2 (behavior) × 3 (friend) mixed ANOVA on invitation likelihood revealed a significant main effect of friend ($p=.0006$), which was qualified by a significant interaction ($p<.0001$; Fig. 2). While participants were less likely to invite the focal friend to the upcoming concert when this person engaged in documentation (vs. minimal capturing) ($M_{documentation}=5.73$ vs. $M_{minimal}= 6.29$; $p=.0005$), the likelihood of inviting the two non-focal friends was unaffected by the focal friend's behavior ($F<1$). Importantly, consistent with the pilot study, the same pattern and significance of effects continue to hold when controlling for interpersonal closeness ($p<.0001$). A one-way ANOVA on interest in future interactions revealed that participants expressed lower interest in future interactions with the focal friend when this individual engaged in documentation ($M_{documentation}=5.37$ vs. $M_{minimal}=5.82$; $p=.0165$), which held controlling for closeness ($p=.0401$). Finally, mediation analysis (Model 4, Hayes 2017) revealed that the indirect effect of behavior on downstream consequence consequences through perceived presence was significant for both invitation likelihood (CI=-.86, -.17) and interest in future interactions (CI=-.83, -.10]), results that held controlling for interpersonal closeness. In sum, study 4 conceptually replicates the documentation penalty with one's own actual friends and shows that these negative impressions can carry important social consequences, including desire for future interactions.
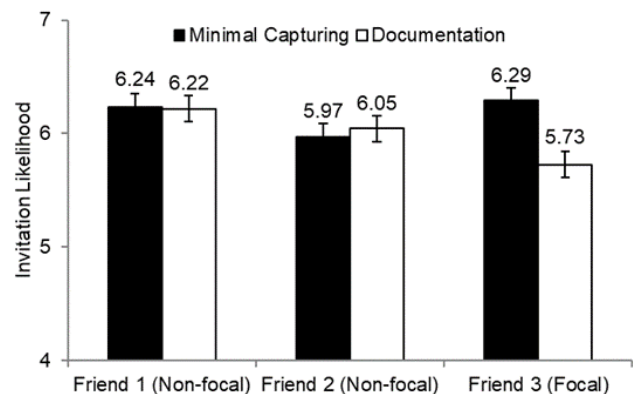
Fig 2. Behavior × Friend on Invitation Likelihood

Summary of Results

Study	Measure	Main Results
1	Target Impressions	• Main Effect of Behavior: $F(1, 278) = 29.55$, $p < .0001$ • Documentation Method × Behavior Interaction: $F(1, 278) = 55.37$, $p < .0001$ $M_{\text{self, enact}} = 4.34$ vs. $M_{\text{self, abstain}} = 6.23$; $F(1, 278) = 83.50$, $p < .0001$ $M_{\text{outsourced, enact}} = 5.71$ vs. $M_{\text{outsourced, abstain}} = 5.42$; $F(1, 278) = 2.00$, $p = .1589$
1	Perceived Presence	• Main effect of Documentation method: $F(1, 278) = 7.82$, $p = .0055$ • Main Effect of Behavior: $F(1, 278) = 114.33$, $p < .0001$ • Documentation Method × Behavior Interaction: $F(1, 278) = 113.17$, $p < .0001$ $M_{\text{self, enact}} = 3.31$ vs. $M_{\text{self, abstain}} = 6.18$; $F(1, 278) = 229.12$, $p < .0001$ • $M_{\text{outsourced, enact}} = 5.12$ vs. $M_{\text{outsourced, abstain}} = 5.13$; $F < 1$
1	Mediation	• Index of Moderated Mediation: $b = -1.48$; 95% CI: [-2.0118, -1.0051] • Self-documentation condition: $b = -1.48$; 95% CI: [-1.9734, -1.0315] • Outsourced documentation condition: $b = -.00$; 95% CI: [-.1709, .1689]
2	Target Impressions	• Main Effect of Behavior: $F(2, 210) = 65.18$, $p < .0001$ $M_{\text{documentation}} = 3.93$ vs. $M_{\text{no documentation}} = 6.25$; $F(1, 210) = 114.59$, $p < .0001$ $M_{\text{documentation}} = 3.93$ vs. $M_{\text{minimal}} = 5.82$; $F(1, 210) = 76.50$, $p < .0001$ $M_{\text{minimal}} = 5.82$ vs. $M_{\text{no documentation}} = 6.25$; $F(1, 210) = 3.93$, $p = .0487$
2	Perceived Presence	• Main Effect of Behavior: $F(2, 210) = 117.69$, $p < .0001$ $M_{\text{documentation}} = 3.38$ vs. $M_{\text{no documentation}} = 6.56$; $F(1, 210) = 203.16$, $p < .0001$ $M_{\text{documentation}} = 3.38$ vs. $M_{\text{minimal}} = 6.04$; $F(1, 210) = 143.64$, $p < .0001$ • $M_{\text{minimal}} = 6.04$ vs. $M_{\text{no documentation}} = 6.56$; $F(1, 210) = 5.31$, $p = .0222$
2	Mediation	• Documentation vs. No Documentation: $b = 2.05$; 95% CI: [1.5690, 2.6088] Documentation vs. Minimal Capturing: $b = 1.72$; 95% CI: [1.2702, 2.2385]
3	Target impressions	• Main Effect of Behavior: $F(1, 215) = 47.01$, $p < .0001$ $M_{\text{documentation}} = 3.58$ vs. $M_{\text{minimal}} = 5.29$; $F(1, 215) = 90.79$, $p < .0001$ $M_{\text{documentation}} = 3.58$ vs. $M_{\text{tripod}} = 4.71$; $F(1, 215) = 39.20$, $p < .0001$ $M_{\text{tripod}} = 4.71$ vs. $M_{\text{minimal}} = 5.29$; $F(1, 215) = 10.17$, $p = .0016$
3	Interest in Future Interactions	• Main Effect of Behavior: $F(1, 215) = 73.20$, $p < .0001$ $M_{\text{documentation}} = 3.24$ vs. $M_{\text{minimal}} = 5.71$; $F(1, 215) = 141.13$, $p < .0001$ $M_{\text{documentation}} = 3.24$ vs. $M_{\text{tripod}} = 4.88$; $F(1, 215) = 61.68$, $p < .0001$ $M_{\text{tripod}} = 4.88$ vs. $M_{\text{minimal}} = 5.71$; $F(1, 215) = 15.44$, $p = .0001$
3	Perceived Presence	• Main Effect of Behavior: $F(1, 215) = 80.31$, $p < .0001$ $M_{\text{documenting}} = 3.10$ vs. $M_{\text{minimal}} = 5.43$; $F(1, 215) = 140.95$, $p < .0001$ $M_{\text{documentation}} = 3.10$ vs. $M_{\text{tripod}} = 5.02$; $F(1, 215) = 94.33$, $p < .0001$ $M_{\text{tripod}} = 5.02$ vs. $M_{\text{minimal}} = 5.43$; $F(1, 215) = 4.28$, $p = .0397$

3	Mediation	• Target Impressions
		  o Documentation vs. Minimal Capturing: $b = 1.05$; 95% CI: [.7331, 1.3874]
		  o Documentation vs. Tripod: $b = .86$; 95% CI: [.5680, 1.1914]
		• Interest in Future Interactions
		  o Documentation vs. Minimal Capturing: $b = 1.64$; 95% CI: [1.2925, 2.0222]
		  o Documentation vs. Tripod: $b = 1.35$; 95% CI: [1.0097, 1.7280]

4	Invitation Likelihood	• Main Effect of Friend: ($F(2, 436) = 7.49$, $p = .0006$) • Behavior × Friend Interaction: $F(2, 436) = 13.97$, $p < .0001$ $M_{\text{friend 3, documentation}} = 5.73$ vs. $M_{\text{friend 3, minimal}} = 6.29$; $t(436) = -3.49$, $p = .0005$ $M_{\text{friend 2, documentation}} = 6.05$ vs. $M_{\text{friend 2, minimal}} = 5.97$; NS $M_{\text{friend 1, documentation}} = 6.22$ vs. $M_{\text{friend 1, minimal}} = 6.24$; NS
4	Interest in Future Interactions	• Main Effect of Behavior: $F(1, 218) = 5.84$, $p = .0165$ $M_{\text{documentation}} = 5.37$ vs. $M_{\text{minimal}} = 5.82$
4	Perceived Presence	• Main Effect of Behavior: $F(1, 218) = 155.69$, $p < .0001$ $M_{\text{documentation}} = 3.67$ vs. $M_{\text{minimal}} = 5.86$
4	Mediation	• Invitation Likelihood: $b = -.51$; 95% CI: [-.8612, -.1686] • Interest in Future Interactions: $b = -.44$; 95% CI: [-.8260, -.0968]

Across a correlational study and four experiments, we investigated the interpersonal consequences of documenting social experiences and uncovered a documentation penalty, whereby people are judged more negatively for documenting experiences due to the perception that they are less present during the experience. These findings highlight an interesting self-other asymmetry, because while documentation has been shown to increase engagement, memory, and even personal enjoyment (Barasch et al., 2017; Diehl et al., 2016; Tonietto & Barasch, 2020; Zhang et al. 2014), observers infer that documenters are *less* mentally present, which in turn generates more negative social impressions. Accordingly, we highlight how this ubiquitous behavior can carry unintended consequences, influencing desire for and thus the likelihood of future interactions with the target.

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Violence as a Consumption Object: Contributions from Other Fields to the Understanding of the Phenomenon

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INTRODUCTION

There are few conceptual articles in the Marketing area, but they are necessary for the development of the discipline (MacInnis 2011; Yadav 2010). This conceptual article proposes violence as an object of consumption and articulates three distinct constructs: violence, power and authority. Every individual, consciously or not, consumes violence to some degree. It can be consumed explicitly in sports, movies, news, video games and entertainment, or it can be invisible when it is part of an industrial process or service, such as meat and vaccines that need testing on animals (Jain et al. 2020).

We contribute to future consumption studies that aim to explore the consumer desire for violence, to explore how marketing incentives violence and the adoption of public policies. Violence is present in experiences such as hunting, arms trade, MMA fights, horror films, electronic games. More recently, on digital platforms, we can spot violence on hate speeches, cancellation policy, social justice warriors, threats to democracy, necropolitics (Mbembe 2018).

Positive effects of violence can be connected to Belk, Ger and Askegaard's (2003) discussion on consumer desire. The *fire of desire* helps to explain violence as an object of consumer desire when positive feelings were associated with hunting or watching a fight. Violence and desire are primarily positive powerful motivating forces to consumption, but both have been scarcely studied.

In consumption studies, we identified researches that relate violence to gender (Joy, Belk and Bhardwaj 2015; Varman, Goswani and Vijay 2018; McVey, Gurrieri and Tyler 2021), to advertisements (Leonard and Ashley 2012) and to the media (Martin and Collins 2002; Söderlund and Dahlen 2010; Zlatevska and Spence 2012). We did not find systematic cultural studies that connect violence and consumption. There are themes and phenomena indirectly related to violence such as pain (Scott, Cayla and Cova 2017; Cova 2021), illegalities (Barros et al. 2010), negative feelings (Andrade and Cohen 2007), risks (Arnould and Price 1993; Celsi, Rose and Leigh 1993), hunting and weapons (Littlefield and Ozanne 2011), heavy metal music (Sinclair and Dolan 2015), hardcore players (Tiercelin and Remy 2019) and dominance (Ashworth, Pancer and Pyle 2010).

We chose to deepen violence discussion of subjective and positive violence bringing contributions from different perspectives such as philosophy (Hanna Arendt 1994; Slavoj Žižek 2014), psychology and neurology (Elbert, Weierstall and Schauer 2010; Weierstall and Elbert 2011) and health (The World Health Organization 2002). Violence is often treated as a synonym for authority and power but Hannah Arendt's philosophical thinking (Arendt, 1994) differentiates these concepts. We propose subjective violence (Žižek, 2014) as an object of consumer desire and articulate it with power and authority.

VIOLENCE AS AN OBJECT OF CONSUMER DESIRE: CONTRIBUTIONS FROM OTHER FIELDS

The World Health Organization (2002, 5) defines violence as "the intentional use of physical force or power, threatened or real, against oneself, another person, or against a group or community, which results or is highly likely to result in injury, death, psychological damage, poor development or deprivation". Jayme Paviani (2016) presents violence as "acts contrary to someone's freedom and will, and this is where their moral and ethical dimensions lie". These definitions cover the physical, psychological, social, cultural and other negative aspects of violence.

Why some people feel fascination and pleasure in the consumption of violence? We encountered a German group from psychology and neurology areas studying positive biological effects of violence (Elbert, Weierstall and Schauer 2010; Weierstall and Elbert 2011). They discuss aggression as the perpetration of violence (Weirstall and Elbert 2011). There is a Reactive Aggression, that happens as a resistance to a threat, and there is an Instrumental Aggression, which is proactive and predatory, related to some type of social or material reward (Weierstall and Elbert 2011; Anderson and Bushman 2002; Fontaine 2007; McEllistrem 2004).

Elbert (2010, 2017) described an "appetite for aggression" based on studies conducted in conflict regions. Members of urban gangs, child soldiers and street children reported that, at first, reactive and instrumental aggression in the fighting and killing experience are perceived as heinous, promoting fear and negative effects. However, after a period of adaptation, repeated acts of violence are felt with increasingly positive effects. Endorphins are released into the body with the emotion of a threat, and these hormones can be addictive (Elbert et al. 2010; Weierstall and Elbert 2011).

The evolution of aggressive behavior presupposes an empathic disconnection with the other living being. There is an association between increased hostility, dehumanization and levels of conflict with the escalation of violence (Weierstall and Elbert 2011). This happens because depreciation and dehumanization of the other reduce empathy and moral judgment (Elbert et al. 2017). Socially, the ability and predisposition to aggression stimulate bonding within a group. Working with others in a joint attack was perceived as pleasurable and fascinating (Elbert et al. 2010). However, this biological behavior is also regulated by moral restrictions, expressed in customs and laws. This duality appears as an internal conflict between the human instinct and the need to live in society.

Starting from this group of researches on the effects of violence on people, we can understand violence as an object of consumption, which provides the consumer with some objective gain (for example, prey or vaccines) or positive effect (such as emotion and feeling of power), either as a spectator or actually acting on it.

Elbert, Weierstall and Schauer (2010) analyze violence from the biological and psychological perspectives. The phenomenon of violence has been also studied by philosophers. The Slovenian philosopher Slavoj Žižek (2014) identified three types of violence: objective systemic, symbolic and subjective. Objective systemic violence is a result of the capitalist system, whose operation presupposes the formation of social groups of marginalized and excluded individuals. Symbolic violence deals with the creation of symbology, mainly through language. Words, rituals and objects can become symbols of naturalized violence. Subjective violence is perceived according to the context. A scene can be considered brutal, while in another context, the same scene can be acceptable. Žižek considers subjective violence to be the result of objective violence.

Hannah Arendt brings a phenomenological and philosophical perspective to analyze violence and compare it to other constructs. Arendt distinguishes violence "by its instrumental character. Phenomenologically, it is close to strength, since the implements of violence, like all other tools, are designed and used for the purpose of

multiplying natural strength until, at the last stage of their development, they can substitute for it" (Arendt 1994, 28-29). Arendt (1994) points out the importance of differentiating the concepts of strength, force, authority, violence and power. She observes that especially authority and power are often used as synonyms for violence. To complement her view, we brought contributions from consumer researchers who support the distinguishment of these other concepts.

DISTINGUISHING VIOLENCE FROM OTHER CONSTRUCTS

Concerning the concept of power, Arendt (1994) sees it as "the human ability not just to act but to act in concert. Power is never the property of an individual; it belongs to a group and remains in existence only so long as the group keeps together" (Arendt 1994, 27). Derek Rucker and David Dubois, researchers on consumer behavior, and Adam Galinsky, researcher on management and social psychology, complement the understandings on power by relating it to consumption. They looked at how having and not having power impacts perception, cognition, behavior and values. For them, power is an asymmetric control over valuable resources in social relationships (Rucker et al. 2011, 2012).

Before we continue to analyze the concept of power, it is imperative to differentiate power as an entity that affects consumption from consumer power. According to Denegri-Knott et al. (2006), marketers understand consumer power as the "ability of consumers to ignore, resist and adapt to even the most elegant and expensive multimedia attack" (2006, 1). Although it is a type of power, we think it is too specific for a relationship of resistance between consumers and the market. Our interest is more in tune with the study by Rucker et al. (2011, 2012), about how power alters consumer behavior due to the attributes of the product and the recipients.

Distinguishing violence from power is crucial, because the concepts can be confusing. Arendt (1994) says that, in the face of losing power, one is tempted to replace it with violence to maintain dominance. Violence appears when power is in danger. We differentiate the concepts, first, by understanding that violence works as an instrument, while power is an ability, working as a mediator. From the consumer's perspective, we find that the instrument of violence also works as an object of desire. Second, violence implies harm or death as a possible outcome, while power is about control. Third, violence can provide an objective gain or a positive effect on the consumer, while power is more related to a gain in status.

As for Authority, Arendt (1994) says there are two kinds: personal authority (for example, in the relationship between father and son, between teacher and student), and authority applied to positions (such as senators and politicians or hierarchical positions of the Church) (1994, 28). From the sociological perspective, Weber (2009) defined a different typology for authority, dividing it into three types: traditional (established by cultural customs), rational-legal (applied by law) and charismatic (granted because of the individual's personal qualities, history and/or personality). Charismatic authority is the type of authority most present in consumer relations today. In consumer studies, Hayley Crocker and James Cronin (2017) relied on the concepts of Weber (2009) to describe charismatic authority as "a certain quality of the individual's personality due to the virtue by which he is considered extraordinary and treated as having supernatural powers or qualities, super- or at least exceptional" (2017, 458).

Authority can be mistaken by power and violence because the three of them are means of government of one individual over the other, but the concept of authority excludes coercion and persuasion. When coercion/violence is needed, it means that authority has failed, while persuasion implies equality, which is opposite to the hierarchy

related to authority. The main characteristics of authority are recognition of asymmetric power, obedience and unquestionability (Arendt 1994). Unlike violence and power, we see authority more as a condition than an instrument, object or ability, although it works as a mediator like power. Individuals are invested with authority, what involves respect and legitimacy by others. Nowadays, we can see the impact of authority on consumers in the case of YouTubers, for example. Cocker and Cronin (2017) analyzed the cult of the streaming platform's personalities through Weber's understanding of charismatic authority, and discovered the change in their conditions from the analogue to the digital era.

Authority and power are related, but are not the same thing. In common with power, authority presupposes a stablished order or hierarchy. It legitimates the exercise of power. When respect is lost, authority can be challenged. Both authority and violence require unquestionable obedience (Arendt 1994, 2006). But while authority requires respect from others, violence implies an empathetical disconnection. Figure 1 is a representation of the connections and singularities identified of power, authority and violence.
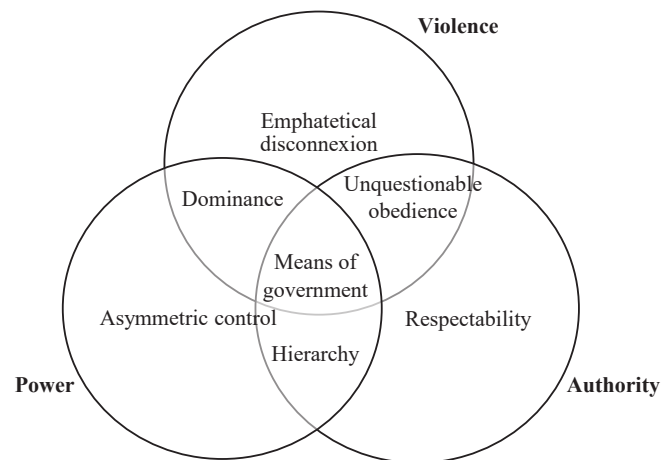
Figure 1 – Connections and singularities between power, authority and violence

Elaborated from Arendt (1994); Elbert et al. (2010, 2017); Weierstall and Elbert (2011); Rucker et al. 2011, 2012; Cocker and Cronin 2017.

DISCUSSION

The concept of violence is rich in providing insights into consumer behavior, marketing practices and public and social policies. The purpose of this conceptual article is to discuss the concept of violence and clarify its importance as an object of consumption desire, contributing by extending the already existing theory (Ladik 2008). Hegemonic understandings treat violence as a practice with negative effects, but it can also be understood as an object of consumption and desire with positive effects of pleasure on the consumer. We provide a different view on violence through the use of psychological, neuroscientific and philosophical contributions and question the positive effects that violence can have on consumers. We realized that violence is a sum of social, cultural, psychological and emotional aspects, that might be present across different contexts.

We have briefly identified further research questions that deserve attention. Is violence subordinated to a hierarchical process or established order? In the sociological and psychological domains, hierarchical structures were identified as antecedents of power and authority. These structures come from the perception of an asymmetry of power between individuals or groups. Ashworth et al. (2010) have found that scenes of dominance are more appealing to people,

especially men, when consuming violent media. Hierarchy must also be studied in the phenomenon of consumption of violence.

How is consumer resistance (disobedience) related to hierarchy? Many consumers are against animal exploitation and resist it by advocating cruelty-free products. In a hierarchical relationship between living beings, animal protectors defend equality between animal and human rights, instead of subordination. This discussion is present in the practices of the cosmetics, fashion, gastronomy and health industries, among others.

How empathy impacts on the consumption of violence-related products? Consumer researchers usually hold the assumption that empathy favors consumption. We located psychological and neurological studies showing that empathetical disconnection is required to appetitive aggression. Contrary to major understandings on empathy, in the case of violence, it can decrease positive consumption. Violence and empathetical disconnection should be more explored in cultural texts such as horror movies and books, brutal sports, bloody e-games.

How does a radical moment of social stress, such as the Covid-19 pandemic, affect the perception of violence? People can be more tolerable to violence in the name of survival or defending a greater good. The world has experienced different violent forces during this crisis: lockdown, social distancing, animal experiments for vaccines, negationist behavior, scarcity, increased inequality, unemployment, fears and trivialization of a large number of sick and dead people. In the case of a huge and unexpected pandemic, violence can change meanings, practices and justifications. This will certainly be a broad field for future researches on violence and correlated issues.

Violence as an object of consumption can have different implications to marketing research. How can violence create negative and positive effects on people? Violent sports, arts and practices, such as hunting (Littlefield and Ozanne 2011); aggressive music, such as heavy metal (Sinclair and Dolan 2015); high-risk activities, such as skydiving (Celsi et al. 1993); and painful adventure experiences (Scott et al. 2017) can cause fear, discomfort and, simultaneously, provoke excitement, pleasure, increasing adrenaline and endorphin. This paradoxical and secular human behavior constitutes an interesting and curious phenomenon to receive more attention in future studies.

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Table 1 – Violence from different perspectives.

Perspective	Violence
Health	• is the intentional use of physical force or power. • can be threatened or real. • is used against oneself, another person, or against a group or community. • results in injury, death, psychological damage, poor development or deprivation.
Psychology and Neuroscience	• is related to Appetitive Aggression. • can be the infliction of harm to a victim for the purpose of enjoyment. • can have positive effects on the individual. • presupposes an empathic disconnection.
Philosophy	• is distinguished by its instrumental character. • is close to vigor. • must be differentiated from vigor, force, power and authority. • is not a single one, but there are three types: objective systemic, symbolic and subjective.
Consumption studies	• is a force with negative effects. • is a subject related to many different consumption aspects (gender, advertising, the media).
Our contribution	• **is an object of consumption.** • **is a sum of social, cultural, psychological, and emotional aspects.** • **can provide some objective gain or positive effect.** • **connects with power and authority.** • **affects marketing, consumer behavior and public policies.**

Elaborated from Arendt (1994); Elbert et al. (2010, 2017); Joy, Belk and Bhardwaj (2015); Leonard and Ashley (2012); Martin and Collins (2002); Weierstall and Elbert (2011); WHO (2002); Žižek (2014).

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Ethical Consumption As Subjectivation: Constituting The Ethical Consumer Subject

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INTRODUCTION

Despite a 40 years long quest for it (Newholm and Shaw 2007), ethical consumption still remains a niche phenomenon (Carrigan and Attalla 2001; Eckhardt, Belk, and Devinney 2010; Holt 2012). According to interpretive scholars, part of the problem lies in that research has failed to understand ethical consumption by reducing it to an issue of ethical consumerism (Clarke 2008; Holt 2012) – an ideology which construes the consumptive act as a matter of free choice (Chatzidakis, Maclaran, and Bradshaw 2012) and consumers as rational actors who are capable and willing to integrate ethical concerns in their choices (Clarke 2008).

To balance this overemphasis on the ethical rationality of individuals, interpretive studies shifted focus onto how ethical consumption is constructed as a social and cultural phenomenon. These studies mainly investigated the individual and/or collective projects of resistance through which consumers (and other market actors) attempt to reconfigure the discursive and ideological structures underpinning mainstream market institutions and consumption practices (Chatzidakis et al. 2012; Cherrier 2009; Kozinets and Handelman 2004; Thompson and Arsel 2004; Thompson and Coskuner-Balli 2007a, b). However, scholars within and outside consumer research have argued that resistance perspectives tend to perpetuate dichotomic divisions – such as inside versus outside the market, consumer versus citizen, moral versus immoral – which at best are fictitious (see Arnould 2007; Miller 2001; Soper 2007) and at worst limit our ability to fathom new consumer culture imaginaries (Moraes, Szmigin, and Carrigan 2010; Soper 2007).

In an effort to refine existing knowledge about it and foster its development, the present article offers a new perspective on ethical consumption – one that does not reduce it to a set of consumer choices, nor to a form of ideological resistance to the market. Drawing on Foucault's (1984a, b, 2018) theory of ethics, we suggest that ethical consumption corresponds to the work of the self upon the self (Foucault 1984a) carried out by consumers to master the drives behind their consuming conduct. Through this work – performed as a set of techniques (or practices) of the self (Foucault 1988) – consumers transform themselves into ethical, self-governing subjects. Based on this framework, we investigate the processes and practices comprising ethical consumption work by asking: how do consumers constitute themselves as ethical subjects?

We answer this question by drawing on a multi-sited ethnography (Marcus 1995) of the ethical work performed by Danish self-proclaimed waste reducers through their waste reduction efforts, as changing waste habits involves *"implicating the self in a process of reflexivity"* (Hawkins 2006, 5). Denmark represents a peculiar context for our study because, despite scoring high in various sustainability indexes, it has the highest amount of waste per capita in Europe (Statista 2021). The findings identify three main stages (problematization, moralization and intensification) and six techniques (meditation, learning, confession, penance, exhibition, dialogue) through which waste reducers constitute themselves as ethical subjects.

The contributions of the study are three-fold. First, it extends prior insights on consumer subject formation (Coskuner-Balli 2020; Giesler and Veresiu 2014; Karababa and Ger 2011; Veresiu and Giesler 2018) by identifying the process of *subjectivation* (contra subjectification) through which consumers constitute themselves as ethical subjects. Second, it informs extant theorizations on the moral-

ity of consumption (Karababa and Ger 2011; Kozinets and Handelman 2004; Luedicke, Thompson, and Giesler 2010; Thompson and Coskuner-Balli 2007a) by illustrating the practices through which consumers constitute their consuming conduct as (im)moral. Third, it contributes to existing understandings of how religion shapes consumption (McAlexander et al. 2014; Saatcioglu and Ozanne 2013; Sandikci and Ger 2010) by revealing the religious techniques performed by consumers in an effort to transform themselves into ethical subjects.

THEORETICAL FRAMEWORK: FOUCAULT'S ETHICS

In an interview conducted in the year of his death, Foucault defines ethics as *"the conscious practice of freedom"* (Foucault 2019, 667). In the following, we clarify the basic tenets of this definition.

For Foucault (1984a), ethics is the work performed by individuals to subject themselves to a moral code, the set of values and rules of conduct normally prescribed by social institutions, such as family, school, religion, etc. This work comprises a set of *"conscious and intentional practices"* (Foucault 1984a, 16), which through the Hellenistic period and until early Christianity were exemplified by: (letter) writing, examination of conscience (exagoreusis), confession (exomologesis), meditation, (physical and spiritual) retreat (anachoresis), sex and food abstention, dream interpretation (Foucault 1984a, b, 2018).

Ethical practices are intentional (*volontaires*) because they presuppose an active involvement of the individual; and conscious (*réflechiés*) because they are founded upon the obligation of knowing oneself (Foucault 1984a, 2019). It is only by gaining knowledge about himself that the individual can determine the problem which must be worked upon and, therewith, transform himself into a subject of moral conduct. Thus, ethics is conscious because it entails a reflection of the subject upon itself.

Self-knowledge is also foundational to the development of the self-governing subject, which is an individual who is in control of the drives guiding his actions (Foucault 1984b, 2005). This control is *"a proof of power and a guarantee of freedom"* (Foucault 1984b, 99): free from the enslavement to their drives, self-governing individuals are able to moderate their power over others and, thus, ensure them their freedom. So, ethics as freedom defines a form of government based on the self-regulation of one's power.

Drawing upon this framework, we suggest that ethical consumption corresponds to the work carried out by consumers to control the drives behind their consuming conduct. In light of this definition, the current paper explores the practices comprising ethical consumption work by asking how consumers constitute themselves as ethical subjects.

RESEARCH PROCEDURES

The research design is premised on the idea of a multi-sited ethnography (Marcus 1995) since the object of study (i.e. ethical work) is not a phenomenon defined by clear spatio-temporal boundaries, but unfolds as a seemingly disconnected set of practices stretching through different times and spaces. In mobile ethnographies the object of study is constructed *"by tracing a cultural formation across and within multiple sites of activity"* (Marcus 1995, 96). Accordingly, we followed the ethical work performed by waste-reducing

consumers in Denmark across three different sites: the domestic, the digital and the cultural site.

The digital site corresponds to the Facebook group Zero Waste Danmark, which is a forum for discussion for *"anyone who is interested in zero-waste, waste reduction and sustainable lifestyles more in general"* (as the group description reads). The first author conducted digital ethnography (Murthy 2008) within the group for about two years, visiting the page on a regular basis and taking notes about the conversations and behaviors held by its members. In total, 91 posts and related comments were selected for closer analysis because emblematic of the interactions taking place within the group. Together with the researcher's fieldnotes, this dataset comprises 250 pages of text.

We used Facebook also to gain access to the domestic site and recruit participants for ethnographic interviews. Recruitment proceeded until we reached the point of information redundancy (Sandelowski 1995). Interviews focused on informants' efforts at waste reduction and were collected in informants' homes. In total, we collected 22 interviews lasting between 1 and 3 hours. These are accompanied by 40 pages of fieldnotes capturing the researcher's reflections about the conversation and details about the domestic site, and 120 pictures portraying objects, artefacts and situations representing informants' waste reduction efforts. Observational and visual data enriched our interpretation of the interview material (Türe and Ger 2016).

Finally, we investigated the cultural site by examining relevant cultural texts (Mikkonen, Vicdan, and Markkula 2013). Inspired by Foucault (1984a), we chose *"prescriptive texts… whose main aim is to propose some rules of conduct"* (Foucault 1984a, 22) in regard to sustainable and ethical consumption. Specifically, we selected three zero-waste guides for their relevance to the Danish context. Two of these guides are authored by Danish zero-waste advocates (*Bæredygtig livsstil: zero waste, veganisme, minimalisme* by Calina Leonhardt; *Bæredygtig badass: En zero waste livsstilsguide* by Gittemarie Johansen), whereas the third one is written by a US-based French author (*Zero Waste Home: The ultimate guide to simplify your life by reducing your waste* by Bea Johnson), whose work is popular among our informants.

Data analysis

We analyzed the different sources through a hermeneutical approach (Thompson, Pollio, and Locander 1994), going back and forth within and between the different data points, and relating and revising provisional codes and categories in light of emerging theoretical interpretations. The lead author began inductively with open coding (Charmaz 2006). As the analysis proceeded, the initial codes were discussed by the authors and revised based on Foucault's theory of ethics. At this stage, axial coding (Charmaz 2006) was performed to identify the categories corresponding to the different techniques of the self. Once we reached the point of theoretical saturation (Corbin and Strauss 2014), we proceed with selective coding by relating the identified categories in the process of subjectivation identified by Figure 1.

FINDINGS

Our findings illustrate the recursive process of subjectivation through which consumers constitute themselves as ethical, self-governing subjects. This process comprises three main phases: problematization, moralization and intensification (see Figure 1). Each phase comprises different techniques of the self. The current section provides a brief explanation of the findings summarized by Table 1.

Problematization

The first phase concerns the problematization of individual needs. At this stage, consumers perform a self-examination of their consumption habits by subjecting themselves to meditation and learning techniques. They do so in order to identify and separate true from false needs, as the latter are considered the cause of unsustainable consumption. Through meditation, consumers assess their reactions to imagined consumption situations; through learning, they acquire scientific and/or creative knowledge that helps them further determine the authenticity of their needs.

This finding indicates that (conscious) consumers do not merely adopt or embody institutionally created subjectivities (Giesler and Veresiu 2014; Veresiu and Giesler 2018), but by voluntarily subjecting themselves meditation and learning, they participate actively in the creation of their ethical subjectivity.

Moralization

Once ethical consumers have established the truth about their needs, they institute a mechanism which ensures their commitment to it. Two techniques are used for such purpose: confession and penance (see (Foucault 1988, 2018). Through these techniques, consumers commit themselves to the obligation of telling the truth about their needs both to themselves (through penance) and others (through confession). In this way, consumers constitute themselves as moral authorities responsible for judging their consumption acts.

This finding suggests that ethical consumers not only draw on alternative ideological frameworks to legitimize their consumption practices (Karababa and Ger 2011; Kozinets and Handelman 2004; Luedicke et al. 2010; Thompson and Coskuner-Balli 2007a), but also institute mechanisms of moral self-control to transform their consumption habits.

Intensification

The last stage is intensification, which involves the public manifestation of one's ethos (i.e. mode of being; Foucault 2019). This manifestation helps the subject enact the truth about itself (and its needs) discovered during the problematization stage. Consumers intensify their ethical subjectivity in the public space through the adoption of two main techniques: the *exhibition* of their waste reduction efforts; and the formation of (i.e. the giving form to) their thoughts through *debate*.

This finding provides new insights on the process of identification through which ethical consumers construct their identity while interacting with submerged networks (Cherrier 2007).
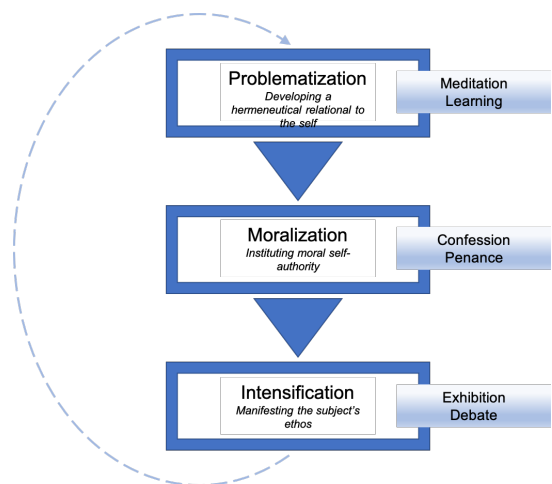
Figure 1 - The process of subjectivation

Table 1 - Summary of the findings

Stage	Description	Techniques of the self	Illustrative references
Problematization (development of hermeneutical relation to oneself)	Consumers subject themselves to self-examination to inspect their consumption habits and determine the authenticity of their needs	*Meditation*: assessing one's reactions to imagined consumption situations	Bea Johnson (*Zero Waste Home*): *"Areas to consider include: reducing packaging (Can I buy in bulk instead?); car usage (Can I bike more?); home size (Can I downsize?); personal effects (Do I need it?); technology (Can I do without?); and paper load (Do I need to print it?). Can I buy a lesser amount (maybe in a concentrated form)? Is the amount or size fitted to my needs?"* (book excerpt)
		Learning: acquiring scientific information *(savoir)* and/or enhancing creative abilities *(savoir-faire)* that help consumers problematize the authenticity of their needs	Randi: *"There [an. on Pinterest] I searched a lot for inspiration on Christmas gifts and zero-waste gifts. So, there I get a lot of ideas for Christmas. But I've also searched a lot for face-, or well, home-made care products in general. I have tried to make my own shampoo."* (in-depth interview 1)
Moralization (instituting moral self-authority)	Consumers institute a mechanism which ensures their commitment to the truth about their needs	*Confession* (exomologesis)*: publicly acknowledging one's status as a sinner while asking for help with unsustainable consumption habits on dedicated social media pages	*"In relation to zero waste and the environment in general. What is the best solution? (no, I can't do it myself – it tastes like water – yes, I've tried your recipe to) Plastic bottle with deposit refund or Tetra Pak??"* (include pictures of the two milk bottles) (Facebook post 1)
		Penance: making amends for immoral (unsustainable) consumption habits by adopting more sustainable habits in other areas	Rita: *"It doesn't make sense to, well, make my own toothpaste, or any of these [products] [...] So, if I have a toothpaste which I like, and I feel it gets my teeth cleaned, I just keep it. I'll have to buy indulgences on something else, and try to do something, that makes sense for me"* (in-depth interview 2)
Intensification (manifesting the subject's ethos)	Consumers reaffirm their ethos (i.e. mode of being) by manifesting their thoughts and behaviors about sustainable consumption	*Exhibition:* sharing personal efforts at reducing the burden of one's consumption	*"For me, zero waste is also about creative thinking. This old glass table had a broken leg when I got it. I had it welded. I've covered it with bathroom tiles. The typewriter and the old safety boxes under the table are also second-hand. I painted the old grey filing cabinet with a color that better suited our home, and now it stands in our living room all confident and proud. I sew pot holders out of old jeans and leather from old furniture/jackets. One of the thing I love about second-hand is that it triggers my imagination"* (include pictures of the work) (Facebook post 2)
		Dialogue: engaging in conversation opinions, ideas and facts about (un)sustainable consumption	*"Don't know whether anyone is ready for this, but now you know* *People are ditching toilet paper for reusable cloth rolls and I have so many questions* [link to webpage]*"* (Facebook post 3)

DISCUSSION AND CONCLUSION

This study brought Foucault's theory of ethics to bear to theorize the process of *subjectivation* through which consumers constitute themselves as ethical subjects. This process corresponds to the ethical work which consumers voluntarily perform on themselves in order to develop mastery over the needs guiding their consumption practices.

Our findings cast new light on the phenomenon of ethical consumption. Previous interpretive studies mainly explored ethical consumption as a moral project of ideological resistance to the capitalist market (Chatzidakis et al. 2012; Thompson and Arsel 2004; Thompson and Coskuner-Balli 2007a). Yet scholars within and outside consumer research have shown mounting skepticism towards resistance perspectives which may limit our ability to fathom new consumer culture imaginaries (Moraes et al. 2010; Shaw and Riach 2011; Soper 2007). In response to this scepticism, we suggest that ethical consumption is not characterized by ideological resistance but by self-imposed work to control and moderate one's consumption acts.

The theoretical contributions of our study are three-fold. First, it contributes to research on the formation of consumer subjectivity (Coskuner-Balli 2020; Giesler and Veresiu 2014; Veresiu and Giesler 2018). While existing studies provide compelling insights on processes of *subjectification* through which institutional forces produce and govern different types of consumer subjects, they tend to portray consumers as passive entities which almost unproblematically adopt (Giesler and Veresiu 2014) or embody (Veresiu and Giesler 2018) institutionally prescribed subjectivities. Our article complements these studies by exposing the process of *subjectivation* through which consumers constitute themselves as (ethical) subjects, thereby supporting and expanding on Karababa and Ger's (2011) insight that consumers participate actively in the formation of their own subjectivity.

Second, our article provides new insights on the interplay between morality and consumption. Previous research mainly considered the moral codes which consumers draw upon in order to negotiate, justify and legitimate their consumption practices (Karababa and Ger 2011; Kozinets and Handelman 2004; Luedicke et al. 2010; Thompson and Coskuner-Balli 2007a). Our study extends these insights by showing how consumers participate in the moralization of their consumption conduct. More specifically, the findings reveal how conscious consumers enforce self-regulation by constituting themselves as moral authorities who, through the techniques of confession and penance, monitor their own consuming behaviour and eventually punish themselves for it.

Third, our article bears implications for research on religion and consumption. Existing studies have shown that religious narratives influence consumption choices (Izberk-Bilgin 2012; Sandikci and Ger 2010), provide consumers with a source for identity construction (McAlexander et al. 2014; Saatcioglu and Ozanne 2013; Sandikci and Ger 2010) and even permeate the interactions of (brand) community members (Muñiz and Schau 2005). Our work shifts the focus onto the religious practices informing ethical consumption. Specifically, it demonstrates that ethical consumers subject themselves to religious techniques (examination of conscience, confession, penance) in order to control the drives behind their consumption.

Finally, we conclude with some implications for future research. While the present work offsets previous research emphasis on the techniques of domination through which more or less responsible consumer subjectivities are formed, more research is needed to explore the intersection between subjectivation and subjectification processes. A better understanding of this intersection – where according to Foucault (1988) governmentality lies – will help us imagine new solutions to the problem of fostering ethical forms of consumption. Furthermore, our findings also suggest that more research is needed on how consumers challenge well-established ideological frameworks, such as moral systems. If as Castoriadis (1981) claims the ecological society is a society based on the critical self-examination of its well-established institutions, more work is needed on the practices through which critical approaches to consumption (and other spheres of social life) develop.

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Social Media Influencers Educating Consumers on Sustainable Fashion

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INTRODUCTION

Researchers and practitioners in various fields are increasingly looking for ways to encourage sustainable consumption, which is characterized by a focus on environmental, social and ethical aspects as well as an "improvement in the quality of life" and "avoiding modern hyperconsumption" (Lim 2017, 71). Changes are needed both in the mindsets and everyday consumption practices of consumer-citizens (Sahakian and Wilhite 2014; Price et al. 2018). However, interventions usually target individual behaviors rather than social practices (Kemper and Ballantine 2019; Gonzales-Arcos et al. 2021). Social influence is a significant factor in facilitating behavior change toward sustainability (Sahakian and Wilhite 2014; White, Habib, and Hardisty 2019). The role of bottom-up initiatives, such as using social media, may hence be very relevant in facilitating sustainable consumption.

This paper examines how social media influencers (SMIs) educate consumers on sustainability in the context of fashion. Building on De Veirman, Cauberghe, and Hudders (2017) and Coco and Eckert (2020), we define an SMI as an opinion leader or tastemaker in one or more areas of consumption with a large social media following based on sharing text, audio, image, and video posts on a range of topics. Fashion industry and the current patterns of (fast) fashion consumption are major contributors to the global environmental crisis (Lehmann et al. 2019). Fast fashion refers to the business model of retailers who produce inexpensive clothing in a rapidly changing cycle, creating pressure for constant purchasing, and textile waste in the form of unsold clothes. Fashion is also one of the major areas of content produced by SMIs online. Hence, it provides a fruitful empirical context.

Recently, sustainability issues have gained more foothold in social media (Pearson et al. 2016). For example, consumers have started to take a stand on sustainability issues in their personal blogs (Joosse and Brydges 2018), but also SMIs have adopted sustainability as their central focus (Närvänen et al. 2018; Leban et al. 2021; Orminski, Tandoc, and Detenber 2021). However, more research is required on what is the role of these influencers in encouraging and facilitating the collective adoption of sustainable consumption.

In this paper, we draw from sustainability education literature (Frisk and Larson 2011; Redman and Redman 2014) and focus specifically on the domains of knowledge that the SMIs contribute to. By sharing knowledge, they also transfer meanings to their followers (McCracken 1989). The paper contributes to consumer research by extending literatures on SMIs and sustainable consumption by shedding light on the different domains of knowledge which are relevant by SMIs to accomplish change in consumption.

THEORETICAL BACKGROUND

SMIs as agents of change for sustainability

Previous research on consumers' social media activities has indicated the potential that social media have on creating change in issues related to sustainable consumption (Kozinets, Belz, and McDonagh 2012). Producing social media content on sustainability issues can take many forms, such as using sustainability related campaign hashtags or commenting on existing content, posting images,

or participating in discussions (Pearson et al. 2016; Närvänen et al. 2018; Paschen, Wilson, and Robson 2020). In their study of environmental blogs, Joosse and Brydges (2018) identified several levels of how sustainability becomes represented, ranging from making small adjustments or giving practical hands-on advice to more substantial lifestyle changes that redefine consumption. Social media have several advantages for building awareness and motivation for social issues. They create a space for existing social norms to become visible (Pearson et al. 2016). Furthermore, they enable to distill and curate complex information into easy-to-use heuristics, promote the establishing of social relationships and communities, provide customized information, and democratize participation (Kozinets et al. 2012). Social media "offer a powerful way for consumers to educate each other about sustainable options, assert their power to choose those options as democratic citizens in a capitalist global economy, and organize as concerned citizens and consumers" (ibid., 217).

SMIs have been studied in marketing and consumer research from various other perspectives than sustainability. CCT research has highlighted that social media has become a megaphone for individuals who are able to exhibit their taste and expertise in different fields of consumption, including fashion (McQuarrie, Miller, and Phillips 2013; Dolbec and Fischer 2015), food (Kozinets, Patterson, Ashman 2017) and interior design (Arsel and Bean 2013). The power of SMIs as authentic, unique, and credible opinion leaders, and the various associated benefits to brands collaborating with them has also been studied (De Veirman et al. 2017; Djafarova and Rushworth 2017; Casaló, Flavián, and Ibáñez-Sánchez 2020). However, SMIs role in sustainability change still requires more research.

Domains of knowledge in sustainability

Within sustainability education literature, a framework outlining four domains of knowledge has been proposed for sustainable behavior change (Frisk and Larson 2011; Kaiser and Fuhrer 2003). The first domain in the framework is *declarative knowledge* which is the factual knowledge about environmental problems and systems. The second domain of knowledge, *procedural knowledge*, is action-oriented, entailing know-how information and concrete advice on how to do something. The third domain, *effectiveness knowledge* refers to knowledge about the (sustainability) impacts of specific behaviors and the responsibility for their outcomes. This can be also subjective in nature and concern people's own beliefs about the effectiveness of their actions. Finally, *social knowledge* refers to information regarding other people's motives and intentions, such as information on social norms or the legitimacy of certain values or goals in society. Previous research has demonstrated that for sustainable behavior change, integration of these various forms of knowledge is critical, especially beyond declarative knowledge (Kaiser and Fuhrer 2003; Redman and Redman 2014).

METHOD

The research was conducted through netnographic methodology, and the data were generated in two ways between October 2020 and April 2021. First, by exploring Instagram profiles related to sustainable fashion in Finland, we familiarized ourselves with the sustainable fashion social media arena. In previous research, Insta-

gram has been identified as one of the main social media channels for fashion influencers (Casaló et al. 2020) and for sustainable fashion (McKeown and Shearer 2019). Next, we conducted nine in-depth thematic interviews with sustainable fashion SMIs. Most of them can be considered as micro-influencers with less than 5.000 followers (Yalcin, Nistor, and Pehlivan 2021). We observed the SMIs for several months before contacting them to make sure that a substantial part of their social media content was related to sustainable fashion. The interviewees were in different stages of their SMI career, including the amount of followers, the length of their history as an SMI, and the degree of their professionalism (i.e. whether they considered influencing as a hobby vs. as a livelihood).

The interviews were conducted in Teams or Zoom, each lasting about 90 minutes. In addition, the social media postings of the interviewees were observed and analyzed from the preceding year. This data includes photos, videos and texts published on their social media channels, and these postings were also jointly discussed in the interviews by viewing them on a shared screen. All interviewees were active on Instagram, some of them also on YouTube or on their personal blogs.

Topics that were discussed during the interviews included, for example, the SMIs' own experiences and knowledge on secondhand fashion; their thoughts and future goals on their SMI careers, as well as their aims to educate and change the consumption behavior of their followers.

Data analysis and interpretation for both types of data followed the process outlined in Spiggle (1994). Two of the authors firstly categorized the data according to the framework of four knowledge domains (Kaiser and Fuhrer 2003). Consequently, through a joint discussion between all authors, we compared and integrated differences and similarities between different types of data and the four categories. We also utilized iteration to go back and forth between the framework and various types of data to assess the fit between the theoretical framework, the data and our interpretation.

FINDINGS

Declarative knowledge contains both technical or mechanical information and systems knowledge. The first kind includes facts on sustainable fashion consumption: materials, care, acquisition, and disposal practices. For instance, SMIs share technical information through material guides, where the features of different textile materials are compared. On Instagram, these guides are usually short lists of pros and cons, from where the followers can easily receive information without devoting a lot of time and effort into it. In blogs, the material guides are longer texts. Often the information is gathered from external sources: books, articles or from other SMIs. This emphasizes the role that SMIs have as declarative knowledge providers: they summarize and curate information from various sources to offer their followers information in a suitable form. The systems knowledge concerns the way the fashion system works, including the fashion companies' power in society. For instance, on Black Friday, one SMI wrote on Instagram: "Did you know that today is Buy Nothing Day? [...] also a cheap garment has an expensive price. Today is a good day to buy nothing!". Thus, declarative knowledge helps SMIs to subvert the dominant marketing and consumption practices in the fashion industry.

Procedural knowledge covers all stages of consumption from acquisition to use and disposition. Regarding acquisition, procedural knowledge is shared on how to recognize a piece of clothing that is of good quality, where are the best secondhand shops and the best tips for shopping there (e.g. "always try on clothes before purchasing" and "feel the materials of the clothes" in order to recognize poor

quality). Also tips for avoiding shopping are shared, such as how to make one's own clothing or how to refrain from shopping impulses. Related to the use phase, the SMIs share knowledge on how to style thrifted garments and how to maintain clothes in good condition, for instance, by using DIY laundry vinegar, avoiding washing clothes too often, or by using a special wool comb. In the disposition stage, the knowledge shared by the SMIs includes, for instance, advice on where to take the disposed clothes to recycle them in the most sustainable way or how to set prices when selling clothes in secondhand shops. Here, the SMIs highlight not only clothing-related knowledge but also knowledge about digital marketing and algorithms, such as how to either bypass or take advantage of the algorithms which target consumers based on their browsing history. Hence, the SMIs want to offer concrete advice for resisting particularly big fast fashion brands.

Effectiveness knowledge includes providing facts and reflections on the outcomes of specific actions and choices that consumers make in fashion consumption. The SMIs share knowledge on aspects of fashion consumption that the fashion industry controls (such as the environmental impact of different types of fabrics or CSR issues). They also share knowledge on the impacts of daily fashion consumption choices made by consumers. Some influencers highlight the need for a holistic perspective in terms of impacts and to have a prioritization system when evaluating the sustainability impacts of one's own actions. For instance, one SMI suggests "making a list of the sustainability values that are personally most important and then prioritizing your actions accordingly". The most sustainable choice is to use the garments you have - to "shop your closet" as one of the SMIs said. The SMIs also highlight social sustainability, such as the working conditions of fashion production. The SMIs thus help consumers who feel disempowered or overwhelmed by the amount of information. Furthermore, effectiveness knowledge includes the dimension of social media. The influencers highlight the consequences of, for instance, liking or commenting (even in critical tone) the posts of fast fashion companies as this will help the "bad guys of fashion" as named by one of the interviewees, gain more impressions and influence.

Social knowledge can be considered to include anything SMIs share about their personal experiences related to fashion consumption. This provides their followers social understanding of what other consumers (or SMIs) do and think. SMIs also share their own failures regarding fashion consumption, such as accidentally ruining a garment in the wash. In addition, they often share their growth stories as sustainable consumers: "This is how and why I broke free from fast fashion". These stories portray the SMIs as ordinary consumers and as vulnerable to mistakes and temptations, such as impulse purchases. Another form of social knowledge are the social norms: SMIs determine what is legitimate and acceptable and what is not. For instance, one SMI argues that "I hope that they [people with low income] will not feel insufficient or ashamed about their income. Sustainable choices should be made if and when one's income level rises". In addition to enforcing social norms, SMIs are tastemakers. Good taste is important to many SMIs, who are often enthusiastic about fashion and clothing. One SMI argues that buying secondhand does not mean giving up on being on top of fashion trends: "We all know that fashion rotates". SMIs often frame secondhand shopping as a style choice - in addition to being a sustainability choice.

DISCUSSION

Firstly, our findings extend the literature on the roles of SMIs in consumer research. Dolbec and Fischer (2015) suggested that consumer influencers are doing work earlier done by other actors, such

as photographers or fashion editors. From a sustainability perspective, however, it can be argued that the work done by SMIs can be also considered to be complementary or substitutive to sustainability campaigners, such as consumer activists, or public or private educational actors such as schools and non-profit organizations. Compared to these more traditional educators, fashion SMIs are considered as taste leaders. Especially because top-down interventions for sustainability, such as governmental bodies' information campaigns have been found inefficient (Gonzales-Arcos et al. 2021), SMIs provide more potential for social influence and credibility.

Secondly, our findings contribute to research on encouraging sustainable consumption through social media (Kozinets et al. 2012; Pearson et al. 2016; Närvänen et al. 2018) by revealing how the SMIs share different types of knowledge: declarative, procedural, effectiveness and social. Social media appears as a very suitable forum for going beyond declarative knowledge, which is important in influencing sustainability behaviors (Redman and Redman 2014). Furthermore, within fashion, knowledge on sustainability issues can create confusion and complexity, for example due to many trade-offs that must be made (Bly, Gwozdz, and Reisch 2015). Hence the role of SMIs becomes crucial in curating knowledge to their followers.

Thirdly, in addition to sharing knowledge on sustainable fashion consumption, the SMIs also engage in criticizing unsustainable aspects of the mainstream fashion system, such as fast fashion. The role of algorithms is significant and the SMIs share tips for resisting their power. Thus, the SMIs build awareness not only on sustainability of fashion but also on coping with the persuasive power of digital marketing.

Finally, the limitations of the study include that by focusing on SMIs only, the findings do not cover the impact of knowledge sharing on sustainable behavior of their followers. Furthermore, it would be interesting to compare the micro-influencers to big celebrity influencers using social media to discuss sustainability issues. Our study opens up avenues for investigating the relations between SMIs and followers further in the context of sustainability change.

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Table 1. Summary of the empirical findings

Domains of knowledge	Declarative knowledge	Procedural knowledge	Effectiveness knowledge	Social knowledge
Description	Mechanical and technical information of sustainable fashion consumption Systems knowledge on how the fashion system works	How-to skills related to sustainable consumption, covering all stages of consumption How to cope with digital marketing and algorithms	Aspects of fashion consumption that the fashion industry controls Knowledge on the impacts of daily fashion consumption choices	Enforcing social norms in fashion consumption Sharing experiences of success and failure
Aim	To summarize information from various sources to offer followers information in a suitable and accessible form	To provide concrete advice on how to perform a particular task	To provide facts and reflections on the outcomes of specific actions and choices of consumers or companies make	To provide the followers social understanding of what other consumers (or SMIs) do and think
Example(s)	Material guides: Instagram posting and blogs text Revealing how power manifests in the fashion system	Tips on the best secondhand shopping outlets How-to -videos (e.g. DIY laundry vinegar or lint remover)	Advice on ordering one's sustainability values to prioritize actions accordingly	"Outfit of the day" -photos Sharing own growth stories about breaking free from fast fashion

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Meanings of DIY in a non-Western Mediterranean Market: The Case of Pastry-Making in Algeria

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INTRODUCTION

DIY has been widely studied in Western and industrialized contexts. In consumer research, masculinity in the home has until now been the general focus (Moisio et al., 2013; Watson and Shove, 2008; Campbell, 2005). Wolf et al. (2015) first demonstrated how it can contribute a perspective of female empowerment. Very few studies have investigated non-Western (Gurtoo et al., 2010) and Mediterranean markets (Jafari, Firat, Süerdem, Askegaard and Dalli, 2012). These are currently subject to heavy transformations in terms of DIY consumption practices. Non-Western consumers are observing a wider availability of ready-to-eat/wear/use experiences due to increased imports and new local industrial processes combined with a growing middle class. This is reshaping the essence of DIY as a practice in terms of both meanings and use. This context enriches our views of DIY in contrast with mature markets. Moreover, Southern Mediterranean contexts offer complex environments in which to examine DIY given their proximity to the Northern Mediterranean coast and the continuation of local practices in relation to handmade products including food. This research follows Türe and Ger's (2016) call to research craft-like activities in relation to social capital. It also focuses on handmade food pastry-making as a marker of social distinction (Bourdieu, 1979). Findings support the argument that the widespread practice of DIY pastry-making in Algeria reveals the complex dynamics of (social) expression.

This paper specifically sheds light on the contrasting meanings of DIY practices of pastry-making in Algeria in comparison to Western conceptualizations. Algeria is a rich context for this for 2 reasons. First of all, Algeria is a Southern Mediterranean country (under-represented in consumer research) and has a long history of hosting empires and reigns of Numidians, Phoenicians, Carthaginians, Romans, Vandals, Byzantines, Middle Eastern populations, Ottomans and finally French colonies (Djedidi, Ourahmoune and Dalli, 2017). These have inevitably permeated national food culture and offer a rich set of references within which to unpack the meanings of DIY. Algeria is also a transitioning market. After decades of socialism, Algeria opened its market up in 2000 and is currently experiencing strong economic and social transformations affecting consumer behaviors (Ourahmoune and Özçağlar -Toulouse, 2012). The intersection of a complex cultural heritage of food and the status of a transitioning market in a non-Western context offers a unique space in which to capture various layers of DIY meanings.

Counterintuitively, DIY did not disappear to leave more space for outsourcing and the consumption of ready-to-eat industrial foods. Instead, we are witnessing an intensification of DIY practices, channeled by a variety of modern resources beyond traditional family circles. Consumers use books, TV channels and blogs to discover popular recipes and actively partake in social media, sharing media content (pages, photos, videos, applications, etc.).

Using an ethnographic approach, this research derives inductive insights into how the DIY trend is lived and practiced through pastry-making. It anchors the micro in the macro, uncovering spatial and temporal dimensions at the heart of traditional and modern tensions, to identify subtle taste regime negotiations.

METHOD

The ethnographic case study method (Visconti, 2010) adopted in this research to capture the different overlapping meanings surrounding DIY pastry-making practices. Multiple data sources were used in order to enrich our understanding of the complex dimensions of the topic, including: (a) ethnographic interviews with 16 consumers, recruited using the snowball process until theoretical saturation was reached (Creswell, 2006), with a varied sample in terms of gender, class, age (ranging between 22 and 69), occupation, education and location to capture a variety of expressions of taste regimes; (b) 2 sets of netnography data (Kozinets, 2010) *via* blogs and social media pages of pastry-makers; (c) participant observations at social events (tea parties, weddings, sip and see parties, religious celebrations, etc.). Visual material was produced, in the form of photos of various stages of the pastry-making process, from preparation to consumption; and (d) the textual data was further enriched with the transcripts of 4 interviews with pastry-makers. The aim was to capture the motivations of DIY consumers who choose not to buy and those who choose to outsource ready-to-consume pastry. In accordance with Grounded Theory (Strauss and Corbin, 1990), interviews were transcribed and analyzed, categories evolved over time and their interpretations were revised.

FINDINGS

To expose the different meanings of DIY practices in the Mediterranean context of Algeria, the overlapping results of the research are presented around two important themes, which inductively emerged from the data analysis: (1) connecting time and space and (2) expressing taste and distaste.

Connecting time and space

Time perpetuation: celebration and convivial experiences of sharing. Pastry-making used to be an exclusively home-based activity, often gathering a large number of family members, and uniquely centered around joyful occasions such as religious celebrations, weddings, graduations and births. Now that most of these celebrations are held in party halls, and that family members have less time to spend on such collective activities as preparing for ceremonies, pastry-making is still perceived as a way in which to reproduce these convivial moments of sharing. Indeed, for many, it is not the end product that matters so much as the process. Here the act of creating food from scratch, of rising to challenges such as having the right temperature and baking conditions, choosing the right ingredients are part of the experience of suspense followed by gratification. This experience continues when serving the pastries and seeing family members and guests enjoy them.

Transcending space: simulating one's home country atmosphere. When one's environment is not conducive to experiencing the ambiance of preparing pastry from scratch, some interviewees say they participate in events where they try to recreate this atmosphere. Around six female immigrants among the interviewees came to France to study[1] and attended a professional Fair dedicated to the Algerian community in France. Because they knew the organizer, they wanted to participate by preparing pastries for this event (with 300 attendees) as a way of doing it "*the Algerian way*" and as such to recreate the atmosphere they missed from home. "*Preparing pas-*

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[1]   In different domains: biology, computing, management, medicine, physics…

try for the Fair[2] was a festive occasion of excitement, discussions, laughter and music, just like a typical preparation for an Algerian wedding." (Ouerdia, F, 29 y). For more than 5 years, these interviewees wanted to replicate and convey the authenticity and care which had transcended country borders and which had enabled them to revive a genuine atmosphere of joy and sharing in a professional context (the Fair) where the dichotomy of personal/professional space is challenged.

Expressing taste and distaste

Social hierarchy: ranking tradition and innovation. Algerian culinary heritage is a reflection of its long history of finding itself at the crossroads of different civilizations and cultural footprints. The discourses of consumers and pastry-makers paint a picture of traditional pastries as symbolic of memories of special occasions, childhood, grandmothers' and family recipes. Preparing these pastries is seen as "*sticking to tradition: these are our origins, where we come from, and from where we develop*" (Imane, F, 32 y). For instance, some of the traditional types cited are Baklawa, Tcharak, Sablé, Mouskoutchou, Ghribia, Makrout Ellouz, and Croquet. This subset of pastries is widely associated with other cultural contexts: Baklawa and Tcharak are Turkish, Sablé owes its name to the French city Sablé-sur-Sarthe; Mouskoutchou is Spanish, Ghribia is analogous to the Spanish Mantecado de Sevilla; Makrout Ellouz and Croquet are comparable to, respectively, the Italian Ricciarelli di Sienna and Cantuccini di Prato, etc. So far, none of the individuals interviewed have mentioned the non-Algerian resonance of some pastry names. Throughout time, the process of endogenization, -prompted in both directions (South to North, North to South) and linking both sides of the Mediterranean-, has enabled a re-appropriation and integration of some pastries into culinary heritage within a repertoire/classification. The results question the Western versus Oriental categorization that overlooks such endogenization processes.

Moreover, all the traditional pastries, - whether they are comparable (or not) to other exogenous types -, are considered markers of distinction by contrast with newly introduced pastries. For example, interviewees underline how these original DIY traditional pastries have been refined over time, setting them in opposition to the recently introduced pieces inspired from other cultures, such as Syrian or Turkish Baklawa. Interviewees also describe how the modest and sober traditional DIY Sablé is more refined than the new Sablés with their extravagant decorations. Named Sablé Prestige, this new sophisticated Sablé is inspired by television programs like Top Chef and social media content about DIY pastry. Interviewees talk of "*bad taste*", "*bling*" and a "*nouveau riche attitude*" when pastry becomes extravagant in this way.

Furthermore, there is no link made between the price of the ingredients used in refined DIY pastry and the image of good taste. Invariably, traditional, original recipes will win over more contemporary ones in terms of perceptions of good taste. Makrout Lassel[3] pastry (made using very affordable ingredients) is the cornerstone of any well-to-do wedding and is judged a success only if it is traditional in both taste and appearance (size, form, etc.). Makrout Lassel is also prepared for mundane daily consumption, but once made in a ceremonial context, it acquires an extra layer of meaning. Moreover, tradition is also a structure that determines the extent to which innovation is tolerated. For instance, interviewees highlighted how it could be seen as "blasphemy" to present a pastry as an innovation when it is the same as a traditional recipe but merely shaped

or displayed differently. Consequently, interviewees only tolerate a minimal amount of extra decorations in traditional pastry-making in a bid to protect the legacy. Innovation is accepted where the pastry is the product of a completely new recipe, shape and name.

Outsourcing, delegating DIY and projecting taste expression by assembling skills. On special occasions such as weddings (with hundreds of guests), families are often overwhelmed. Therefore, they tend to outsource pastry-making in order to control the quantity/quality/price ratio. The DIY skills involved are converted into expertise assembling different pastries and presenting them according to what is considered a refined set of ceremonial pastries. The DIY process is transformed into a process of selecting the right experts among pastry-makers for each type of pastry (through word of mouth, sampling, skills, expertise in specific areas, etc.). The second requirement sought is the creative ability to fashion the right combination in order to express their vision of good taste and to impress guests. In this way, consumers who outsource pastry-making still derive pride and prestige through their choices of pastry types, colors, flavors and scenographic display. Given the expectation of traditional pastry to reflect good taste, opportunities for innovation and differentiation are necessarily limited and require subtle taste regime assemblages. Interviewees consequently highlighted the importance of impressing and surprising guests at the way in which the pastries are chosen and presented. The research shows how DIY can apply beyond the individual sphere to a more social one. Social DIY follows a specific trajectory from the kitchen to the point of serving, revealing the importance of scenography as a social ritual to derive social distinction and a wow effect.

CONCLUDING CONSTRIBUTIONS

This research contributes to the stream of consumer research focusing on the meanings of DIY. The practice of DIY in a non-Western Mediterranean context reveals new findings which reflect its collective and social dimension, rather than its generally individualistic nature in the West; and the ephemeral and shared production (of pastry) versus Western individualized practices (home improvement, etc.), the latter having been the focus of previous research. DIY as a practice is less uniform than it may seem and is anchored in its socio-cultural context. This extends our knowledge about the subtle forms of DIY entrenched in rapid socioeconomic transformations in emerging markets.

Furthermore, the results show how DIY pastry is a powerful expression of a nonlinear configuration of time as it brings together a condensed heritage of the different dynasties and civilizations, which shape Algeria today. We present a somewhat homogenous and nostalgic account of individual memories embedded in DIY pastry-making. Time is revealed as being "atemporal" (Djedidi and Ourahmoune, 2020) since time heterogeneity allows the past and present to coexist (Türe and Ger, 2016).

DIY pastry-making is a symbol of the nostalgic recreation of a home atmosphere. Kusenbach and Paulsen (2013) define home as "*a canvas for the expressions of styles and tastes*". DIY pastry-making embodies this notion by reshaping a subtle combination of practices to serve this view, adding the importance of negotiating taste regimes as is reflected throughout this paper. More specifically, the present findings suggest that DIY can transcend the definition of using one's own hands, resources and skills to produce. DIY is a wider process involving complex and subtle boundaries between classes, which shape taste regimes, and class dispositions. These are further magnified through "symbolic obstacles" and beliefs according to strict scripts for production, aesthetics and presentation, conforming to taste expectations, respecting legacy and the desire to impress oth-

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2   Annual Algerian Fair held in Paris with professional networking objectives.

3   Completely different from Makrout Ellouz

ers. Indeed, it shows how DIY extends to the options and decisions made when one chooses to outsource under constraints. Family contexts (Epp, Sunaina and Velagaleti, 2014) show how outsourcing of individual activities is motivated by both practicality and the desire to optimize quality time (Thompson, 1996). This paper emphasizes how DIY pastry-making is inseparable from social distinction dynamics even in its outsourced form. Indeed, food is ripe ground for social distinction (Bourdieu, 1979), and taste regimes reinforce cultural hierarchies (Arsel and Bean, 2013). Here, individuals seek to maintain social distinction and mobilize social and cultural capital to extend DIY skills and carefully assemble different pastry-makers (providers).

Assemblage theories unveil the complexity of component dynamics (Epp and Price, 2010; DeLanda, 2006). Assemblage, regarding outsourcing options in pastry-making, is considered an extended DIY practice as it entails expertise and cultural capital to assemble different pastry-makers based on a well-studied constellation of components. This paper enriches the array of sources that help to navigate the landscape of resources. Whereas Epp et al. (2014) investigated the role of the market in developing and revising assemblage, the present research highlights the important role of the social distinction motivation in shaping this assemblage. As choices of components are impacted by their complementarity and competition (Epp and Price, 2010; Epp et al., 2014), this paper shows how cultural capital (Bourdieu, 1979) can act as a navigational cue to minimize discrepancy or emphasize homogeneity among components.

Counter-intuitively, our paper shows how the pastry-making domain is strictly normative, with limited margin for accepted innovation. Thus, when DIY pastry is made with the purpose of shared consumption, the scenography chosen is a way in which to express singularity and distinction, enabling individuals to use their know-how and social skills. The results enrich Abrams' (2013) claims that scenographic imagination interacts with gustatory experience, recognizing the porosity of the human body and its connection with the environment. Indeed, Abrams' (2013) research scrutinizes the scenography, which engages an audience in the active production of the meal experience as their sense of self is involved. This paper goes further by presenting scenography as an extended form of DIY expertise and social distinction within a normative field.

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APPENDICE
Table1: Results Summary

Themes: DIY meanings	Sub-themes	Quotations
Connecting time and space	Perpetuation of celebration and convivial experience of sharing	"When *you visit your family members in Eid, you give your dish full of different pastries to show the models you would have prepared, and when leaving, they would give you back your dish and fill it with their own pastries: it is the occasion to discover new models. Unfortunately, now people do not visit, they just call or send SMS*" (Souhila, F, 34 y).
		"*Now, even if you do not have time, you prepare small quantities of pastry, so that tradition is not lost… (Nowadays) some will order the pastry. As time goes by, this tradition will disappear, and for me, there would be no charm nor ambiance around Eid, because the messy kitchen, stress and effort generated by traditional pastry preparations are the sources of this charm, rather than simply putting a dish full of pastry out for consumption*" (Imane, F, 32 y).
		"*I really love it when I have made pastries with my own hands, from scratch, and when I offer it to others to eat. I feel happy, happier than if I had purchased it. I know that my pastries are better than those purchased from the market, but I feel it is a great accomplishment when I make pastry with my own hands and see my guests and family really enjoying them*" (Sabrina, F, 36 y).
	Simulation of home country atmosphere	"*Preparing pastry for the Fair[4] was a festive occasion of excitement, discussions, laughter and music, just like a typical preparation for an Algerian wedding.*" (Ouerdia, F, 29 y).
		"*We get out from office at 8 p.m., we go to Mimi's house, and start preparing pastry, each one does a sort, we put Chaabi music[5], we sing, we dance, we laugh, we are exhausted, but we don't care, just like in marriage or Eid, we sleep at 5 a.m … we just feel home while doing this as we really miss this kind of moments*" (Yasmine, F, 35 y)
Expressing taste and distaste	Ranking tradition and innovation in DIY pastry as embodiment of high taste	"(When choosing traditional models) w*e want something 'Betbaa We Shan'[6]. Even if people are trying to innovate, but traditional pastry charm is unique, it is never old-fashioned. All these new models with glitters and extra decoration are quickly outmoded*" (Imane, F, 32y)
		"*Traditional pastry is the one we prepare for Eid and for marriages ceremony, like Baklawa, Makrout Lassel, Ghribya, Tcharak, but I also think of Sablé, Croquet: it is not the same scale (laughter), but they can garnish the platter and they fit well with everyday coffee breaks*" (Fella, F, 33y)
	Delegated DIY revealing high taste through assembling competencies	"*In my brother wedding, we opted for our neighbor Z, they have a shop in Place des Martyrs, they are known for decades for making pastry, and we also heard that they are best known by their very delicious baklawa as it is stuffed with a mixture of almond and nuts… and the two other models of pastry, we ordered them from my brothers' friend mother B, she is known for making very good and neat pastry, she does it at her place and she is helped by her daughter, she is trustworthy, she respects deadlines, she delivers pastry in their paper liner, she uses good ingredients, not like bakeries that cheat on the ingredients. Her pastry was so good that our guests asked for her contact for their daughter wedding*" (Imane, F, 32).

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4   Annual Algerian Fair held in Paris with professional networking objectives.

5   Popular traditional music genre.

6   Colloquial expression to signal when things are done according to high standard and status.

Dimensions of Frugality

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INTRODUCTION

We live in an era where rampant consumption is highly encouraged. We are bombarded with advertising messages, offers, and other means of marketing campaigns with slogans such as "buy now pay later", "buy two pay one", "eat as much as you can" and "upgrade your choice". On the one hand, rampant consumption has been associated with enhanced psychological well-being, life satisfaction and impression management in public. On the other hand, there is increasing concern about its damages on consumers' budget and environmental resources. The UNDP 2030 Agenda for Sustainable Development, for example, acknowledges that fundamental reductions in spending and consuming are needed to achieve global sustainable development. Accordingly, particular consumption practices are getting more and more popular among consumers such as, keeping hands off expensive consumption, selling and purchasing used products, mending a broken house appliance instead of buying a new one, renting instead of purchasing, or spending time and effort to recycle. Such practices have been compiled under the umbrella term of 'frugality' in previous consumer literature (Bove, Nagpal, and Dorsett, 2009). While recent developments have drawn attention to importance of frugality, previous research has provided contradictory evidence until now. In this research, we develop a two-dimensional scale of frugality mindset and elaborate on the roles of its distinct dimensions in explaining contradictory findings on frugal consumer behavior such as bargain hunting, stockpiling and recycling.

CONCEPTUALIZATION OF FRUGALITY

Frugality is first defined by DeYoung (1986: 285) as the "*careful use of resources and avoidance of waste*", and it is usually conceptualized as the opposite of consumption (Gronow and Warde, 2001). While this initial conceptualization of frugality approached the phenomenon from a waste avoidance perspective, subsequent research added the *acquiring* dimension to the conceptualization and defined frugality as "*a unidimensional lifestyle trait characterized by the degree to which consumers are both restrained in acquiring and in resourcefully using economic goods and services to achieve longer-term goals*" (Lastovicka, Bettencourt, Hughner, and Kuntze, 1999). Although the authors conceptually defined frugality as cited above, they explain their findings based only on the acquiring (or spending) dimension. Majority of subsequent research in consumer behavior has followed Lastovicka et al.'s (1999) conceptualization and used their scale to measure frugality (e.g., Goldsmith, Flynn, and Clark, 2014; Bove et al., 2009; Todd and Lawson, 2003). As opposed to this stream of research that operationalized frugality as thriftiness, i.e., spending as less as possible, subsequent research of DeYoung (1996) operationalized frugality as waste avoidance and making full use of purchased products (e.g., Rao, 2013; Evans, 2011; Witkowski, 2003). We acknowledge that both perspectives are true in nature, because frugality has inherently two dimensions: careful spending and careful consuming. As a result, research following the works of DeYoung (1996) and Lastovicka et al. (1999) has yielded contradictory findings. For example, Ballantine and Creery (2010) argue that frugal consumers are motivated to keep their spending at minimum, while Evans (2011) shows that frugal consumers tend to be environmentally conscious, involve in green consumption and thus are willing to pay higher prices in their purchases. Similarly,

bargain hunting for a lower price is regarded as a practice of frugality (Podkalicka and Potts, 2014), while spending time and money to reach the donation boxes is also another practice of it (Evans, 2011). Next, we briefly elaborate on the constructs that are theoretically related to frugality. Please note that due to space restrictions, we are not able to present a discussion on all related constructs, and hence focus on the most important ones.

3. CONCEPTUALLY RELATED CONSTRUCTS

3.1. Thriftiness

Thriftiness is "*the art of doing more consumption with less money*" (Evans, 2011), which stems from the notion of high pain of payment combined with a motivation to consume more (Rick, Cryder, and Loewenstein, 2007). Compared to frugal consumers, thrifty consumers are twice as more likely to feel pain of payment. Financially prudent consumers enjoy spending money to the extent that they deem necessary (Bardhi and Arnould, 2005). Another aspect that differentiates thrifty consumers from frugal consumers is that they do not focus on the quality related attributes of what they purchase, as long as they are reasonably cheap. These consumers tend to purchase cheap food with beyond-use date or visit charities to get free clothes which they do not need (Miller, 2001; Wilk, 2001). Moreover, unlike thriftiness, frugality does not have to result from perceived deprivation of resources or from efforts to save each penny (Evans, 2011).

3.2. Propensity to Plan Spending

Lynch, Netemeyer, Spiller, and Zammit (2010) demonstrate that frugal consumers tend to plan how they spend money. Investigating frugality as a spending related trait, Todd and Lawson (2003) have shown that frugal consumers are better than their non-frugal counterparts in setting goals and sticking to them with ambition, capability and with a sense of responsibility. Bardhi and Arnould (2005) have further shown that such consumers tend to plan their shopping days only on days of sales. Frugality motivates consumers to plan and monitor their spending, yet, planning is not sufficient to engage in frugal consumer behavior.

3.3. Voluntary Simplicity

Voluntary simplicity is defined as "*a system of beliefs and a practice centered on the idea that personal satisfaction, fulfillment and happiness result from a commitment to the non-material aspect of life*" (Zavestoski, 2002). Elaborating on simple lifestyle choices, some articles use frugality and voluntary simplicity as synonyms without pointing out their distinct aspects (e.g., Shama, 1981). In voluntary simplicity, reaching personal growth is the main consumer motivation (Leonard-Barton, 1981). However, frugality relates to a simpler lifestyle only in the sense of spending and consuming as needed; not more than necessary.

3.4. Value Consciousness

Value consciousness is defined as *"a concern for paying low prices, subject to some quality constraints"* (Lichtenstein, Netemeyer, and Burton, 1990). It generates a concern about acquisition utility, which is relevant to, yet distinct from frugality. Lastovicka et al. (1999) empirically showed that frugality and value consciousness

are distinct traits: frugal behavior is positively related to value consciousness, and this relationship has only medium strength (0.54). Later, Todd and Lawson (2003) demonstrated that the items on their frugality scale are not systematically related to value consciousness.

3.5. Environmental Consciousness

Environmental consciousness is defined as "*the degree to which a person is oriented toward concern for the environment*" (Lin and Chang, 2012). Environmentally conscious consumers do not necessarily have frugality goals, and not all frugal consumers may avoid waste due to environmental concerns. For example, buying fairly-traded products is regarded as an environmentally conscious choice (Evans, 2011). However, in fact, it has nothing to do with restraining acquisition and consumption of goods, and thus frugality. Moreover, compared to frugal consumers, environmentally conscious consumers are more likely to leave their purchased products unused, and they may even engage in overconsumption (Lin and Chang, 2012). Frugal consumers, on the other hand, try to make best use of their products without a focus on the environment.

3.6. Price Consciousness

Lichtenstein, Netemeyer, and Burton (1995: 235) define price consciousness as "*the degree to which the consumer focuses exclusively on paying a low price*". It usually generates outcomes at the expense of other consumer judgments such as quality (Alford and Biswas, 2002). Regarding price consciousness as a consequence of frugality, Lastovicka et al. (1999) showed that the relationship between frugality and price consciousness has a medium strength (0.68).

4. DIMENSIONS OF FRUGALITY

As depicted in its conceptual definition provided above, frugality has two dimensions: one is about the acquisition of goods and the other is about the usage of goods. In other words, one dimension is related to spending carefully; the other is related to consuming carefully.

4.1 Spending Related Frugality

Spending related frugality can be observed when consumers are motivated to make the necessary consumption with the least possible payment. According to Miller's theory of shopping (1998), spending related frugality can be understood in terms of an attempt to carefully use economic resources for further and better acts of consumption - not saving due to pain of payment. We suggest that it is dominantly salient in the pre-purchase stage of consumption, where consumers search for product information, compare prices and make purchase decisions. Previous research that conceptualized frugality as consumption related have found a positive relationship between frugality and market mavenism, bargain-hunting and price consciousness Podkalicka & Potts, 2014, Bardhi and Arnould, 2005).

4.2. Consumption Related Frugality

Consumption related frugality is observed when consumers are motivated to make the best use of their belongings leading to least possible waste or not trashing the items without being fully used. Using a bottle of shampoo till the last drop and crafting a pencil out of the bottle once it is fully consumed is one such example. Previous research that conceptualized frugality as consumption related have found a positive relationship between frugality and second-hand consumption, green consumption and recycling (Evans, 2011; Pepper, Jackson, and Uzzell, 2009). We suggest that it is salient both in the pre-purchase stage of consumption and during/after consumption. Specifically, it is evident during consumers' search for product

information while comparing product durability and when purchase is completed, during the consumption phase where they try to use the products carefully, and if possible repair and recycle them in later stages. Next, we present three studies for scale development, and an exploratory study that tests the consequential effects of two-dimensions of frugality (SRF and CRF).

5. DEVELOPMENT AND VALIDATION OF THE SCALES

5.1 Study 1: Item generation

To create an initial pool of items, we recruited a U.S. national sample using Prolific online panel. Our sample consisted of 12 respondents (*M*age = 32, 33% female). Using a set of open-ended questions, we asked participants to elaborate on and write their thoughts in detail about: a) spending money carefully, b) consuming possessions carefully, and c) the most important things while purchasing/using/disposing of their possessions. Item generation relied on theoretical insights derived from previous research as well as investigating data gathered in this exploratory investigation. We identified and converted frequently mentioned answers into scale items. An initial pool of 81 items was generated to reflect the two dimensions of consumers' frugality. Two research assistants were provided with the definition and explanation of each dimension as well as the set of items. They were then asked to allocate the items to one of the two dimensions or remove them from the set. After allocating or eliminating the items, a total of 18 items remained.

5.2. Study 2: Scale Development

We recruited a U.S. national sample using Prolific online panel. Our sample consisted of 216 respondents (*M*age = 32, 46% female). The 18 items generated in Study 1 were put into a seven-point Likert-type scale format (1: strongly disagree, 7: strongly agree). Respondents were asked to indicate the extent to which they agreed with these statements. We deleted items based on two criteria: if corrected item-to-total subscale correlations were below .50 and if they had statistically higher correlations with a dimension to which they were not hypothesized to be related to (Bearden, Netemeyer, and Teel, 1989). We used Varimax with Kaiser Normalization as the rotation method. The analyses generated a reduced scale of 9 items (see Table 1). Items that loaded on factor 1 constitute the scale of spending related frugality (SRF); items that loaded on factor 2 constitute the

Table 1: Factor Loadings

Rotated Component Matrix		
	Component	
Factor	1	2
I like to keep my budget under control	.759	
When I purchase something, I want to get the best deal	.725	
I plan my purchases beforehand	.621	
When buying something, it is good to think carefully about how much I spend	.617	
I wait until I can get a product at the best price	.584	
I do not dispose of a product if it can still be useful in alternative ways		.718
I do not throw things away unless they get too damaged to be repaired		.684
I keep empty items such as containers or bags to use them again in the future		.662
I try to make products last (like toothbrushes, shampoos, pens...)		.527

scale of consumption related frugality (CRF). We further calculated the Cronbach's alpha for each dimension (Cronbach's alpha for SRF =.784 and for CRF = .712).

5.3. Study 3: Convergent and Divergent Validities

We recruited a U.S. national sample using Prolific online panel. Our sample consisted of 302 participants (Mage = 35, 55% female). After the respondents responded to a set of conceptually related trait scales, we analyzed the correlations between them. In accord with Campbell and Fiske's (1959) suggestion, the traits were distinct and not perfectly correlated (see Table 2). The correlation between SRF and CRF was r = .448. Although SRF tends toward propensity to plan spending money and value consciousness, both dimensions are

DISCUSSION

This research explores the two distinct dimensions of the consumer frugality scale, which was defined as a unidimensional consumer trait by previous research. We suggest that frugality incorporates two distinct elements: *consumer related frugality* refers to careful consuming; *spending related frugality* refers to careful spending. Our findings support that CRF and SRF are theoretically and empirically distinct from each other, as well as from other frugality related constructs that are identified in consumer literature,

Table 2: Correlations Between Consumer Traits

		Correlations						
		Price Conciousness	Propensity to Plan Spending	Value Consciousness	Deal Proneness (active)	Deal Proneness (passive)	Voluntary Simplicity	Environmental Consciousness
SRF	**Pearson Correlation**	.242	.700	.691	.406	.392	.033	.252
	Sig (2-tailed)	.000	.000	.000	.000	.000	.564	.000
CRF	**Pearson Correlation**	.217	.374	.422	.301	.314	.171	.331
	Sig (2-tailed)	.000	.000	.000	.000	.000	.003	.000

not perfectly correlated with other traits. Therefore, we can conclude that the dimensions are distinct from each other as well as from other traits[1] listed below.

5.4. Study 4: Exploratory Test of Consequential Effects

We conducted an exploratory study to test the consequential effects of the identified sub-dimensions of frugality (SRF and CRF). Specifically, we hypothesized that 1) consumers with a higher trait consumer related frugality would be more likely to repair their items rather than buy a new one, and 2) consumers with a higher trait consumer related frugality would have a more positive attitude towards using second-hand items. However, we did not expect to find these effects for consumers with a higher trait spending related frugality. Our sample consisted of 218 student participants from a European university (Mage = 21,57, 51% female). After responding to a set of trait scale items including SRF and CRF, participants indicated their preference between buying a new outfit versus repairing the torn one, provided that both options cost the same. Then, they indicated their attitudes towards using second-hand goods (1= very negative, 7= very positive) and how willing they would be to buy a second-hand accessory at half the price of a new one (1= not at all, 7= very much). As expected, having an outfit repaired (vs. buying a new one) was strongly positively correlated with CRF (r = 0.23, p = 0.001), but not with SRF (r = 0.09, p > 0.05). Also, CRF was strongly positively correlated with positive attitudes towards using second-hand goods (r = 0.21, p < 0.05), and higher willingness to purchase a second-hand accessory over a new one (r = 0.15, p < 0.05). However, there was no correlation between participants' SRF and the measured DV's (p's > 0.05). These results provide initial evidence and shows that the two sub-dimensions of frugality identified in this research (SRF and CRF) has different behavioral correlates.

and have different consequential effects. As the next step, we are at the stage of manipulating CRF and SRF to identify cause-and-effect relationships between the distinct dimensions of frugality and the 3R (reduce, reuse, recycle) model of consumption. Specifically, we hypothesize that consumption-related frugality will lead to consumer behavior with 3R strategies such as secondhand consumption, repairing, reusing, donation and recycling, whereas spending-related frugality will not motivate these tendencies.

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[1]   Scales are received from: price consciousness (Lichtenstein et al. 1993), propensity to plan spending money (Lynch et al.2010), value consiousness (Lichtenstein et al. 1990), deal proneness (Lichtenstein et al. 1995), voluntary simplicity (Leonard-Barton 1981), environmental consciousness (Dunlap et al. 2000).

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Food Well-Being at the Time of Covid-19: The Use of Coping Strategies Rooted in Caring for Low Socio-Economic Status Families

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INTRODUCTION

Covid-19 lockdown in spring 2020 upset families' lives, reorganizing their daily activities and restricting living space: dining out decreased, families learned to cohabit and parents took over school via distance education. This pandemic disrupted the way consumers ate, shopped and interacted with food (Janssen et al. 2021; Scott and Martin 2021). Yet, the effects of Covid-19 on food consumption and food well-being (FWB) differed depending on consumers' socio-economic situations (Hamilton 2021; Scott and Martin 2021). It became apparent that, during lockdown, families' FWB required material comfort and financial ease due in part to food price increases causing adverse effects on low socio-economic status (SES) families' FWB. Rooted in the TCR stream (Mick 2006; Mick et al. 2012), **this research aims to deepen our understanding of families' FWB in a state of vulnerability by analyzing the strategies they deployed in spring 2020 to face this unprecedented situation**.

THEORETICAL FRAMEWORK

Taking a dynamic perspective of vulnerability, we consider it as not unique to certain individuals, but as an experience that any person may live depending on their individual characteristics, economic, social, and environmental conditions, and a context (Baker, Gentry, and Rittenburg 2005). Similarly, although a crisis may touch the whole population, some individuals, due to specific vulnerabilities, may be more affected (Baker 2009). Vulnerability can be economic, cultural or social (Schultz II and Holbrook 2009; Spotswood and Nairn 2015) and is characterized by a loss of personal control (Baker et al. 2005). Although the Covid-19 crisis as a vulnerability context differs partly from the natural disasters studied so far, it also altered *consumption adequacy* (Hill, 2020; Hill and Sharma 2020) disrupting access to basic necessities (Martin and Hill 2012), specifically to food (Baker, Hunt, and Rittenburg 2007).

Block et al. (2011, 6) defined FWB as "as a positive psychological, physical, emotional, and social relationship with food at both the individual and societal levels". While most studies on FWB so far have been conducted among consumers who have access to abundant food (Hémar-Nicolas and Ezan 2019; Mugel, Gurviez and Decrop 2019), recent research has focused on consumers who lack access to affordable and nutritious food (Bublitz et al. 2019a; Parsons et al. 2021; Voola et al. 2018). Bublitz et al. (2019b) proposed an integrative framework of marketing practices that improve affordable access to healthy food for people experiencing hunger, highlighting the fundamental role of social and local entrepreneurship. Drawing from the five domains of FWB (Block et al. 2011) - availability, socialization, literacy, food policy, and marketing, these authors extend the FWB paradigm to include people who do not have adequate access to food. Similarly, Mugel (2020) highlighted how a social restaurant designed for homeless people meets their physical, emotional, and social needs. All these studies have focused on analysing FWB from a chronic vulnerability perspective, without taking into account the impact of a crisis context, which may accentuate difficulties. This research aims to bridge this gap.

Lazarus and Folkman (1984) defined coping mechanisms as a set of efforts made by individuals to reduce or tolerate sources of stress. To do so, individuals use resources to deploy problem-focused or emotion-focused coping strategies. Problem-focused coping aims to modify the environment causing the distress, whereas emotion-focused coping aims to reduce the negative emotions generated by the stressful situation (Stanton et al. 2000). Yet, this dichotomy is criticized for not taking into account the social and then collective context of individuals and sometimes for inducing a normative view of "good" (problem-centred) and "bad" (emotion-centred) coping (Hutton 2015). Focusing on families' responses to vulnerability due to the Covid-19 lockdown, this study contributes to the literature on coping strategies characterizing the collective dimension of coping, and better understanding the porosity between problem-centred and emotion-centred strategies.

METHODOLOGY

In a comprehensive approach, this qualitative study is based on 14 semi-structured interviews conducted with one parent of low SES families (Appendix 1), in France, from July to November 2020. In line with the ethical assessment of the study, explicit consent was obtained for each informant. Our sample was built on the basis of two conditions: 1) participants had to live in one of the three major cities' suburbs where a large number of households live below the poverty threshold (Observatory of French inequalities 2018); 2) households had to have at least one baby or a school-aged child. Neighbourhood-oriented social organizations helped us to recruit them striving to diversify vulnerability situations (Baker 2009). Due to the lockdown situation, seven interviews were conducted by phone, seven others face-to-face, allowing us to partially immerse ourselves in the local environment. During the data collection, researchers tried to understand and articulate the point of view of the families living the experiences (Baker and Gentry 2006). The interview guide aimed to explore the families' experiences of lockdown: food supply, meal preparation, meals, after-meals, FWB or food distress, and family well-being. Integrally transcribed interviews were analyzed through thematic analysis and interpreted independently by the coders who proceeded to break down the material collected into units of meaning, attempting to understand the meanings families attach to their experience and how those meanings cohere and confirm patterns (Miles and Huberman 1994; Spiggle 1994). We used credibility, dependability, confirmability, and transferability as four criteria of the trustworthiness of our findings (Lincoln and Guba 1985). Through this process, the place of care in intra- and extra-household coping strategies emerged from our findings.

RESULTS

(A summary of the results can be found in the Appendix 2, Table 2)

The lockdown multiplied the **stressful situations in low SES families**. First, it reinforced **economic tensions**. Job insecurity increased: "*you try to find small jobs like that, which bring in some food for your kids and so on, but with the corona, there was nobody! [...] I do gardening, there are people who know me but they tell you: 'Sir, we are not doing it right now.'*" (I2). Some interviewees observed an increase in their food expenses due to the presence of struggling relatives in their homes and/or the closure of school canteens: "*Before, I rarely had my children for lunch, so from an economic point of view, it was difficult to manage so many meals. I*

also had my sister-in-law and her daughter at home, economically speaking, it wasn't the same." (I14). Additionally, the families faced a rise in supermarket prices, which disrupted the purchase of basic necessities: "*I normally pay 50 cents for a kilo of flour at the supermarket, and here we could only find organic flour, which costs €1 per kilo (...) so in terms of price, we had to make a selection of the most important products.*" (I14). Second, the lockdown exacerbated **administrative tensions** among undocumented immigrants, who dared to go out less during this period, aggravating stress linked to food supply: "*Even if we went out to pick a food parcel up, if we meet the police somewhere, they can frisk people like that, and then I get sent back home. You lose... If you go out, you have to be careful. I'm ready to eat less and stay at home so as not to risk my family*" (I2). Third, Covid-19 led to **health tensions** within the households where members were at high risk from Coronavirus: "*my husband is a vulnerable person. So, there you go, he was sending me to the dogs (laughs)*" (I13). The meal could generate tensions for large families who were afraid of intra-household contamination: "*we have the big table for the boys and the small one for girls (...) Normally, we all sit at the same table. But as there is confinement, and we were not all supposed to be in the same room, we tried not to be together too much.*" (I5). Additionally, the lack of physical activity due to home confinement added weight concerns, specifically for children: "*Actually, I was very careful about what the children ate. Since I realized the risk and the danger, I've always tried, let's say, to regulate, to take care of their diet but to make it something important. But it's true that during the confinement, I realized that my son had put on weight*" (I14). Finally, **psychosocial tensions** emerged. As many families lived in cramped accommodations, staying at home generated a proximity detrimental to intimacy: "*there are four of us in an 193 sq.ft (18 m2) house with a kitchen, shower and everything*" (I9). In addition, some of them expressed a feeling of isolation because of the lack of real contacts outside the home: "*socially, I need [...] to see people, to talk about this and that. Being at home is complicated for me*" (I12). As a result, the lockdown aroused negative emotional states, which could affect FWB: "*it became complicated because we couldn't keep our spirits up, the laziness got worse and there wasn't much creativity left in the meals*" (I14).

Faced with the stressful situations described above, these families sought to **implement coping strategies within the household**. Some of them focused on food, which played a dual role. On the one hand, food, as a source of stress, required coping strategies. Coping strategies were then problem-focused, such as reducing the shortage risks and expenditure with tighter stock management: "*usually the children help themselves as they want, during the lockdown they had to ask first*" (I6), or cooking healthier to limit weight gain linked to sedentary life: "*by cooking properly, I make real dishes, by taking my time, it has even become a pleasure to cook. And subconsciously, there was no more room for nibbling.*" (I12). On the other hand, as a central activity in these confined families' lives, food was used as a resource to develop coping strategies. Cooking and commensality were widely mentioned as ways of mitigating negative emotions: "*we all ate at the table. Because my child used to eat on a little table in front of his TV (...) During the lockdown, we changed our habits. In a way, it was a time to get together, to be convivial*" (I13).

Beyond the intra-household sphere, **extra-household problem-centred and emotion-centred coping strategies** that involved actors in the neighbourhood were deployed. Once again, these strategies helped to reduce tensions related to food: "*the neighbourhood schools all did this. There were donation, food parcels, there were vouchers and nappies [...]. It helped us a lot. Without that, I don't think we would have managed to survive*" (I1); "*in food banks,*

sometimes you find things, for example very important things like vegetables, things like that, fish, to prepare a balanced meal*" (I2). Moreover, food, as a coping resource, generated social links with the outside world and thus helped to attenuate the lack of social life: "*with the mums from school, it was: I tried that, you should try it, it's good. (...) In fact, we shared recipes*" (I12); "*I had my family, some of them helped me a lot. They went to other places [to find food]. [...] My son takes Guigoz [baby milk]. Well, they took milk, they brought it to me! Meaning I had milk! We helped each other like that! For example, I took potatoes. If I still had some at home, I would give them to the family, that's it. I discovered something else*" (I1). These findings highlight that these coping strategies to reduce lockdown-related tensions, due to food distress but through positive food practices as well, were not only based on individual actions. They were also part of collective and ecosystemic initiatives, thus revealing the key-role played by coping strategies anchored in care.

DISCUSSION

Our findings highlight the role played by food in coping with the stress experienced by low SES families during the Covid-19 lockdown in spring 2020. Food is at the heart of both problem-centred and emotion-centred coping strategies (Appendix 3. Figure 1). In this respect, our work does not call into question the dichotomy between emotion- versus problem-centred strategies, but allows to show how food is a resource for achieving greater autonomy in stress coping. This research underlines the collective dimension of coping and echoes the notion of relational coping highlighted by Hutton (2015), who showed that women's active coping styles may have a relational or community orientation. In this way, this study advocates for the need to shift from a predominantly psychological and unidirectional view of coping to an ecosystemic view showing the interdependence between actors (Afifi, Hutchinson, and Krouse 2006; Baker et al. 2007). Actually, coping strategies related to food, centred on the individual, the family, and more broadly the local community, contribute to FWB by improving the psychological, emotional and social relationships with food at the individual and collective level (Block et al. 2011). While these strategies mainly affect food availability, one of the five pillars of FWB particularly impacted by the lockdown, they also have an effect on food literacy (culinary capabilities) and socialization (food solidarity, interactions with food...). Additionally, this study enriches the understanding of emotion- versus problem-centred strategies, which, in our case, depend more on the source of the stress (in this case, whether it is food-related or not) than on the actors' ability to act. In this way, this work contributes to avoiding the normative view that problem-centred strategies are more desirable than emotion-centred ones. This is particularly relevant when people in a state of vulnerability do not have the material resources to act on the problem. Nonetheless, this work does not allow us to deepen further the interplay between emotion- and problem-centred strategies. As a result, further research is required to scrutinize the interplay between factual delineation of a problem and the related emotions (Hutton, 2015).

Adopting coping strategies embedded in intra- and extra-household relationships, low SES families show that the way they faced lockdown to preserve their well-being, in terms of and through food, partly relied on care practices. These practices were designed for the family members themselves, and more widely for their neighbours, friends and extended family, who also experienced vulnerability. Indeed, we identify the three key phases of Tronto's caring model (Tronto 1993). Aware of the various tensions generated by the crisis within their family and the community ("care about"), the interviewees felt responsible for their well-being ("care for") and

sought to provide solutions ("care giving"). Care, in this case pertaining to food consumption, is therefore part of an ecosystem based on solidarity and benevolent values, at three levels. At the first level, intra-household care can be seen through cooking and commensality, as the mainstay of a family balance disrupted by the health crisis. A second level, extra-household, includes the families in the neighbourhood, who also face vulnerability. Care given to others relies on the spontaneous establishment of a localized network of support based on food exchanges and supportive social links, in particular through social media, where recipes and tips for food supply are shared. Finally, a third level integrates actors from the local community-based network who are less affected by the crisis, including nonprofits, schools, teachers, and, in some cases, local food retailers. This third level, characterized by personal and altruistic relations with the families, is considered by families as essential to their well-being, particularly with regard to food, owing to food donation, the sharing of recipes or the organization of online cooking workshops. This recognition by families of the care provided by local social and economic actors demonstrates the existence of the fourth phase of care ("care receiving") (Tronto 1993) and recalls the importance of reciprocal relationships between actors in a care ecosystem (Parsons et al. 2021; Shaw et al. 2017). A perspective of this work is therefore to interview the various stakeholders identified here (nonprofits, schools, teachers, and local food retailers), to describe this ecosystem of care and thus strengthen our understanding of the collective dimension of coping.

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Appendix 1. Table 1: Informants Profiles

N°	Gender	Age	Occupation	# of Children	Location in France
1	M	35	Catering industry worker	5	Cité Félix Pyat - Marseille (13)
2	M & W	45 et 40	Undocumented worker and Housewife	4	Cité Félix Pyat - Marseille (13)
3	W	32	Housewife	3	Marseille (13)
4	W	40	Housewife	4	Cité Félix Pyat - Marseille (13)
5	W & W	45 et 15	Housewife and middle-school student	4	Cité Félix Pyat - Marseille (13)
6	W	45	Housewife	4	Bondy (93)
7	W	39	Housewife	3	Bondy (93)
8	W	27	University student	1	Marseille (13)
9	W	43	Housewife (undocumented)	2	Cité Félix Pyat – Marseille (13)
10	W	41	Housewife (undocumented)	6	Cité Félix Pyat – Marseille (13)
11	W	38	Hospital assistant	1	Marseille (13)
12	W	47	Unemployed	1	Roubaix (59)
13	W	45	Unemployed	2	Loison sous Lens (62)
14	W	34	Housewife	3	Cité Félix Pyat – Marseille (13)

Appendix 2. Table 2: Summary of the findings

Types of tensions during the Covid-19 lockdown (*food-related* and <u>non-food-related</u> ones)			
Economic - <u>Job insecurity</u> - *Increase in food expenses* - *Rise in prices*	**Administrative** - <u>Anxiety among undocumented immigrants</u>	**Sanitary** - <u>Anxiety in case of co-morbidity</u> - <u>Fear of intra-household contamination</u> - *Weight concerns*	**Psychosocial** - <u>Lack of intimacy</u> - <u>Isolation due to a lack of real contacts</u>

FWB-related coping strategies		
Actors involved in the coping strategy	**Problem-centred versus emotion-centred coping strategies**	**Examples**
Intra-household: Family members within the household	Problem	Reducing tensions related to food shortage: "usually the children help themselves as they want, during the lockdown confinement we they had to ask first" (I6)
	Emotion	Reducing the feeling of loneliness: "we all ate at the table. Because my little baby, he's used to eating on a little table in front of his TV (...) During the lockdown, we changed our habits. In a way, it was a time to get together, to be convivial" (I13).
Extra-household: Family members living nearby, Neighbours, School, Food bank	Problem	Reducing tensions related to food access: "the neighbourhood schools all did this. There were donation, food parcels, there were vouchers and nappies (...). It helped us a lot. Without that, I don't think we would have managed to survive" (I1)
	Emotion	Reducing isolation: "with the mums from school, it was: "I tried that, you should try it, it's good. " (...) In fact, we shared recipes" (I12)
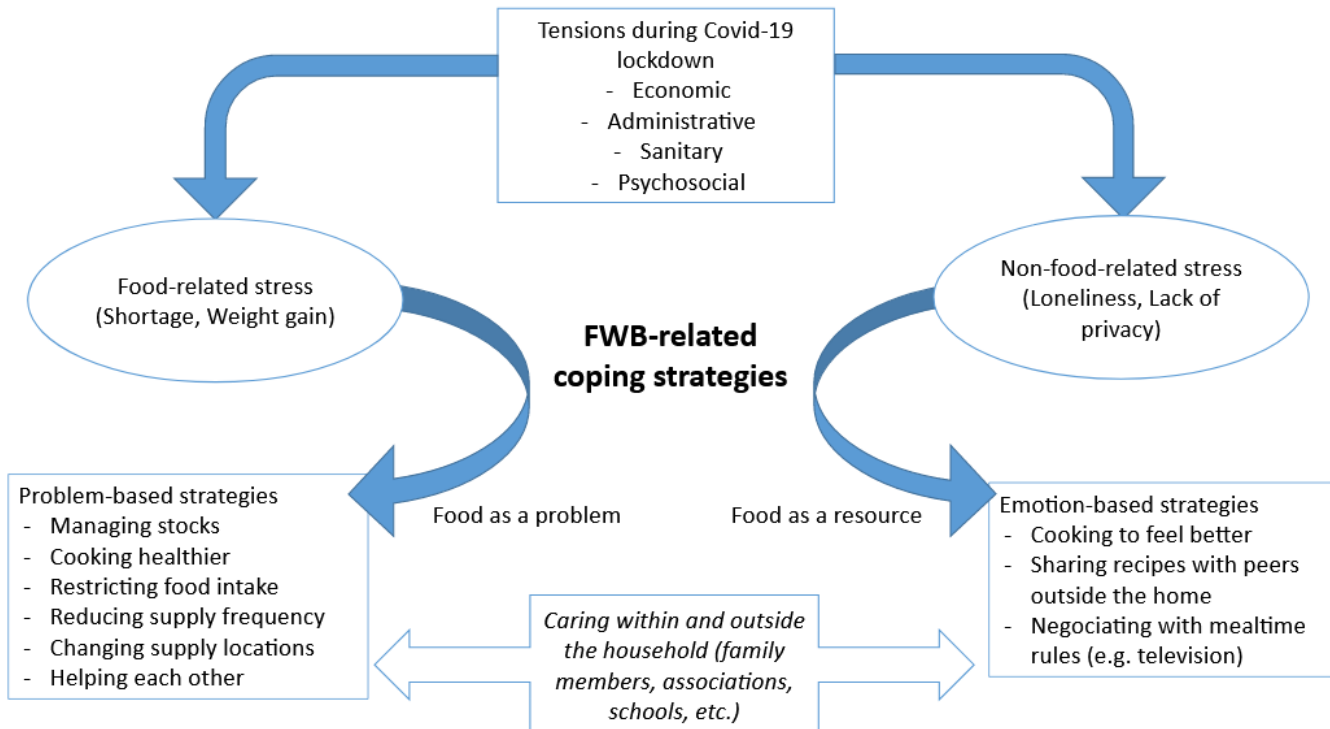
Appendix 3. Figure 1: Coping strategies rooted in care for low SES families, during Covid-19 lockdown

Symbolic Dimensions of Jewelry as a Gift: An Interpretive Study

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INTRODUCTION

Marketing research on gift-giving was demarcated in the 1980s by the works of Levy (1982) and Sherry (1983), who built on Marcel Mauss's seminal work involving tribal societies (Sherry et al., 1995). Mauss (1988) addresses three obligations related to the gift: giving, receiving and reciprocating. The meanings of the gift are associated with status and power, in which the giver assumes a superior position, whereas non-reciprocation implies inferiority and subordination. Not accepting the gift is an offense, a refusal of fellowship, friendship and alliance. Furthermore, it is a matter of building a mutual network of obligations: the giver generates an obligation on the part of the receiver. Thus, the gift per se may be seen as a symbolic, ceremonial or ritual exchange (Mauss, 1988; Caillé, 2002). However, obligations and the form of reciprocity may vary in different societies, on different occasions, and depending on the roles played by the giver and the receiver.

For Sherry (1983, p.158), gifts are "tangible expressions of social relationships." The practice of gifting occurs mainly among family members and between generations (Belk, 1979) and the female gender is generally responsible for its management (Garner & Wagner, 1991). Nevertheless, the breadth of the relationship network and the obligation to give gifts vary from one society to another. In the United States, spending on gifts is associated with romantic relationships (Nguyen & Munch, 2011), the emotional characteristics of the gift giver (Pillai & Krishnakumar, 2019) and egocentric reasons (Givi & Galak, 2020), or even with materialism and status, as is also seen in India (Sharda & Bhat, 2018) and Brazil (Miranda et al., 2017).

But which objects cannot be given, but must be kept? This question led Godelier (2001, p.53) to investigate so-called "inalienable" objects, i.e., those that follow "the paths of transmission and rooting in time," those that can only be given to a small group such as children, relatives or initiates. Mauss himself (1988) speaks of objects that remain in the family. They are objects that must be kept because of their value or their meaning, which makes them almost sacred. For Baudrillard (2009, p.83), "the old object is always, in the exact sense of the term, a 'portrait of the family'."

Levy (1982) was possibly the first marketing scholar to point out the purchase for oneself as a self-gift. The self-gift is a symbolic act that can have rewarding, therapeutic properties, or have the purpose of celebrating passages or transitions (Mick & Demoss, 1990a, 1990b), usually in categories of high ego involvement and entailing a strong symbolic component, as in the case of jewelry (Mick et al., 1992). Several motivations may be behind the self-gift: rewarding oneself, celebrating, remembering (or forgetting), feeling loved and enjoying life, in addition to the therapeutic dimension, or compensating for something negative (Heath et al., 2015). Individuals with certain characteristics such as anxiety and insecurity (Rippé et al., 2019) may be more likely to self-gifting. In addition, in individualist cultures there may be a greater propensity to self-gift than in collectivist cultures (Suzuki & Kano, 2018).

This study investigated jewelry as a gift, identifying symbolic dimensions that differentiate the categories of giving gifts, receiving gifts and self-gifting. The peculiarity of jewelry is that it is a luxury item, which, in the literature, is related to the issue of distinction (Bourdieu, 1984) and status consumption (Beverland, 2004; Eastman & Eastman, 2015; Kapferer & Bastien, 2009).

METHOD

We conducted in-depth interviews with 25 young women (between 23 and 38 years old) from the upper middle class, living in the city of Rio de Janeiro, Brazil. All the interviewees had a university degree, were employed and were financially independent. The interviews were mediated by a semi-structured script, recorded and transcribed afterward. The names used in this paper are fictitious. We identified preliminary categories that emerged from the field, which were then grouped and compared with each other. The categories were subsequently refined, reaching a final concise relationship. Lastly, we compared the categories obtained with those mentioned in the literature.

FINDINGS

Jewelry received as a gift

Jewelry received as a gift appears in the context of family relationships and romantic love. It appeared as a link between generations, as a chain of continuity for the family, giving it connotations such as "tradition" and something "special" that can dignify the relationship with loved ones who have already passed. Letícia considered the jewelry that she inherited from her grandmother to be "emotionally valuable," something that enables her to "take her father's family" with her. Jewelry comes to symbolize a sacred relationship, one that transcends each life: "When you receive jewelry as a gift, it eternalizes the person who gave it".

Jewelry is also a symbol of familial love ("special, because my mother gave it to me"; "it was proof that my brother loved me"). The first piece of jewelry may also mark the passage to adulthood. Alice received from her grandfather "an adult's gift, a woman's gift." Sometimes, it refers to the giver's sacrifice to express love and to the receiver's worthiness. Lorena said that her father "was in no shape to buy that bracelet, [which he had bought with] little money that he had saved up," thus an expression of fatherly love. Secondarily, jewelry was also associated with terms such as "sweetness," "beauty" and "glamor." The gift of jewelry also symbolizes the romantic love between a man and a woman. It was described by Sarah as a kind of amulet against the possibility of the relationship falling apart. When it comes to definitive commitment, jewelry takes on a wider range of meanings, in that it reaffirms love, commitment and responsibility; it makes a rite of passage tangible, and it spells out romantic values in the relationship.

Jewelry as a self-gift

Jewelry as a self-gift was associated with simplicity of the object, something meant solely for daily use. When it is a "pricey piece of jewelry," explained Erica, it does not serve for such purpose. For those who self-gift, it may not have "the same charm," as Verônica observed: "Buying it for yourself isn't the same thing as getting it from someone else." The self-gift of an item of jewelry can mark passages and experiences. For Lorena, it suggests "showing yourself" how mature you are. Buying jewelry whenever "you can," takes on the character of being a "reward" and is a way to manifest one's

fulfillment in life. Isadora emphasized meanings of achievement and merit, bordering on a feminist viewpoint: "My mother always said that you should buy your jewelry with your own money." For Isadora, if, on the one hand, there is "a great feeling of independence; you worked for it." Sara agreed; she saw the self-gift of jewelry as a reflection of women's achievements in independence. Veronica, on the other hand, saw the self-gift as a symbol of femininity and gender demarcation: "Jewelry helps to comprise the female status." It can also take on the meaning of compensation. Erica was "feeling a little down" so she bought a necklace to cheer herself up. The self-gift of jewelry also appeared as a hedonistic manifestation.

Jewelry given as a gift

For those who give it as a gift, jewelry marks out passages and materializes the discussion about "giving the gift and staying with the object at the same time" (Weiner, 1992; Godelier, 2001). Lorena explained: "To this day, I still have the first gifts [of jewelry] that I gave to my children; they mean a lot more to me than to them." When the gift is meant for younger people, the ideas of a link between generations and tradition reappear. As Claudia stated: "I gave a Our Lady of Fatima necklace to my niece because the whole family has one." Claudia said that the gift meant "I care about you." Paula emphasized the value of perpetuity: "When you give, it means that it's forever." For Paula, the financial sacrifice implicit in the purchase adds value to the gift. Luana, on the other hand, felt that remembering the recipient and spending time on the choice make giving jewelry as a gift something special.

Gifting individuals who are not familiar with jewelry may represent a display of status, good taste, or wealth. Lorena stated that she will gift someone who "means a lot" to her, and when she "can't think of anything more valuable to give," or when she wants to "show-off," or "feel important." Gabriela explained: "I care more about what the person expects than what I'm giving,' indicating concern about giving the "right" gift.

DISCUSSION

The meanings raised in a first analysis movement were grouped together, taking underlying symbolic dimensions into account.

Gifting as a symbol of passages

People use jewelry to make life passages tangible throughout their lives (such as the engagement ring and wedding ring). The symbolic character of jewelry as the demarcation of passages runs through civilizations. Turner (1974, p.157) believes that "all societies ritualize and publicly mark with suitable observances to impress the significance of the individual" in his or her new status. There are secular and religious rituals in noteworthy passages. In general, dating and engagements are secular public or private rituals. Marriages are public rituals and can be performed in secular or religious ceremonies. In consumption studies, ceremonial celebrations and rites of passage are probably the most commonly studied occasions of gifting (e.g., Schmidt, 1995). In the case of the self-gift, however, the commemoration of passages tends to be private and secular.

Gifting as a symbol of the eternal

A piece of jewelry is something that lasts, representing the eternal, and transcending individual lives; a link between the past and the future on a timeline that must not be broken. It is possible to theorize that the impact of gifts with the meaning of intergenerational transmission is greater for those who receive them than for those who give them. Givers are freed from an obligation to transmit the "the portrait of the family" (Baudrillard, 2009, p.83) to following

generations. Whoever receives the object that embodies the family's perpetuity assumes the responsibility of maintaining and transmitting it. By this same logic, jewelry as an eternal link with loved ones appears much more in jewelry received than in jewelry that is gifted, since the symbolic and emotional content is more intense when jewelry is received as a gift. Sometimes the meaning of the piece of jewelry became clear only after the death of the one who gave the gift. As Baudrillard (2009, p.88) observed, the object is "fetishized" and transformed into a "relic," which enables it "to hold [...] the soul of the dead." It thus becomes a sacred object, involving "transcendent experiences of extraordinary significance to the individual" (Mick & Demoss, 1990b, p. 327).

In both cases – link between generations or link with loved ones – what lies behind it is the idea of perpetuity, of eternality. The same idea arises when the object is a symbol of love. Garner and Wagner (1991, p.370) called attention to the importance of gifts for maintaining "networks of love." Jewelry received in adulthood symbolizes the love relationship between partners, making tangible the romantic ideal of eternal love. The engagement ring carries coded "fidelity expectations" (Sherry, 1983, p.159) and commitment (Nguyen & Munch, 2011). As for jewelry given at other times in a couple's life, it is a reaffirmation of the commitment or a "realignment of the giver/recipient relationship" (Ruth et al., 1999, p.385).

Gifting as "emotional nutrition"

The two categories of meanings – deserving and compensating – appear strongly in the self-gift, with similar characteristics. Individuals allow themselves to buy a self-gift, either as a prize or a reward for a meritorious deed, or as compensation for something negative. Both situations require "emotional nutrition" (Mick & Demoss, 1990b, p.325). Jewelry as something that is merited is associated with passages (Mick et al., 1992), both as a gift received and as a self-gift. However, jewelry as compensation appears only in the self-gift.

Gifting as a symbol of reaffirmation of female roles

Two distinct meanings deserve attention. One, which we did not find in the literature, is that of jewelry as a symbol of female emancipation, and which is linked to the self-gift, symbolizing that the woman is not dependent on anyone to buy jewelry for her. At a time when the role of women is changing, it is possible that this is an indicator of new perspectives in the purchase of luxury items. However, jewelry also appears as a symbol of femininity, associated to elegance, beauty and glamor, highlighting the traditional role of women in society. The two views are not antagonistic since they coexist in the social environment.

Gift as a status symbol

A specific meaning appears in the case of jewelry given as a gift: jewelry as a status symbol, or as a mechanism of ostentation. The gift is given to acknowledge both the status of the giver and of the recipient. This is rather curious, because, in general, the search for status is referred to in the literature as the main reason for luxury consumption. If jewelry is a natural object of ostentation, why has the search for status been so little reported? It is possible that it is related to the understanding of jewelry as something sacred, a symbol of the continuity of the family or of love, and therefore, far above the purpose of ostentation. Or perhaps this quality – a status symbol – is not considered relevant when receiving the gift or self-gifting, but only when the object is worn.

Other meanings

One meaning that only appeared in the category of self-gift is that of jewelry as a hedonistic symbol, that is, something that has to do with the intrinsic pleasure that one experiences with the acquired object (Mick and DeMoss, 1990b). Jewelry also entails a financial sacrifice, both in the case of jewelry received, as well as jewelry given as a gift to someone else. Sacrifice adds value to jewelry; it is a display of affection.

FINAL CONSIDERATIONS

This research contributes to the literature on the consumption of luxury items by showing a range of meanings in addition to the display of status. Moreover, we found striking differences between jewelry received as a gift, given as a gift and as a self-gift. The most significant differences, however, were found between the gift and the self-gift, perhaps because the ritualistic behaviors are quite different in the two situations. We arrived at a set of six symbolic dimensions, which differ in part (and agree in part) with the existing literature, both in bringing some new dimensions, and in relation to the form and intensity with which dimensions that had already been identified in the literature appear. We found no study that mentioned the eternality dimension in the gift giving literature, although this dimension appears to be related to ancient objects in the anthropology of consumption. Nor did we identify any references in the literature connecting the self-gift with the issue of female emancipation.

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Table 1. Symbolic Dimensions of Jewelry as a Gift

Symbolic Dimensions	Meanings		
	Jewelry received as gift	**Jewelry as self-gift**	**Jewelry given as gift**
Symbol of passages	Marker of passages (secular or religious, public or private)	Marker of passages (private and secular)	Marker of passages (secular or religious, public or private)
Symbol of the eternal	Link between generations, perpetuity; tradition; sacred bonds; familial love; romantic love, fidelity and commitment.		Link between generations, perpetuity; tradition.
Emotional nutrition	Recognition of one's merit	Reward; Compensation	
Symbol of reaffirmation of female roles	Femininity	Female emancipation, Independence; Femininity	
Status symbol			Ostentation, taste, distinction
Others	Financial sacrifice	Hedonistic symbol	Financial sacrifice

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Assembling Tribes on Instagram: Analysis of a Mega-influencer Follower-generated Hashtag Network

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INTRODUCTION

This study investigates the tribal assemblages formed around Instagram mega-influencers (Campbell and Farrell 2020). Researchers have been interested in 'consumer tribes', as contemporary consumption is increasingly characterized by consumption-focused social groups (Cova, Kozinets, and Shankar 2007). Aspects of consumer tribes such as members' organization (Mamali, Nuttall, and Shankar 2018), value co-creation (Dominici, Yolles, and Caputo 2017), and liquid entrepreneurship (Biraghi, Gambetti, and Pace 2018) have all been considered in this field. However, Ruiz, Penaloza, and Holmqvist (2020) recently signified that the extant literature does not provide a full understanding of the dynamics of tribal constitution and reconstitution, and suggest assemblage thinking as a useful lens in exploring how consumer tribes are assembled. We extend this notion to the networked environment, where virtual tribes (Gloor et al. 2020) in social media platforms may be yet more dynamic. Further, drawing to the vital role of user-generated 'text' (Gloor et al. 2020) (i.e., hashtags) in social media, we bring a methodological novelty through a hashtag network analysis approach to explore virtual consumer tribes, which is uncommon in marketing literature. Considering the immense popularity of Instagram (Djafarova and Rushworth 2017) and the vast consumer rallying around Instagram influencers (Casaló, Flavián, and Ibáñez-Sánchez 2018), this study addresses the question: *how tribal assemblages formed around Instagram mega-influencers are reflected in follower-generated hashtag networks?*

THEORETICAL BACKGROUND

Instagram is currently the fastest-growing social media platform (Djafarova and Rushworth 2017) based on visual aesthetics (Jin, Muqaddam, and Ryu 2019). It is popular among mobile-savvy individuals (Abidin 2016) with a higher engagement than other social networking sites (Casaló et al. 2018). Marwick (2015) sees Instagram as a "convergence of cultural forces: a mania for digital documentation, the proliferation of celebrity and microcelebrity culture, and conspicuous consumption." (p. 139). Hence, unsurprisingly the Instagram has become a promising platform for microcelebrities/social media influencers. Among distinct influencer categories, *mega-influencers* with over 1 million followers emerge as highly influential (Campbell and Farrell 2020). Followers tend to engage in a conversation around these influencers (Etter et al. 2018) and embrace trends set by them (Jin et al. 2019) even without direct influencer participation. We see this networked social grouping of followers as an indication of tribal formation. This also leads to what Usher (2020) emphasized: social construction of the microcelebrity brands. Though the significance of consumer tribes in traditional brand building has been previously examined (Canniford 2011), how virtual consumer tribes contribute to the social construction of mega-influencer (personal brands) remains under-theorised.

Cova and Cova's (2002) seminal work considers consumers' convergence into tribes to be more influential on consumers' behavior than mainstream marketing institutions and traditional cultural forces. This convergence leads to alternative social structures and new forms of communities (Goulding, Shankar, and Elliott 2001) where individuals increasingly gathering into multiple and ephemeral groups. Typically, consumer tribes are non-commercial entities (Goulding, Shankar, and Canniford 2013) having no structured hierarchy and established leadership (Cova et al. 2007). Further, consumer tribes are multiple, playful, and transient (Cova et al. 2007; Canniford 2011). Members of consumer tribes form social links through a 'linking value' (shared use of product/service) (Cova and Cova 2002) and seek emotional connection through nostalgic narratives (Mamali et al. 2018). Mega-influencers' followers collectively exhibit many of these characteristics, thus, are increasingly being theorized as tribes (Arvidsson et al. 2016) and some influencers call their fan base 'my tribe' (Marwick and boyd 2011).

Recently, Ruiz et al. (2020), emphasizing the dynamics of consumer tribes, inspired the infusion of *assemblage thinking* in understanding tribes. Following Deleuze and Guattarai's conceptualization, DeLanda (2016) defined an assemblage as "a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes, and reigns – different natures" (p.1). How entities are bound together (territorialization and deterritorialization) (Bacevic 2019) and how emerging properties (enabling and constraining) are exercised (DeLanda 2016) are key tenets of assemblages. It considers the interdependencies among human and non-human actors while enabling the understanding of the agency redistribution from individuals to things, narratives, and socio-material networks (Canniford and Bajde 2015; Hoffman and Novak 2018). This provides a useful theoretical lens to uncover virtual tribal assemblages where social media users redistribute their agency to socio-material meshes (including other followers, captions, and hashtags), collectively forming tribal assemblages around mega-influencers. Ruiz et al. (2020) noted two other characteristics of assemblages: *hybrids* (individuals, materials, and discourse belong to the same analytical frame) and *fluidity* (enabling the freedom to investigate stability, deterioration, or reconstruction). This enables researchers to take Instagram users and their (hashtagged) discourse into the same analytical frame, making it a robust approach to understanding the formation of tribal assemblages around mega-influencers.

METHODOLOGY

We selected the hashtag network analysis approach (Meraz and Papacharissi 2013) to identify how tribal assemblages are reflected in follower-generated hashtag networks. Co-hashtag network analysis is a useful method in identifying topics, semantic representations, and network frames (Meraz 2017) and has been used to identify themes reflected in networked assemblages (Schöps, Kogler, and Hemetsberger 2020). Despite being novel and useful, this method is yet to be popularized in understanding consumer tribes and tribalism.

Influencer Marketing Hub's website (list of top non-celebrity Instagram influencers) was used to select an influencer as the access point to a co-hashtag network. We selected #nashgrier as the access point to a tribal network associated with the influencer Nash Grier based on three criteria: high number of posts related to his eponymous hashtag, high follower count, and frequent content creation on Instagram. The Instagram API was used to access a sample of Instagram posts using #nashgrier (N=5000) and capture the captions ensuring the anonymity of data. Hashtags were extracted from captions

and the co-hashtag network was constructed using a bigram script written using R software (Nasir et al. 2017).

The network consisted of 4321 unique hashtags (nodes) and 11439 co-occurrences (edges) and was visualized using Gephi, open-source software for network analysis (Cherven 2015; Ichau, Frissen, and d'Haenens 2019). We followed the procedure applied by Schöps et al. (2020) and analyzed the hashtag network using the modularity clustering algorithm embedded in Gephi. This algorithm detects groups of nodes based on shared characteristics (Cherven 2015). In our case, these hashtag clusters can be considered as themes of tribal thinking commonly shared by Instagram users in assembling the tribe around Nash Grier (figure 1).
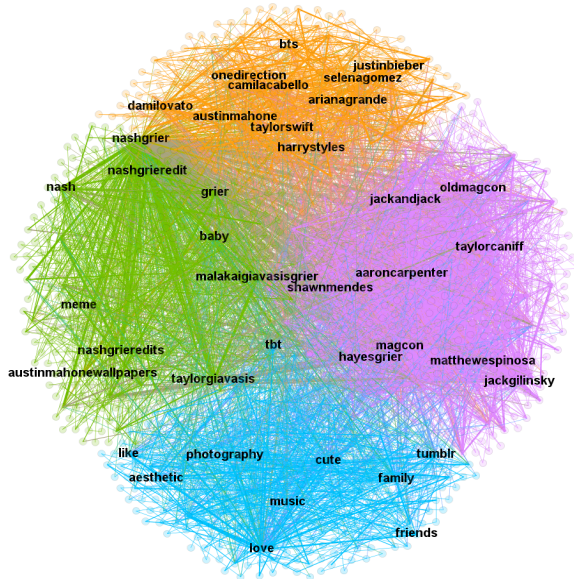
Figure 1: Follower-generated hashtag network of #nashgrier

ANALYSIS AND DISCUSSION

This section explains four major themes that emerged from follower generated hashtag network visualized in figure 1.

MAGCON: nostalgia and heritage

The first theme that emerged from the hashtag network (coloured purple in figure 1) reflects Grier's influencer heritage through MAGCON, a teen group of which Grier was a part. MAGCON (Meet And Greet Convention) was a group of 12 American teen internet personalities who were famous on the Vine platform in 2013-2014 (Horan 2014). In addition to Grier, the team consisted of others who gained internet fame and their own influencer status: Cameron Dallas; Hayes Grier; Matthew Espinosa; Jack Gilinsky; Jack Johnson; Aaron Carpenter; Taylor Caniff; Shawn Mendes; Jacob Whitesides; Carter Reynolds; and Mahogany Lox.

Our data indicate that followers on Instagram still consider these influencers as strongly interconnected in their hashtagged conversations, even after years of MAGCON's dissolution. Dominant hashtags in this cluster were related to MAGCON and its members (see figure 1). These hashtags were mostly accompanied by nostalgic captions such as *"the golden years"*.

> "Yesterday was Thanksgiving and I am just so thankful for this boys. I can't imagine my life without them. Magcult forever and always."

This caption is evidence of some followers who demonstrated that history and nostalgia are a strong dimension of their bond and continued tribal relationships with Grier and MAGCON. Particularly, using terms such as 'Magcult' strongly reflects the tribal thinking of Grier/MAGCON followers.

This finding advances Spittle (2009) and Mamali et al.'s (2018) argument: neo-tribal consumers are fond of nostalgic narratives that can provide momentary identification on emotions. We find that, for virtual tribe members, nostalgic stories go beyond mere momentary identification and are used as means of sticking members together. This also provides the tribe a solid foundation with heritage, to which followers are attached. We also consider history and nostalgia as means of territorializing the tribal assemblage (Bacevic 2019) by homogenizing MAGCON followers as an enabler of the assemblage formed around Grier (by including the other MAGCON members' identity into the tribal assemblage). This furthers the understanding of how elements of an assemblage become parts of totality that is culturally and historically constituted.

Influencer as the 'linking value'

The hashtag network predominantly reflects Grier's personal aura but also shows a strong dynastic component (coloured green in figure 1). The second hashtag cluster is around a family theme including Grier, his brother, partner, and son. Top hashtags in this cluster included #nashgrier, #malakaigiavasisgrier, #taylorgiavasis, #baby, #hayes. Malakai particularly is a strong component of this part of the tribal narrative and is Grier's 2-year-old son. Followers seem to passionately embrace the boy's online presence as a mean of shared emotional connection within the tribe which is reflected in the following captions:

> "The definition of cute is @malakaigiavasisgrier"

> "We think that this 2-month-old boy is going to be the youngest successful #blogger@malakaigiavasisgrier"

> "i just had to share this one on its own because they make my heart burst #malakaigiavasisgrier #nashgrier #taylorgiavasis"

This is not only the case for Malakai. Eponymous hashtags of both Taylor (Grier's partner) and Hayes (Grier's brother) are dominantly represented in this cluster. #nashgrieredit, #meme, #youtuber were also dominant, reflecting the personal capabilities of these influencers. We see this as advancing Cova and Cova's (2002) concept of 'linking value' of social links within a tribe that emerge through shared product/service usage. As our data reflect, members of the tribal assemblage consider the influencer and his dynastic relations as instrumental in forming such social links via hashtagged conversations. This finding reflects how the tribal assemblage is stabilized (Schöps et al. 2020) by followers, collectively extending their co-functioning around Grier to his dynastic relations.

Playfulness of the tribe

The third theme that emerged from the hashtag network (blue in figure 1) predominantly reflects the playfulness of the tribe's members. #love, #cute, #happy, and #fun were dominant hashtags that represent emotions shared by members within the network. Some other hashtags (#photography, #music) symbolized activities whereas togetherness (#family, #friends), media (#tumblr, #film) and general hashtags related to playfulness (e.g., #aesthetic) were among top hashtags. These hashtags were annotated in captions such as:

"LETS MAKE IT VIRAL #MAGCON2020 #nashgrier #family #aesthetic #tumblr #vine #music #cute #edit #love #aesthetic"

"It's been raining to much here in New York, I'm starting to feel like a duck. Quack,quack.."

This finding furthers Canniford's (2011) reading: consumer tribes are playful. According to Cova et al. (2007), consumer tribes provoke an 'active play' with marketplace resources including aesthetics, emotions, music, and media which is also reflected in our data. Though Canniford (2011) argues that tribal consumers 'plunder' these resources during the active play, our findings show that virtual tribes' members rather 'amass' such resources as means of establishing the emotional connection between members and the tribe. We also extend this into assemblage thinking and see this playfulness as an agentic role (Hoffman and Novak 2018) of tribal members in shaping the identity of the whole tribal assemblage through the inclusion of emotions, activities, media, and aesthetics.

Fluidity of the tribe's boundary

It is a somewhat surprising finding that the fourth hashtag cluster symbolizes some mainstream celebrities and other internet personalities. Particularly, eponymous hashtags of mainstream celebrities such as Justin Bieber, Selena Gomez, and Ariana Grande were among the dominant hashtags along with #onedirection (an English-Irish pop boy band) and #bts (a South Korean boy band).

Notably, all these celebrities (and bands) also have a strong social media presence and possess enormous online fame. It was evident that Instagram users are likely to co-mention these celebrities with mega-influencers, rather than discriminating between them. This is exemplified in the following caption:

"Just imagine.........You are doing your make up and he is watching and waiting for you to finish. That's too cute. #austin-mahone #selenagomez #Arianagrande #shawnmendes #justin-bieber #camerondallas #nashgrier #bts

We consider this to be representing the 'fluidity' of the tribal boundary, especially within the digital realm, and extending Canniford's (2011) concept: 'multiplicity' of tribes (members can belong to distinct tribes simultaneously). Our data shows that the virtual tribe members tend to make the tribe's boundary fluid through the inclusion of celebrities and other internet personalities into the mega-influencer tribe, rather than perceiving them as having their own (distinctive) celebrity tribes. On this ground, we argue that virtual tribes can not only be 'multiple', but also 'inclusive'. Considering the similarities of these influencers and celebrities (i.e., young, into music, online presence) we theorize this followers' behavior as an effort of internalizing the celebrities (with similar characteristics) into the mega-influencer tribal assemblage and as an attempt of enabling the whole tribal assemblage to extend the territorialization.

Table 1: Summary of results

Network cluster	Theme	Key hashtags	Key findings
1	MAGCON: nostalgia and heritage	#magcon, #shawnmendes, #hayesgrier, #oldmagcon, #aaroncarpenter, #jackandjack, #taylorcaniff, #jackgilinsky, #matthewespinosa, #carterreynolds	Followers demonstrate that history and nostalgia are a strong dimension of their bond and continued tribal relationships with the mega-influencer.
2	Influencer as the 'linking value'	#nashgrier, #malakaigiavasisgrier, #taylorgiavasis, #nash, #baby, #grier, #austinmahonewallpapers, #nashgrieredit, #nashgrieredits, #meme	Members of the tribal assemblage consider the influencer and his dynastic relations as the 'linking value' in forming social links within the tribe via hashtagged conversations.
3	Playfulness as a tribe	#love, #cute, #like, #tumblr, #tbt, #music, #family, #photography, #friends, #aesthetic	Members of the tribal assemblage engage in an 'active play' with marketplace resources (such as aesthetics, emotions, media) and 'amass' such resources as means of establishing the emotional connection between members and the tribe.
4	The fluidity of the tribe's boundary	#austinmahone, #justinbieber, #camilacabello, #arianagrande, #selenagomez, #onedirection, #demilovato, #taylorswift, #bts, #harrystyles	Members make the tribal assemblage's boundary more fluid through the inclusion of celebrities and other internet personalities into the mega-influencer tribe, rather than perceiving them as having their own (distinctive) celebrity tribes.

GENERAL DISCUSSION AND IMPLICATIONS

Understanding virtual consumer tribes is challenging, yet, important (Hamilton and Hewer 2010). Despite previous theorizations, assemblage thinking is suggested as a useful lens to explore consumer tribes (Ruiz et al. 2020). This study shows how tribal assemblages formed around Instagram mega-influencers can be understood through follower-generated hashtag networks. We found 4 ways in which this type of analysis can advance tribal thinking.

Advancing the Spittle's (2009) argument, this study revealed that the members bring nostalgic narratives about the influencer, providing a heritage to the tribe while facilitating the cultural/historical constitution of the tribal assemblage. Also, our findings extend Cova and Cova's (2002) concept of 'linking value' by revealing that the influencer and his dynastic relations are instrumental in establishing social links, stabilizing the tribal assemblage (Hoffman and Novak 2018). As opposed to Canniford's (2011) argument of 'plundering', we found that virtual tribe members 'amass' marketplace resources (i.e., aesthetics, media) to shape the identity of the whole tribal assemblage. Finally, we add to the 'multiplicity' (Canniford 2011) of tribes by arguing that virtual tribes can be 'inclusive' as members make the tribe's boundary more fluid through the inclusion of celebrities and other internet personalities.

This study extends the theorization of virtual consumer tribes with the infusion of assemblage thinking. Hashtag network analysis opens a novel methodological stream for consumer researchers to investigate virtual tribes. This study also provides useful implications for practitioners. Particularly, themes emerging from a hashtag network of a consumer tribe would inform marketers of the directions of online consumer conversations within the tribe. This would enable marketers to align their brand's message to such directions appropriately. Understanding how members territorialize the tribal assemblage would be pivotal for marketers in determining the key actors through which a brand message can be significantly imparted into the tribe's conversation.

LIMITATIONS AND FUTURE RESEARCH

This study investigated a tribal assemblage formed around one mega-influencer. Future studies can compare among different influencers. The tribal assemblage formation in various social media platforms may be different due to their inherent characteristics. Cross-platform investigations may reveal how the platform functions mediate the tribal assemblage formation. Further, deeper investigations about 'fluid' boundaries between mega-influencer and mainstream celebrity tribes may be an interesting research avenue.

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Authenticity, Cultural and Paracrisis: A Typology of Digital Influencers' Transgressions

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INTRODUCTION

Digital influencer is someone who posts on social media in exchange for compensation, not necessarily financial, and can be differentiated by factors such as focus, follower base, engagement rates, monetary requirements for collaboration and skill sets (Campbell and Farrell, 2020). An influencer's trajectory traces the beginning of an evolution towards the reaching of celebrity status (Erz and Christensen, 2018), considering aspects of authenticity, accessibility, expertise, and cultural capital (Campbell and Farrell, 2020). Types of influencers (Campbell and Farrell, 2020), relationship with brands (Nascimento, Campos, and Suarez, 2020) and with an audience (Kozinets et al., 2010) can shape these trajectories. Some controversial events such as transgressions can also shape these trajectories (Cocker, Mardon and Daunt, 2021).

Transgression, an act of breaking rules and exceeding limits, can be committed by different figures such as the individual consumer (Belk, Ger, and Askegaard, 2003), brands (Aaker et al., 2004) and celebrities (Finsterwalder, Yee, and Tombs, 2017). In general, transgressions are approached from the point of view of the motivations and consequences for the transgressor. Recent studies have begun to identify the digital influencer as a new transgressive figure (Cocker et al., 2021; Kozinets et al., 2010; Mardon, Molesworth, and Grigore, 2018). In the digital sphere, transgression appears as a tension between community rules and commercial partnership norms (Kozinets et al., 2010). Influencers are embedded in various relational systems that have specific norms. Understanding the types of transgressions that influencers can commit, beyond the commercial sphere, helps to understand how these figures relate to their consumers beyond simply to partner brands.

This research aims to identify what transgressions are and how they differ according to their underlying nature. Based on a netnographic longitudinal study, with 6 years of data collection, this study analyzes the transgressive trajectory of the Brazilian influencer Bianca Andrade, considered by the mass media as the Brazilian Kardashian. The researcher's findings suggest some criteria to identify and differentiate transgressions in social media. These criteria make it possible to delineate three transgression categories: *authenticity*, *paracrisis* and *cultural*. The relevant theoretical contribution lies in a conceptualization of other types of transgression beyond those previously discussed in the consumer behavior literature.

TRANSGRESSIONS: APPROACHES FROM THE TRANSGRESSOR'S POINT OF VIEW

Individual social transgression is configured as a breach of collective social behavioral norms (Bataille, 1957; Bakhtin, 1984) arising from the individual desire to change. For the transgressor, feelings of guilt and shame and the possibility of legal and social punishment are generated (McCullough, Fincham, and Tsang, 2003). Some studies analyze the role of transgression in the consumer's identity construction (Batat, 2014; Karababa and Ger, 2011; Kozinets, 2001), while others have presented transgression as a process for consumer's internal personal conflicts resolution (Belk, et al., 2003; Canniford and Shankar, 2013).

Brands transgressions are violations of implicit or explicit rules regulating the relationship with consumers, that are committed by a market agent (Aaker et al., 2004; Chung and Beverland, 2006; Gregoire and Fischer, 2008). Studies of brand transgressions generally address the consequences of such acts, which apparently always have negative effects for the transgressor, involving reevaluation or complete termination of the relationship (Chung and Beverland, 2006; Hemetsberger et al., 2009) and possibility of retaliation (Grégoire and Fischer, 2008). Recently, Parmentier and Fischer (2015) highlighted a dissipation dynamic, whereby consumers do not consider restoration of the relationship and simply abandon the brand. Studies on this approach claim that consumers feel betrayed and consider the brands' perceived sincerity to judge the transgressive act (Aaker et al., 2004).

Celebrities (McCracken, 1989) transgressions are perceived acts of immorality that can directly affect their success and can turn into public dramas (Finsterwalder et al., 2017). The fan-consumer premise in which a celebrity is a behavioral role-model to be followed, can also elevate transgression to scandal status (Um, 2013). Studies that address celebrity transgressions focus primarily on consumer reaction. Consumers with a strong emotional attachment to transgressive celebrities tend to defend them (Bhattacharjee, Berman and Reed II, 2013) while others judge based on the idea that transgression could have been avoided (Um, 2013). Consumers may also decide to forgive the celebrity, but forgiveness does not prevent a change in consumer's perceptions which were previously maintained (Finsterwalder et al., 2017).

Digital influencers have appeared in the literature as new transgressive figures. Influencer's transgressions are acts of violation of communal rules through excessive commercial relationships (Kozinets et al., 2010; Mardon et al., 2018). When violating privacy rules and digital exposure, evidencing their commercial partnerships, the influencer starts to face the judgment of their community (Kozinets et al., 2010; Mardon et al., 2018; Scaraboto and Fischer, 2016). Endorsement practices can also be considered transgressive acts by the audience (Cocker et al., 2021). Studies that address these transgressions seek to demonstrate how they generate conflicts between the influencer and his own community (Kozinets et al., 2010; Mardon et al., 2018). Influencers perform the act of rule breaking (Batat, 2014), but it is the followers who classify it as a transgression. Based on the tone of the comments made following the act, it is possible to define the transgressions' nature. Transgressions have often given rise to an online firestorm (Pfeffer, Zorbach, and Carley, 2014), featuring an apparently negative dynamic on social media (Scholz and Smith, 2019). Analyzing the influencer as a transgressive figure enables an understanding of a negative relational dynamic within social media.

Transgression literature frequently uses the transgressor figure as the level of analysis, considering mainly motivations and consequences. In addition to the transgressor's perspective, it is important to understand the transgression itself, as well as the factors and criteria that characterize this behavior to better understand the role of consumption in acts of this nature. When assessing digital influencers, there is a void in the literature about any other types of transgressions beyond community-commercial tensions. Considering transgression as a level of analysis, this research aims to understand what transgressions by digital influencers are and how they can be differentiated considering their nature.

METHODOLOGY

In order to identify transgressions committed by the digital influencer, this research opted for the longitudinal netnographic approach (Kozinets, 2019), which enabled observation of interaction in native conditions and an immersive understanding of the influencer's community. The chosen research context was the Brazilian digital influencer Bianca Andrade, who currently has more than 15 million followers only on Instagram. Considered by her fans and mass media as the Brazilian Kardashian, Bianca was involved in several controversial episodes throughout her trajectory, having lost 400,000 followers in one day following one of these events. As such, Bianca has become a platform for observing controversies.

This research followed Kozinets' (2019) procedural guide with two phases of data collection. An immersive exploratory phase began with observation of Bianca's social media, her content and interaction with fans. All profiles related to Bianca, such as pages of fan clubs, friends, family, and partner brands were followed by the researchers. This movement made it possible to characterize Bianca's ecosystem. From that, all posts made by Bianca that showed her work as an influencer on Instagram and YouTube were collected and saved in a Google Drive folder. After that, in the investigative phase, all posts and videos on Bianca's social media that showed a polemic episode were separated. Comments from followers, pronouncements from partner brands in their official profiles and reports on controversial events were collected as along with posts on gossip webpages, such as @webtvbrasileira, and hashtags related to the controversy. This phase allowed a fuller understanding of the dynamics of the transgression.

Data collection continued from September 2015 to January 2021 resulting in more than four thousand prints of posts and comments, in addition to 95 prints of numerical comparison rankings, which demonstrated the number of followers and views on social media over time, provided by the Social Blade platform. The researchers also collected one hundred news items about the controversies published in more traditional media forms such as newspapers and magazines. The analysis process began with separation of Bianca's transgressions. Within this set of transgressions, we identified the 15 that generated the most impact. In a second step, in a back-and-forth movement with the theory (Kozinets, 2019), we grouped the criteria that identify a transgression and also identify discrete categories according to the nature of the transgressions.

DISCUSSION

Digital influencers are inserted into innumerous relationships, created, and shaped in their social media. As consequence, they have contributed partially to the construction of the norms governing these relationships. Despite that, all parts of these relationships, especially the audience, are acutely aware of the applicable rules thus becoming behavioral inspectors. At the first sign that a rule has been violated, they comment on social media to explicitly identify a transgression. Through the data it was possible to separate transgressions committed by digital influencers according to their nature. Table 1 summarizes the characteristics of three categories: *authenticity transgression*, *cultural transgression* and *paracrisis transgression*.

Throughout their trajectories, digital influencers display character narratives that determine the expectations of followers regarding a given message and its meanings (Kozinets et al., 2010). *Authenticity transgression* occurs precisely when the followers perceive a violation in the character narrative constructed by the influencer. Authenticity (Arnould and Price, 2000) is socially constructed through individuals, groups, performances and is linked to the perceived sincerity around representational practices (Gannon and Prothero, 2016). The lack of authenticity can also be found in endorsement practices (McCracken, 1989; Nascimento et al., 2020), when the publicity is not perceived by followers as authentic (Cocker et al., 2021).

One example of an *authenticity transgression* is Bianca's liposuction episode. In 2017, during an interview, Bianca said that she had had liposuction and that she chose not to disclose it to her followers. Bianca had previously made a series of posts about how she had lost weight thanks to a healthier diet, a physical exercise routine and the use of a modeling belt, which was provided for her use as a paid partnership. When exposed, Bianca was criticized and seen as a liar by followers who were disappointed: "It was just about being sincere. You are an influencer. Think of the weight of your profession. Think of so many people who look up to you. I like you and I was extremely disappointed" (Follower's Comment X on Instagram Post – Andrade, 2017).

Influencers are also embedded within the set of moral rules that govern the society's behavior. *Cultural transgression* occurs when an audience identifies that the influencer has not acted correctly in relation to a social, moral, or ethical standard otherwise important to the group and its cultural practices and/or orientation and social mores. Followers use their own ethical principles to judge influencer's

Table 1. Typology of Digital Influencers' Transgressions

	Authenticity Transgression	**Cultural Transgression**	**Paracrisis Transgression**
Nature	Lack of authenticity perception	Positioning regarding Moral or Social Dilemmas	Non-compliance with commercial agreement
Identification Criteria	Followers' comments in a tone of disappointment	Followers' comments in a disapproval tone	Followers' comments in a problematizing tone
Relation Dyad	Influencer-Follower	Influencer-Society	Influencer-Consumer; Influencer-Partners
Relational Rule Violated	Expected Performance Rule	Social Moral Behavioral Rule	Business relationship rule
Enabling Factors	Character Narrative + ParaSocial Relationship	Narrative discourse + Socio-Cultural Context	Positioning + Marketing strategy
Case Example	Liposuction lie	Reality Show and Feminist Movement	Allergy products of her own makeup brand

actions considering the follower's sense of morality and the level of harm to society as a whole (Zhou and Whitla, 2013) generated by the perceived transgressive behavior or comments. This type of transgression, which violates socially accepted codes of conduct, can lead to an emotional state of embarrassment that triggers feelings of shame and disgust (Krishna et al., 2019), displayed in the disapproving tone of the follower's comments.

In 2020, Bianca decided to participate in the biggest reality show aired in Brazil, *Big Brother Brasil*. Bianca had always produced content seeking to value and encourage female empowerment. However, in actuality, she was in the position of defending anti-feminist attitudes and making fun of the movement that has become an increasingly more important topic of discussion over the past few years in Brazilian culture. Such behavior led followers to accuse Bianca of just using the feminist cause to promote herself: "When a woman is aware that a woman friend was the victim of a dirty plan made by a male and this first woman says to the male 'be careful with her' that he be careful with her friend. Bianca, you are CANCELED! You make a living with women consuming your products and work, you should at least be in favor of them!" (Follower's Comment Y on Twitter) (Otto, 2020).

From their evolutionary trajectory, influencers are seen as human brands (Thomson, 2006) and may even launch their own products. With that step, they begin to establish a consumer-brand relationship with their audience (Fournier, 1998) in addition to the parasocial one (Brown, 2015). *Paracrisis transgression* is configured as publicly visible crises that arise from a seemingly intentional, irresponsible, or unethical behavior on the part of a brand (Coombs and Holladay, 2012). These transgressions are related to competence or possible accidents with the influencer's brand.

In 2019, Bianca launched skin products using her own makeup brand, Boca Rosa Beauty. However, some consumers showed videos of their major allergic reaction caused by two of the products. This caused followers / consumers to start questioning Bianca's credibility (Hauser et al., 2017): "All products in the Boca Rosa line have a dubious composition! There are more reliable professionals if you want to invest money. Bianca sells the name and makes money" (Follower 's Comment Z on YouTube Video) (Simões, 2019) Although it also has a commercial nature, this transgression differs from the transgression previously reported in the literature (Kozinets et al., 2010) since it is not related to the excess of commercial contracts accepted by the influencer. *Paracrisis transgression* is related to the failure of the influencer's brand, which is differentiated from what the literature calls brand transgression (Aaker et al., 2004) because it is a transgression committed by the joining of two brands: the influencer's human brand (Thomson, 2006) and the brand created by him or her.

CONCLUSIONS

This research intended to expand the scope of transgressions committed by influencers beyond the commercial-community tensions (Kozinets et al., 2010) previously identified. By changing the level of analysis from the transgressor to the transgression itself, it was possible to identify the nature of each transgression and, consequently, identified transgression types. Our research contributes to a better understanding of the transgression committed by the digital influencer, a figure who presents and relates in a different way from already traditional figures such as brands and celebrities (Nascimento et al., 2020). Every transgression is relational, but each one has a system of convergence and opposition created by the regulatory rules of such a relationship, which shape and direct the dynamics of the transgression. So, the question is raised as to the possibility of establishing different criteria for the identification and judgment of a transgression. Future research may focus on the dynamics of transgression, seeking to understand how the transgression committed by influencers differs from those committed by brands and celebrities, as found in traditional marketing literature. Even considering the crossover among multiple relationships dyads in which the influencer participates.

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Theorizing Brand Community Conflict

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INTRODUCTION

…I'm going to start a GoFundMe that will fund the billboard [with] our message to help fire Garpax. I just want to… post here first to make sure that the community has someone that will start this out...; if there are others planning to do this too, I hope we can collaborate. (Fan post on r/chicagobulls (reddit.com), June 23, 2017)

In 2017, a fan of the Chicago Bulls, a team in the National Basketball Association (NBA), posted the above message on social media. One month later, fans raised over $8,000 globally to fund a billboard urging the firing of General Manager Gar Forman, and John Paxson, President of Basketball Operations (Kenney 2017). Like many beloved brands, the Chicago Bulls is the heart of a brand community, defined as a specialized social collective "based on a structured set of social relations among admirers of a brand" (Muñiz and O'Guinn 2001, 412), and present it as a point of connection for consumers. Extant research primarily examines how brand communities enhance the experiences of their members, which include consumers and other important stakeholders such as marketers (Schouten and McAlexander 1995; Muniz and O'Guinn 2001; Schau, Muñiz, and Arnould 2009; Kumar and Kumar 2020). Yet as this billboard example demonstrates, differences in community members' aspirations, goals, and values vis à vis their focal brands can trigger problematic, negative experiences, leading to conflict within a brand community.

In this paper, we explore two questions, one conceptual and one empirical. Our conceptual question, based on a review of the literature on community, conflict, and consumption is, "What is brand community conflict, and how can it enhance our understanding of the brand community?" Our empirical question is "What are the sources of brand community conflict?" In exploring these questions, we enrich the understanding of brand community by: 1) exploring how consumers perceive conflict within brand communities; 2) demonstrating the salience of Rahim's conflict management theory (hereafter, CMT) to consumer research, by leveraging it as our theoretical lens and 3) delineating specific sources of conflict in brand communities.

BRAND COMMUNITIES AND CONFLICT

Evolution of the Brand Community Construct

Muñiz and O'Guinn (2001) introduce brand community, demarcating it from other social collectives. McAlexander et al. (2002) develop our understanding of the construct by incorporating the brand, product, and marketing agents as brand community members. Moreover, McAlexander et al.'s (2002) theoretical model emphasizes the customer's experience (versus a community that revolves around a brand), providing a foundation to study consumers' relationships with various brand community elements.

Conflict in Consumption Communities

Muñiz and O'Guinn (2001) recognize in their seminal paper that conflict can be inherent in brand community, stating, "…the marketer is often regarded as having too much say in the brand's future. The brand's very ownership is contested" (424). Yet few studies emphasize the tensions that emerge within a brand community, and how these tensions impact members' experiences. Beyond brand communities, researchers examine tensions in the consumption communities, though we contend this research stream requires more investigation (Chalmers, Price, and Schau 2013; Husemann, Ladstaetter, Luedicke 2015).

Organizational Conflict.

Organizational scholars frequently study conflict, conceptualized as an "interactive process manifested in incompatibility, disagreement, or dissonance within or between social entities (i.e., individual, group, organization, etc., Rahim 2002, 207). This definition assumes at least two parties engage in some form of interaction, and that at least one party perceives both parties' concerns to be incompatible. Conflict can yield a variety of group outcomes, influencing a range of group dynamics, such as group performance, task efficiency, intragroup trust, cohesion, and group member satisfaction (Marks et al. 2001).

Definition of Brand Community Conflict

Our review of the literature leads us to offer the following definition: *brand community conflict* refers to the *brand-relevant, interactive processes consumers believe are rooted in incompatibility, disagreement, or dissonance within or between the five components of a brand community:1) focal consumer, 2) other consumers, 3) brand, 4) product, and 5) the firm*. Furthermore, we aver that a focal consumer may experience brand community conflict by merely *observing* (what they perceive to be) incompatibility, disagreement, or dissonance between/among other brand community members (such as the firm and its product).

CONTEXT: THE CHICAGO BULLS FRANCHISE

Given the Bulls' success with Michael Jordan, a renowned former professional basketball player who helped the franchise win six NBA championships, the Bulls possess a global presence, a rich history, and a loyal fan base. However, recent tension stemming from unpopular management decisions, poor team performance, and fan disagreements make the stakeholders coalescing around this NBA franchise a highly appropriate context for exploring brand community conflict. The community encompasses Muñiz and O'Guinn's (2001) three defining features of a brand community. Notably distinct from a material object, the human-based aspect of the focal product (e.g., the team and its aggregation of various "human brands") allows it to develop more nuanced relationships with other brand community elements (Thomson 2006), increasing the likelihood for conflict to arise. What magnifies this team-franchise relationship is the publicized conflict discussed among fans and media outlets. As we demonstrate, relationships within the brand community that do not directly include the focal consumer are still important to study, because of how these relationships impact consumers' perceptions of the team product.

METHODS

Depth Interviews

We used purposive sampling to interview two types of consumers: those self-identifying as either "die-hard" fans (14 informants) or casual fans (11 informants, n= 25). The first author conducted interviews between May 2018-May 2019. We ensured the ages of the participants varied for both loyal and casual fans and only interviewed male participants of diverse ethnicities to eliminate gender

effects. We offered each a $10 NBA store gift card for each hour of participation.

We first made broad inquiries about fans' original connections to the Bulls, then asked about their current thoughts, emotions, and behaviors pertaining to the team. We probed perceptions of tensions within the community (including the relationships between and among the franchise, team, and other fans) and asked about opportunities and challenges regarding their ability to participate in and connect with the Bulls' brand community.

Social Media Archival Data

Netnographic methods greatly enhanced our dataset (Kozinets 2002). We analyzed consumer-generated Facebook comments posted on the official Bulls franchise's Facebook page. Specifically, we captured every post from November 2015 to May 2018. We study fans' textual responses to these posts; thus, the posts reflect consumer-firm interactions and consumers' observations of the product-firm relationship. Because the Bulls organization uploaded original posts, disagreements with these often indicate fan-franchise tension. Fans' responses, formatted in Microsoft Excel files, totaling 439,379 comments. Using interview transcripts, informal conversations, background knowledge from preliminary analysis, and the first author's familiarity with the context, we initially narrowed this dataset to 1,254 comments, using neutral keywords solely related to consumer-firm interactions (such as "front office" and "management"). We periodically expanded the dataset to include notions of conflict, after additional topics arose through depth interviews, and through our own iterative data analysis.

Data Analysis

We imported transcripts into MAXQDA, a data-analysis software that organizes data, facilitates coding, and helps researchers approach text from diverse perspectives before they generate inferences. The first author coded as much text as he could in-vivo, ensuring informants' voices were well represented. Both authors revisited the codes to conduct thematic analysis, periodically reevaluating the codes and text excerpts.

Theoretical Lens: Rahim's (2002) Conflict Management Theory

Arguing that certain types of conflict are healthy and productive, Rahim (2002) shifts the focus of organizational theory from conflict resolution to conflict management. He contends his theory is applicable at various social levels: interpersonal, intragroup, and intergroup. Building upon theorization in Rahim and Bonoma (1979), Rahim (2002) asserts that conflict management styles vary along two dimensions: 1) the degree the focal party is concerned about his or her own interests, and 2) the degree to which the focal party values the other group's interest.

Rahim outlines five strategies for conflict management in the organization, demarcating the conditions under which each is particularly useful. He adopts a situational approach—not positing a single solution for conflict, but offering multiple options he avers are appropriate, depending upon the situation. Rahim (2002) notes that although organizations should work to reduce relational conflict at all levels, merely resolving conflict is not always the ideal outcome. Rather, firms should seek to *manage* conflict so it can exist purposefully – e.g., to spur dialogue on important issues within the firm. Thus, conflict may yield functional and dysfunctional outcomes.

In marketing, Rahim's CMT (2002) is limited to characterizing conflict in different contexts (e.g., marketing channels; Samaha, Palmatier, and Dant 2011, Watson IV et al. 2015; and relationship

marketing; Zhang et al. 2016. Thus, we believe Rahim's contributions remain underutilized in the marketing field, and can be useful in explicating brand community conflict.

EMPIRICAL FINDINGS: SOURCES OF BRAND COMMUNITY CONFLICT

From the perspective of Bulls consumers, we delineate four sources of conflict that emerge from consumers' perceptions regarding how the firm's actions (or inactions) compromise the brand. Also notable is that while our informants may incorporate a variety of brand community members when describing the brand community conflict they experience, they perceive all of these sources of conflict to originate from the firm, often absolving the product, other consumers, and the brand of blame for conflict.

Apathetic Brand Management

The first emergent construct we discuss relates to how consumers perceive a firm values its brand. Specifically, Bulls fans believe the franchise actually is indifferent to it. Utilizing psychological literature on apathy (Levy et al. 1998), we define perceived apathetic brand management as the *belief that a corporate institution is unmotivated to enhance its brand quality, brand status in the industry, and/ or its commercial success*. Research on consumers' attitudes toward brands, including their indifference, is abundant (Thurstone 1931; Tyebjee 1979). Firms' apathy toward their own brands, however, are less. Our informants clearly articulate the belief that the firm is apathetic in its crafting of the brand. Santino states: "Our front office [management] really doesn't care about the Bulls at all....They genuinely don't care about the product they put out onto the court and that's why you have the mess that the Bulls are in right now."

Incompetent Product Management

Organizational competence is characterized by three dimensions: knowledge, know-how, and attitude (Durand 1998). Here, this source of conflict pertains to consumers' lack of confidence in the firm's "know-how" regarding how to execute a strategically successful product performance strategy. As fans witness substandard team performances, accusations of incompetent management are frequent. A Facebook user comments on a particular poor performance and quickly assigns blame to the Bulls' general manager ("GM") for the loss, "Up by 20 not once but twice and still lose the game... maybe just maybe if the bulls had a GM that KNOWS HOW TO BUILD A TEAM[,] WE AS FAN[S] WOULDN'T BE DISAPPOINTED…"

Toxic Organizational Culture

Consumers identifying this source of conflict describe the Bulls' corporate culture as disrespectful, unaccountable, and inflexible. In our context, some consumers observe the Bulls' franchise disrespecting its employees. One such example includes the dramatic claim of Bulls' corporate employees spying on the players. Salvador explains, "I remember seeing a headline that management had put a snitch in the locker room…. Supposedly they were giving management information on the players…." Fans also accuse the franchise of being unaccountable and for using scapegoats to explain poor performance. In CMT, Rahim discusses the construct of organizational defensive routines, practices and procedures that employees enact to help them avoid negative attention, preventing them from "examining the nature and causes of that embarrassment or threat" (Rahim 2002, 213). In this context, the product itself is the scapegoat, with managers blaming coaches and unruly players for poor basketball performance. In CMT, Rahim alludes to accountability, who avers that to support organizational long-term effectiveness, conflict management requires employees to "take responsibility for their errors and not blame others for their mistakes or incompetence"

(Rahim 2002, 227). Finally, fans also describe the Bulls organization as closeminded. Related to this perception of inflexibility, CMT suggests organizational defensive routines inhibit employees' ability to accurately formulate a problem, and as a result, "…old policies, procedures, and practices continue to be followed although they may have been rendered ineffective due to changes in the external environment" (Rahim 2002, 214).

Inconsistent Firm Messaging

A final source of brand community conflict reflects the fact that consumers perceive inconsistencies in the Bulls' communication efforts from both the franchise and the team. Our data indicate such messaging manifests in a variety of forms, such as: selling false hopes, lack of team promotion by players, irrelevant marketing communications, statements to the public from the firm that contradict the firm's behavior, and management's attribution of poor product underperformance to coaches and players. When asked how he perceives the Bulls' promotional efforts on social media, Kenneth responds,

> Pretty negatively. Because if you just looked at how the Bulls market themselves, you would have no idea they sucked. But as someone who sees both that and they're on-court products, I can see the contradiction…. And that makes me feel like, '….Can we just stop hyping up these players when you can't win 15 games in a season?'

Fans often believe Bulls' promotional efforts are simply untrue, and sometimes they can prove it by referencing the firm's decisions. A fan posts online, "The same front office that claimed they wanted to 'get younger' last year but went and overpaid for two [older] past-their-prime players just to sell tickets." These "overselling" firm communications not only highlight the negative reality of current product quality, but also appear to consumers to insult their intelligence. Moreover, players uninterested in interacting with fans via media leads to fans believing the players (and the firm) do not value the product or the fan experience.

CONCLUSION

Delineating and developing the construct of brand community conflict should serve as a catalyst for marketing scholarship and practice. Primarily, the construct enables and encourages scholars to move beyond a myopic view of merely understanding the positive consumer experiences within brand communities (e.g., studying brand community practices that enhance brand value and consumers' brand community experiences; Schau, Muñiz, and Arnould 2009).

Thus, the theoretical insights that emerge from this study pose important implications for consumer research. In this research, we first discuss how deepening our understanding of what we term brand community conflict may contribute to extant scholarship in the brand community domain. In doing so, we explain the importance of utilizing conflict management theory in consumer research. We offer a definition of the brand community construct, illuminating possible negative communal experiences. We also urge scholars to acknowledge how consumers' observations of other brand community relationships may impact their experiences. Moreover, we introduce four sources of brand community conflict, including the new and distinct construct of perceived apathetic brand management. All of these contributions converge to offer a foundational understanding of conflict within brand communities. We encourage consumer researchers to continue this stream of research to develop a more holistic conceptualization of the brand community experience.

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TABLE 1: Sources of Brand Community Conflict

Source of Brand Community Conflict	Apathetic Brand Management	Incompetent Product Management	Toxic Organizational Culture	Inconsistent Firm Messaging
Definition & Characterization	• Perceptions that the firm is not concerned with brand performance	• Belief the team is not managed properly due to the upper management's lack of skill, such that the team performs consistently poorly	• Consumers' perceptions of the firm's detrimental cognitive, emotional, and behavioral activities that members engage in (e.g., owner, managers, players, coaches) • Includes consumers' perceptions of the firm being too risk averse and inflexible	• Consumers' detection of the firm's contradictory, sometimes incoherent, messages regarding the Bulls' current and future status

How Conflict Sources Manifest among Consumers	• Consumers perceive the firm prioritizes other firm interests over the brand/product
	   o Profit margins
	   o The Chicago White Sox (another business the Bulls' owner operates)
		• Repeated poor performances by the team
		• Repeated poor decisions made by management (how the player roster is designed)
			• Unreasonable firm loyalty to incompetent managers
			• Inappropriate behavior among managers/ players (e.g., physical altercations, rumors of management spying on the team, and so on)
			• Management blaming underperformance on coaches and players
				• Irrelevant marketing communications
				• Public firm statements that contradict firm behavior

TABLE 1: (Cont.)

Empirical Evidence *Unnamed excerpts are consumers' comments posted on the Official Chicago Bulls Facebook page			
• Cameron: "[Managers] just care about getting money…to milk it out….to see how long they can keep their jobs." • Rick: "…how dare you [the Bulls firm] fucking charge 80 dollars a ticket to go see your team lose. No…to keep me in your seats…sell… cheaper." • "50% off [tickets]? Are [yo]u kidding? With this garbage dump of a team[,] I wouldn't go see them if you gave the tickets away. Put a team on the court instead of a trash heap then I'll go..." • "Pax [I] lost all respect for you bro. Yeah you helped us win rings in the past but you can care [less] about taking this team to the promised land again. You need to go…" • "I love the [B]ulls, that's my team. But do [P]axson and Forman do? …pissed off"	• Santino: "[managers are] not putting out a good product on the court and…it's not the players and coaches fault." • Joey: "I don't really want to watch the Bulls until those jokers [managers are] out of there." • "…world['s] most garbage sport organization….. decide to tank and DONT EVEN KNOW HOW TO TANK RIGHT!!!!!!!..." • "This dysfunctional organization hasn't a clue…. Terribly run rebuild by the 2 front office bozos." • "Chicago Bulls are Ran by garbage management, they suck period. I see no future with this roster, one horrible trade after another..."	• Kenneth: "…the only reason they've [two upper managers] had their jobs…is because there's some sort of 'old boys club' at the Bulls where they're…friends with the owner, and…they fulfill the owner's wants, …to make the team profitable…. if teams underperform consistently, especially for as long as the Bulls have, (so basically six years now), those guys would be fired." • Santino: "…that show[s] how much the disconnect between the fan base and front office is….the majority of the fan base doesn't have a problem with the players. A lot of us do have a problem with the front office…because Reinsdorf is too loyal to fire Forman and Paxson…." • Joey: "Instead of taking blame and saying, 'Hey, it's my fault. I made the wrong hire.' He's like, 'Oh, we did a lot of researching… he's this great communicator….' now you fired him… and…saying his main weakness is he doesn't communicate. Well whose fault is it? …. is it because maybe you didn't evaluate properly?"	• "Alright I give up[.] all this hype [and] when I saw 5 [points] per game..I didn't bothered watching it.. Too much hype for nothing.." • "Why are we showing highlights of players who are gonna be out of the league…. they're garbage" • "I love all the Bulls highlights. I noticed one thing though. They never show the final score…. Hot garbage."

How Do Consumers Manage Technologically Induced Scarcity of Time Through Digital Decluttering Practices?

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INTRODUCTION

For a few years, scholarly interest in the impact of resource scarcity on consumer behavior has been increasing (Goldsmith et al., 2020). Resource scarcity can be defined as "a subjective sense of having more needs than resources" (Mullainathan & Shafir, 2014, p. 86). When the resources are limited, the ever-increasing need-creation and abundance regarding market offerings can boost the perceptions of scarcity. This is what consumers experience for example, around time, which is finite and can neither be acquired nor stored (Cotte et al., 2004; Feldman & Hornik, 1981; Woermann & Rokka, 2015). Consumers need to make choices to allocate time between consumption opportunities and tasks (Holbrook & Lehmann, 1981; Kaufman et al., 1991). When consumers try to "save time" they reallocate time between different activities to increase efficiency (Feldman & Hornik, 1981; Fernbach et al., 2015). Consumers start to prioritize what to spend time on (Fernbach et al., 2015). So far, little is known about these reallocation decisions of consumers. With our research, we follow the call for research to start to work on a resource based model for consumers and better understand how consumers perceive and invest resources (Arnould & Thompson, 2005). With this paper, we want to address the research question: *How do consumers manage resource scarcity of time through digital decluttering practices?*

LITERATURE REVIEW

Time is a relevant concept for consumption decisions and experiences as it can mediate the quality and attractiveness of offerings in the market (Woermann & Rokka, 2015). Previous research focused on how retailers can adapt the experiences of time to accommodate their consumers' preferences (Arnould, 2005; Kozinets et al., 2004). Retailing research focused strongly on how to minimize the duration of time as a way to save consumer's time (Berry et al., 2002; Hui et al., 1998; Messinger & Narasimhan, 1997). However, additional research showed that the temporal duration of an activity does not equate to the perceived temporality of a consumption experience or practice (Woermann & Rokka, 2015). For example, Husemann et al. (2019) showed that unwanted interruptions by technology were associated with feelings of acceleration. Consumers slowed down temporal experience through limiting and controlling device usage. Woermann et al. (2015) found that temporal rush and stress can be caused by misalignment of practices. Practice misalignment is overall a negative state for consumers, which then engage in efforts to restore the practices (Phipps & Ozanne, 2017; Thomas & Epp, 2019).

Paradoxically, modern technology is often acquired with the intention to save time and increase productivity; however, often enough, it ends up wasting time (Mick & Fournier, 1998). Consumers are facing an array of diverse opportunities to engage in specific consumption practices not only in the physical but growingly in the digital realm: Digital spaces enable "(…). new opportunities for transformational spaces and, therefore, new forms of pleasure and experience. What we are only just able to see and document are the range of new practices that these spaces are allowing" (Denegri-Knott & Molesworth, 2010, p. 116). Research shows that digital spheres can have such an alluring character and even increase consumers' desire to consume (Hoffman & Novak, 2018; Kozinets et al., 2017). The alluring nature of technological devices then seduces consumers to spend a considerable amount of time online and this can lead to feelings of wasting time and decreased productivity (Gonzalez Rodriguez, 2020). Time feels for many consumers like a scarce resource anyway (Bellezza et al., 2016), and techno-consumption can increase the experience of resource scarcity. Consumers are confronted with conflicts and trade-offs, e.g., between the on- and offline world or leisure and work activities (Kozinets, 2008). Little is known on how consumers efficiently and effectively allocate time in their techno-consumption.

METHODOLOGICAL APPROACH

To gain insights into consumers techno-consumption we studied the phenomenon of digital decluttering (Newport, 2019). Decluttering overall has become a major societal trend in the analog but also the digital sphere (Cherrier & Belk, 2015). For this study, we considered 19 in-depth interviews with consumers who shared with us how they organized and decluttered their digital life. The interviews ranged from 40 – 153 minutes, but on average 67 minutes. The interviews resulted in 300 pages of transcripts (single-spaced). Further, we examined 29 videos (308 minutes) on digital decluttering from YouTube, which were turned into 111 pages of transcribed content (single-spaced). We extracted discussions on digital decluttering from Redditt, which resulted in a total of 99 pages (single-spaced). The written content was then systematically coded.

FINDINGS

*Consumers are **unconsciously investing resources***

Resource investment in the online sphere is for many consumers unconscious before they started their decluttering process. This
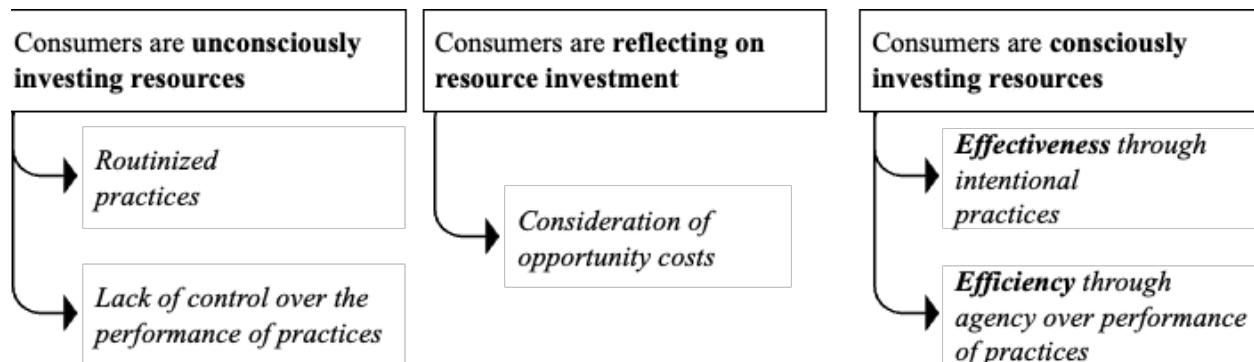
Model 1 Stages of consumers combating technologically induced scarcity of time through digital decluttering practices

is, for example, something that Linda, a very nearly organized respondent, shared with us: *"I think it was more of a rational decision (....). I thought it would* **be healthy to give it up for a while** *and then* **do it again more consciously**. *And that was the intention with Instagram, too. (...) It was more rational for me in the sense of an* **alarmingly high screen time** *or this* **awareness of constantly looking at it** *and then actually at the end of the day* **you're totally knackered** *because you always have your brain running on three channels."*

Linda describes that she made the rational choice to distance herself from technology to be able to approach it more consciously afterwards. She confronted herself with the time she had invested in using theses apps and realized that she was constantly directing her attention to her phone. She became aware that all of this had a negative impact on her well-being and left her feeling 'totally knackered' at the end of the day.

While in traditional market places consumers exchanged consciously money for material goods (Kozinets, 2002), the exchanges in digital marketplaces can involve the exchange of alternative resources (e.g., time or attention), which is often less conscious. Many offerings in the digital sphere are free of direct monetary charge; however, consumers pay with their attention or time (Davenport & Beck, 2001). Consumption in the digital sphere is less material and focuses on access instead of traditional ownership (Bardhi et al., 2012; Bardhi & Eckhardt, 2017). Consumers first must realize that they are trading resources, like time and attention, and that they are paying a price for the investment of their resources. In Linda's case she realized that her well-being suffered. But why are consumers still engaging in practices which bring them undesirable outcomes?

Consumer behavior online consists of many highly routinized practices. This permits the unconscious investment of resources (i.e., time and attention). A deliberate choice is not made in advance. This is what David, a 24-year-old student with a strong focus on optimizing many parts of his life, described: *"It [using a specific app] kind of* **became a routine**. *A routine that* **I did not question**. *But at some point, it* **became too much, and it felt out of my control**. *It was not that I was addicted or anything. It just was a very* **routinized procedure**. *It was tough when I wanted to* **break with that routine**."*

David describes that he did not question the behavior. Giving his time and attention to the application had become a default setting for him. At a point he felt the need to break the routine and reset the behavior. However, material set ups often support specific routines and practices (Phipps & Ozanne, 2017). David described that he himself felt like having 'lost control'. This is not an uncommon feeling in digital spaces.

Consumers can have the feeling that they lack control over their behavior online because the spaces are designed to grab their attention. Claire, a 32-year-old researcher, described her struggle with spending less time on Facebook like this: „*It's just a little annoying. Facebook is pretty smart about that. They always want to* **incentivize you to have the app** *too, and then* **limit your app use** *when you're not here anymore. It used to be easy to look at everything on Instagram online, without an account, if you wanted to for maybe personal research and stuff. And that's not so easy now."*

Claire describes that the technological set up of social media applications force her to download and engage with the app. She experiences limited functionality when using Facebook only through a browser for example. Downloading it seduces her to spend more time online. Digital spaces have become alluring, which drives investment in the application (Kozinets et al., 2017). Some research

starts to critically reflect on the agency consumers have while interacting with technology (Hoffman & Novak, 2018)**.**

Consumers are *reflecting on resource investment*

Consumers are motivated to start a digital decluttering processes when they realize that their attention and time are not well used. During their reflection on how they spend their time online consumers start to consider opportunity costs and become aware of potential trade-offs they are (unconsciously) making. Our respondent Linda, when asked about her digital decluttering motivation, shared that she wanted to re-allocate the time to other activities: "*Yes, that I spend less time with it on the one hand. So, I have* **more time for other things**. *For example, I love to read and have read little in recent years, I would say. Of course, it also has to do with the fact that we have a job where we already read enough during the day. But it also has to do with the fact that before I pick up a book or a newspaper, I* **often look at the Spiegel [News] app or something** *(...).*"

With the awareness that she misses out on doing other things, Linda starts to become more intentional. She reflects on things that would be more rewarding to her. Consumers may also realize how their technology use affects the pursuit of long-term goals.

Consumers are *consciously investing resources*

Consumers want to increase the effectiveness of their resource investment. Consumers start to make sure that when they are spending time, they are spending it with things which they want to do, and which help them to attain their goals. Curating the experience has the goal to increase the quality. This leads to more effective resource investment. Dylan, a 21-year-old passionate photographer, described how he designed his use of the Instagram app like this: "*Instagram is a* **platform of inspiration for me**. *(...) On Instagram I've decided, I only follow* **other photographers whose content I find inspiring**. *I don't follow friends; I don't follow any celebrities or anything. Really just when I look in my* **feed it's just photos that I like**. *(...). I'm not in contact with, let's say, people who are revealing themselves on social media or any personal opinions about people, about political issues, because basically I'm not interested in that*. *"*

Dylan clearly defined a goal for the use of the application and designed the feed to suit his needs. He clearly defined criteria for content he wants to see and does not want to see. This is what others also engage in by (un-)following creators, unsubscribing newsletters, or limiting the access of unwanted information to their life. Consumers often struggle that the use can be prescribed by a technology itself (Shove, 2003). They must adapt the material infrastructure to support more desired practices (Phipps & Ozanne, 2017).

Consumers are increasing efficiency of resource investment by regaining agency and breaking with habits and routines that make them waste their time. Besides adapting the material set up of their digital spaces they also create intangible, temporal boundaries to help structure their consumption.

Consumers are setting temporal boundaries and compartmentalizing their time to make sure that certain activities do not spread all over their day. This can mean for example to set specific start or end times to engage in specific behavior. It is relevant to make sure that the technological features do not cross these temporal boundaries consumers set for themselves. David elaborates on his annoyance with being confronted with digital banners like this: "*Just this being torn out of peace again. Out of my inner peace of mind. I just google for a gift and then* **I get some banner. When I do something, I want to do that.** *And above all, I can influence that; if I'm walking on the street and someone honks, I can't do anything, but* **here I can influence it myself**."

David wants to be able to decide for himself what he wants to do and when and then be able to pursue that activity without any interruption. Features like pop-up ads, banners, or notifications disrupt the activity and consumers attention. Therefore, consumers engage in activities to limit access to them through installing ad-blockers or disabling notifications. Consumers prefer to proactively go and search for information instead of being contacted by third parties.

While outside distractions can lead to the overstepping of the set temporal boundaries the alluringness of technologies may lead to unwanted temptations and distractions. Managing these temptations was the main reason our respondent Abby deleted the app TikTok: *"One of those that I downloaded, but where I really said to myself, no, don't start, is TikTok. Somehow, I found it exciting, and I wanted to at least understand how it is and how it works exactly. But I also* **notice the potential for seduction that then you're there forever** *a little bit like YouTube (...). TikTok is* **really pure entertainment for me.** *Leisure activity and a lot of nonsense as well. Yeah, which is a* **pastime that I don't really want to add to it because other things are more important to me."**

Abby explicitly noticed the 'potential for seduction' to spend a lot of time with the application. She made then a trade-off between the value or entertainment she may get from the app and other things in her life and decided to delete the app again. She did not expose herself to the risk of having to perform a lot of self-discipline. Besides deleting applications, other practices to reduce the alluringness of digital devices may be putting a phone far away, turning the phone screen to black and white, hiding specific applications (e.g., in folders) to make them less accessible.

DISCUSSION

Previous research on techno-consumption started to explore consumers conflicting experiences with technology use (Kozinets, 2008; Mick & Fournier, 1998). We respond to the call for further research on techno-cultures (Kozinets et al., 2019) by expanding the research on how consumer solve these inner tensions (i.e. productiveness versus pleasure). We show that consumers are wasting time by highlighting taken-for-grantedness of practices in techno-consumption. Like within the household the digital sphere has unquestioned routines which are based on "conventions of comfort" and "convenience" (Phipps & Ozanne, 2017, p. 363). In digital decluttering processes the technological structures and the practices they support are critically reflected on and singularized by consumers. Much research has been done on the conscious and more public engagement in the web sphere (Kozinets et al., 2017; Schau & Gilly, 2003), so future research could explore more the tacit and private aspects of techno-consumption.

Prior research on household organization emphasized consumers conscious efforts to assign physical places for their consumption objects (see Arsel & Bean, 2013; Dion et al., 2014). Our research alludes to the role of temporality in digital decluttering processes and consumers efforts to assigning and protect a 'temporal place' for a specific consumption practice. This his means consciously deciding when and how long one is going to engage in that practice. Prior research focused on how practices produce experiences of temporality (Woermann & Rokka, 2015), our research highlights the role of temporality for the performance of practices, which further research could explore in more depths.

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Not Just Impulsiveness: The Psychometric Characteristics of Intertemporal Preferences in Consumer Behavior

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INTRODUCTION

Many of consumer choices involve a trade-off between sooner and later outcomes. For instance, food products rich in sugar and fat promise immediate reward but are damaging to health in the long run. Whereas, keeping a healthy lifestyle can require one to forego immediate satisfaction for the long-term health goal. Credits, loans and credit cards in particular allow immediate consumption, above and beyond one's current cash flow, while the expansion of the individual's purchase power comes with a cost. Saving for retirement or a bigger long-term investment, however, requires one to restrain from using the money immediately for a larger reward in the future (Chabris, Laibson, Morris, Schuldt, & Taubinsky, 2008).

Despite these decisions occurring in very different domains, it has been debated whether the individuals' general intertemporal preferences, summarized in a single or a small set of parameters, underlie the behavior observed in different domains (Chabris et al., 2008; Frederick et al., 2002). In particular, economic models of intertemporal preferences mostly assume that individuals discount future outcomes following a parameterized nonlinear function that flattens with longer delays (Laibson, 1997; Samuelson, 1937).

The discounting function is typically measured based on preferences elicited in a behavioral task. In the most common versions of preferences elicitation task, respondents are asked to choose between various smaller sooner and larger later options (Rachlin, Raineri, & Cross, 1991), or they are asked to match a larger later amount to a smaller sooner amount until the respondent perceives both options as equally attractive (Thaler, 1981). In several studies it has been illustrated, that similarly measured intertemporal preferences, are correlated with various consumer choices (Bradford, Courtemanche, Heutel, Mcalvanah, & Ruhm, 2017; Tasoff & Zhang, 2021; Bartels, Li & Bharti, 2021).

However, recent research revealed several problems in this approach, that threaten the validity and reliability of the measures. First, the measures are sensitive to small changes in the setting of the paradigms (Hardisty, Thompson, Krantz, & Weber, 2013). Second, behavior is often closely related to numeracy and other cognitive scales (Millroth, Juslin, Winman, Nilsson, & Lindskog, 2020). Third, most elicitation tasks measure only trade-offs for money over time (but see Augenblick, Niederle, & Sprenger, 2015; Chapman, 1996 for exceptions), although people make intertemporal tradeoffs involving other kinds of resources. Some studies suggest using measures of self-regulation instead, that are more reliable and provide more accurate predictions of real-life behavior (Eisenberg et al., 2019; Enkavi et al., 2019). However, while these surveys involve aspects that are relevant or closely associated to intertemporal preferences, they do not capture the fundamental aspect of how people tradeoff value and time.

To close this gap in the literature, we developed a survey for measuring intertemporal preferences in consumer behavior (IPICB) over five studies. Unlike scales of self-regulation, the IPICB items are specifically designed to emphasize the trade-off between two outcomes with different delays, in three domains: Consumer Finance, Health, and Readiness. Following the DOSPERT scale for measuring domain-specific variability in risk preferences (Weber, Blais, & Betz, 2002), the scale allows for the examination of domain-specific vari-ability in intertemporal preferences. The items are presented in two different versions, one with immediate outcomes and one with delayed outcomes, to further investigate discontinuities in preferences for immediate outcomes as suggested in some economic models of intertemporal preferences.

STUDY 1

As a starting point for our scale, we conducted a literature review to identify domains and items that are frequently associated with intertemporal preferences in the literature. Aiming to cover a broad range of behavior, we identified five relevant domains and 32 items: Health (e.g. "*At the end of the day, how likely are you to use dental floss after brushing your teeth?*"), Consumer Finance (e.g. "*When your credit card bill arrives by the end of next month, how likely would you pay it in full?*"), Readiness (e.g. "*Imagine you are having a birthday party with friends at your house, but it's getting late now. How likely are you to wash the dishes as soon as your guests leave?*"), Preference for Energy Efficient Products ("*Consider two apartments: Apartment A was recently insulated, and apartment B was not insulated. Due to the insulation, apartment A will have lower heating costs than the otherwise identical apartment B. Would you be willing to pay a higher rent (heating excluded) for apartment A?*") and Media Subscriptions (e.g. "*Your favorite online news page switched to charge most of its content for $120 per year. You can choose either to prepay the entire bill immediately or to split into monthly payments. How likely are you to pay the entire bill immediately?*"). We further designed two versions of each item where the sooner delay was either immediate or delayed.

We tested the survey on an online sample (N = 90, Prolific) to gather initial validity of the items. The items with immediate and delayed outcomes were tested in two separate blocks, in randomized order.

While the scale consistency of the subscales Health (Cronbach's α=.74), Consumer Finance (Cronbach's α=.75), Readiness (Cronbach's α=.73) was good, the scale consistency of the remaining two scales was insufficient Energy Efficient Products (Cronbach's α=.50) and Media Subscriptions (Cronbach's α=.24). A principal component analysis uncovered a clustering of the health items on one component, while the other items were scattered across different components. We extracted five components that explained 27% of variance in the correlations. The components did not capture differences in the items with immediate or delayed rewards. Instead, responses in the two versions of the same items were highly correlated ($r_s > .8$).

STUDY 2

The mixed results on (sub-)scale consistency, and component analysis let us reconsider whether the scale contained all relevant, and only relevant behavior that consumers perceive as involving a time-value trade-off. For that reason, we ran a crowdsourcing task asking an online sample to list behavior that involve time-value trade-offs.

The (N=49) respondents were incentivized to provide five unique, well suited examples. Many of the examples mentioned matched IPICB's existing items, such as healthy habits, buying on credit, long term investments, and studying hard for a long-term

goal, to name but a few. Other frequently mentioned examples were buying products on sale, learning to do services instead of paying for them and buying more expensive, high quality products instead of cheaper products that are to be replaced more often. None of the mentioned examples were tackling media or any other kind of subscriptions and only two examples mentioned energy efficiency.

STUDY 3

Based on Study 2 we revised the composition of the IPICB and its items. We dropped the subscales measuring preferences for energy efficient products and media subscriptions from the scale. Both subscales were not supported by the crowdsourcing task, and substantially overlapped with the consumer finance subscale, while nonoverlapping items of these scales were unrelated to the total scale. The remaining and newly added items were further streamlined to fit the following phrasing for immediate outcomes: "If X now, I would do Y instead of Z" and delayed outcomes: "If X later, I would do Y instead of Z". Please consider this newly added item from the consumer finance subscale as an example: "*If items are on sale today[next week], I would buy them as gifts for my family, instead of buying the items at full price around the holidays or their birthdays*".

Equipped with the 62-items scale (31 items in two versions) we conducted another validation and scale reduction study. In order to test the predictive validity of our scale, we recorded several relevant, self-reported behaviors and indicators of behavior (Credit Score, BMI, highest level of education, monthly income (before the pandemic), number of loans). In addition to these behaviors, we further collected several important covariates that have been associated with intertemporal preferences, and the behaviors (numeracy (Lipkus et al. 2001), impulsiveness (The Barratt Impulsiveness Scale (BIS); Patton et al., 1995), social desirability (The Balanced Inventory of Desirable Responding (BIDR); Hard et al., 2015), parents' education and average income in parent's home zip code area).

The data was collected online, recruited via Roi Rocket, in two waves, two weeks apart. The IPICB items were split between the two waves, such that only one of the two versions of each item was presented in one wave, in randomized order. We replicated the two-wave experiment twice with two independent samples of $N_{Study3a}$ = 144 and $N_{Study3b}$= 192[1] complete datasets in each sample, with 74% and 80% retention rates across the two waves, respectively.

We reduced the scales by repeatedly filtering out items that reduced the internal consistency of each subscale up until no more item could be removed. This let to 38 and 42 items in each of the samples, and 36 items that remained in the scale in both samples. The final version of the scale had excellent internal consistency for the total (Cronbach's alpha = .92) as well as the 11-item Health (Cronbach's alpha = .81), the 9-item Consumer Finance (Cronbach's alpha =.85), and the 16-item Readiness subscales (Cronbach's alpha =.84). All remaining analyses of study 3 will use this scale and the collapsed data of both samples 3a and 3b.

We first conducted a principal component analysis that was aimed at extracting three components, one for each subscale. However, all items loaded on one of the components, with all but two item loadings b > .4 suggesting a general factor without domain variability. However, it might also be the case that the psychometric structure instead is hierarchical with a general factor and domain specific sub-factors (Frey, Pedroni, Mata, Rieskamp, & Hertwig, 2017). To test this hypothesis, we compared the performance of five factor models with confirmatory factor analysis. The models con-

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1   The data collection and analysis plan of study 3b was preregistered: osf.io/v9k8c

sisted of 1) only a general factor (BIC = 35908); 2) separate factors for immediate and delayed rewards (BIC = 36436); 3) three subscale factors (BIC = 35801); 4) three subscale and one general factor (BIC = 35180); and 5) three subscale and two separate factors immediate and delayed rewards (BIC = 35174). Comparing the models BIC for fitting the data revealed that the fifth model provided the best fit to the data. However, despite the implementation as uncorrelated factors, the factor scores of the model's general factors were highly correlated (r = .98) due to the high correlation of the two different versions of each item.

In order to cut this strong association, and test the robustness of our finding we used a second approach to test IPICB's psychometric structure. Instead of comparing the models on the entire scale only, we randomly constructed 1000 sub-versions of the scale that contained each item in only one of the delay versions. For four items, only one of the versions was included in the final 36 consistent items determined above, and these items were added to each sub-version. For the remaining 16 items, either the version with immediate or delayed outcome was randomly picked. The sub-versions of the scale thus had 20 unique items, with either immediate or delayed sooner outcomes. Next, we repeated the model comparison of the different factor models, on each of the sub-versions and counted how often each factor model had the smallest BIC. In more than 87% of the sub-versions, the model with one general factor and factors for each subscale provided the best performance for fitting the data.

Second, we tested the predictive validity of the 36-item and the 20-item sub-versions for the behaviors collected in wave 1. We estimated hierarchical regression models with random effects for the sample to account for variability between the two samples 3a and 3b, and fixed effects for all covariates as well as either one of all possible combinations of the IPICB subscales, only the mean IPICB, or no subscales of the IPICB. We then compared the performance for predicting the behaviors (with BIC and R^2). Table 1 summarizes the results by reporting the best fitting model including any of the IPICB scales, and the difference in BIC and R^2 compared to the model with only covariates. For all behaviors, except for the number of loans taken in the last year adding one or multiple subscales of the IPICB increased the model's performance.

Figure 1 further shows the results of the same analyses for the 1000, 20-item subversions of IPICB. The left column shows how often which of the compared regression models yielded the smallest BIC, and the right column of the figure shows the distribution of the R^2 of the best models. Despite the smaller number of items, the results replicate the analysis with the 36-item version of the questionnaire.

STUDY 4

The results of study 3 provide strong evidence for the predictive validity of the 36-item as well as any of the shorter 20-item subversions. In study 4, we extended these results further by predicting additional, relevant behavior (Bartels, Bharti & Li, 2021) and relying on only the shorter, 20-items version of IPICB.

Three-hundred-five respondents participated in this online study, recruited via the panel provider ROI Rocket. On top of respondents' credit score and BMI, we further collected additional self-reported variables that have been proven to be predicted by intertemporal preferences in a related study (Bartels, Bharti & Li, 2021), listed in Table 1. In addition to the self-reported variables, we constructed incentive aligned titrator paradigms corresponding to each IPICB subscale domain (Bartels & Urminsky, 2011). The titrators were tailored to estimate respondents' temporal discounting for vice behavior in each domain (unhealthy restaurant, fashion shopping and

Table 1. Predictive validity of the IPICB for various behaviors on top of the covariate only model.

Outcome variable	Study 3 (36-items IPICB)				Study 4 (20-items IPICB)			
	IPICB model[a]	R^2	ΔBIC	ΔR^2	IPICB model	R^2	ΔBIC	ΔR^2
Credit score	**CF, R**	**33%**	**-25**	**12%**	**CF**	**19%**	**-17**	**10%**
BMI	**mean / H**	**13%**	**-9**	**6%**	**CF**	**6%**	**-7**	**5%**
Education	**H**	**35%**	**-5**	**3%**	-	-	-	-
Income	**H**	**18%**	**-4**	**4%**	-	-	-	-
Loans	CF	5%	7	1%	-	-	-	-

<table>
Outcome Variable
</table>

		IPICB model	R^2	ΔBIC	ΔR^2
Retirement Savings		**CF**	**25%**	**-43**	**14%**
Total debt		**CF**	**6%**	**-5**	**4%**
Late payments		CF	17%	5	<1%
Late at meetings		**H, P**	**16%**	**-6**	**5%**
Regular bedtime		CF	4%	4	<1%
Min. exercise / week		**H**	**7%**	**-9**	**5%**
Smoking		**CF**	**6%**	**-1**	**1%**
Vaccine[b]					
	Flu	**H**	**9%**	**-6**	**6%**
	Covid	**H**	**9%**	**<-1**	**2%**

Titrators

		IPICB model	R^2	ΔBIC	ΔR^2
Health[c]					
	Virtue/Vice	**mean**	**8%**	**-3**	**5%**
	K	R	6%	5	1%
Consumer Finance[d]					
	Virtue/Vice	CF	2%	4	<1%
	K	R	22%	4	<1%
Readiness[e]					
	Virtue/Vice	H	5%	3	1%
	K	R	6%	5	1%

Note. [a] IPICB model refers to the best performing model among all models with at least one of IPICB's subscale, or the mean score. CF= Consumer Finance, H = Health, R = Readiness. [b] To account for the binary variable yes = I have been or will get vaccinated or no = I will not get vaccinated, the models were fitted with a log link function. [c] Options for the health domain titrator: virtue = vouchers for *Outback Steakhouse,* an restaurant chain perceived as unhealthy; vice = vouchers for the *Jamba Juice* a restaurant chain perceived as healthy. [d] Options for the consumer finance domain titrator: virtue = vouchers for *acorn,* an online investment and saving provider; vice = vouchers for Nordstrom, and luxury fashion retailer. [e] Options for the consumer finance domain titrator: virtue = vouchers for *acorn,* an online investment and saving provider; vice = vouchers for Nordstrom, and luxury fashion retailer.
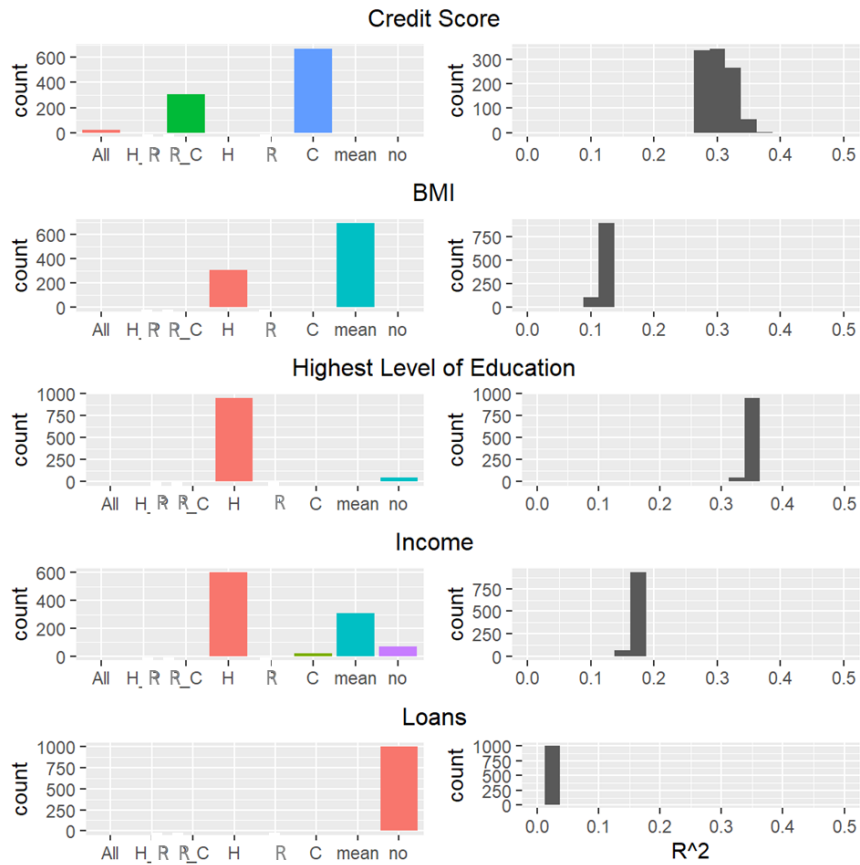
Figure 1. Results of the model comparison between regression models that included all covariates and the models including different parts of the IPICB. The left column illustrates the number of best perfoming models (smalles BIC) for fitting each of the 1000 sub-versions of IPICB. The x axis indicates the name of best performing model: all = all IPICB subscales, H_R = IPICB health and readiness subscales, R_C = IPICB readiness and consumer finance subscales, H = IPICB health subscales, C = IPICB consumer finance subscales, R = IPICB readiness subscales, no = no IPICB subscales, only covariates. The righ column illustrates the distribution of R^2, of the best performing models for fitting the subversions of IPICB.

streaming) and their subjective value for virtue (healthy restaurant, online investment and online classes) over the corresponding vice behavior, for further details see Table 1.

Similar to study 3, we then estimated regression models predicting each of the behaviors with all covariates, and any combination of the IPICB subscales, the mean IPICB value or no subscale of IPICB. Next, we compared the models based on BIC and explained variance in the outcome variable. Replicating the results from study 3, all but two of the self-reported variables were better predicted using at least one of IPICB's subscales compared to regressing on the covariates alone, taking model complexity into account.

However, the titrators were not better predicted with the IPICB, except for the subjective value of healthy over unhealthy restaurants. Investigating which covariates instead explained most of the variance in the titrator measures revealed that all discount rates K were best predicted with numeracy. The best predicting variables for the subjective values instead varied between the domain specific virtue/vice ratios.

DISCUSSION

The IPICB has high predictive validity for various relevant consumer behavior on top of highly relevant covariates. The scale's psychometric structure and the specific predictive validity of the subscales suggest the existence of a general factor of intertemporal preferences, with some domain specific variability. The scale promises to be a valuable contribution to consumer researchers' instruments that may help to close the gap between economic models of intertemporal preferences, and psychological surveys of self-regulation.

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User-Generated Content on Social Media: Values from Goals

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INTRODUCTION

Consumers invest considerable labor in creating, curating, and posting user-generated content (UGC) on social media. They spend as much time on social media platforms as they do in caring for and helping their children, spouses, and parents. However, do consumers value preserving their social media UGC for longer-term uses? In the present research, we examine the psychology of how consumers value the things they post online. Specifically, we investigate whether consumers perceive any 'enduring value' (i.e., value beyond its immediate consumption) in their UGC posted to social media. We also contrast this value with the value they attribute to similar UGC that they privately archive (e.g., in their phones, computers) but not share publicly on social media platforms.

Our results show that the content generated for sharing on social media is perceived as having inherently limited value. We explain this lower valuation with a goal-theoretic framework. Past research has shown that consumers evaluate stimuli relative to active goals, directing attention to attributes and functions compatible with the goal they are pursuing (Ferguson and Bargh 2004; Markman and Brendl 2000; Shah, Friedman, and Kruglanski 2002). We start with the assumption that UGC's creation and consumption are motivated by at least two important goals (Barasch, Zauberman, and Diehl 2018): (1) goal to share that content with others to facilitate social exchanges and (2) goal to use that content as a memory asset through which to remember experiences, accomplishments, and relationships. When the focal goal is to share the UGC with others (Harridge-March et al. 2010; Villaespesa and Wowkowych 2020), when posting on social media platforms, UGC has high immediate consumption utility, but consumers care little about its value as an enduring asset. When the focal goal of UGC is to preserve memories by archiving indexical connections with meaningful personal events (Tully and Meyvis 2017; Wallendorf and Arnould 1988; Zauberman, Ratner, and Kim 2009), its value is substantial to consumers. Across four studies, we find considerable evidentiary support that (a) consumers attribute little value to preserving their UGC on social media, and (b) a goal-theoretic framework helps explain why they value their UGC on social media less than comparable UGC they archive elsewhere.

Our first study (N=303) tested our directional prediction that consumers perceive the same kinds of UGC to have less value when they intend to post it to social media than when they intend to archive it. We compared the value of UGC to participants after they posted or archived it and restricted all comparisons to digital content in a 2(UGC intention: post, archive) X 3(UGC type: photograph, video, recipe) between-subjects design. Participants randomly assigned to a posting condition imagined posting either a digital travel photograph on Instagram, a digital video of an event with family and friends on Facebook, or a digital recipe board of weeknight dinners on Pinterest. In the archiving condition, participants imagined having saved a digital travel photograph on their computer, a digital video of an event with family and friends on their phone, or a digital recipe board of weeknight dinners on their computer. The UGC was similar in both conditions (i.e., digital travel photograph, digital video of an event with family and friends, and a digital recipe board of weeknight dinners). All participants then reported their WTP for application to restore that UGC if it was later corrupted on an analog scale with endpoints $0 and $10. As predicted, we found that the participants were willing to pay less to restore corrupted UGC posted to so-cial media (M_{WTP} = $2.74, SD = 2.99) than corrupted UGC archived on digital devices (M_{WTP} = $4.48, SD = 3.22; $F(1, 269)$ = 22.77, $p <$ .001, η_p^2 = .078). We suggest that these differences are due to the activation of different goals - posting UGC on any social media platform is less likely to activate a memory preservation goal than archiving similar UGC on a digital device, which leads consumers to value the same kinds of UGC lesser when posting than archiving it. Moreover, as all the archived content was also digital, the findings suggest that the difference between posted and archived UGC is not due to the different values ascribed to physical and digital goods (Atasoy and Morewedge 2018).

In our next set of studies, we directly tested our goal-theoretic process account. We showed that the lower value of UGC posted to social media than archived was driven by the activation of different goals. In Study 2A (N=658), participants were randomly assigned to one of three goal-priming conditions (control, sharing goal, memory preservation goal). All participants were told that they took a photograph to post on Instagram. Participants in a control condition were not given any additional information. Participants in the sharing goal-priming condition were told that they took the photograph to post on Instagram "to share with others in their network." Participants in the memory preservation goal-priming condition were told that they took the photograph to post on Instagram "to preserve it as a part of their history." All the participants then reported their WTP for the application to restore the photo, on an analog scale with endpoints $0 and $10. Analysis of variance showed a significant main effect of goal priming on WTP ($F(2,606)$ = 64.58, $p <$ .001, η_p^2 = .18). Post-hoc tests (Tukey' HSD), further, revealed that participants in the sharing goal-priming condition were not willing to pay more to restore their UGC than were participants in the control condition (M_{WTP} = $1.88, SD = 2.30 vs. M_{WTP} = $1.52, SD = 1.96; p = .331) indicating that posting UGC is more likely to activate a sharing goal. By contrast, participants in the memory preservation goal-priming condition were willing to pay 272% and 220% more to restore their UGC (M_{WTP} = $4.14, SD = 3.14) than were participants in the control and sharing goal-priming conditions, respectively ($p <$ .001).

In Study 2B (N=451), we measured endogenous activation of sharing and memory preservation goals for UGC posted to social media versus archived UGC. Participants randomly assigned to the posting condition imagined taking a photograph to post on Instagram or making a video of a bicycle ride on their vacation to post on Facebook. Participants in archiving condition imagined taking a photograph to save for their family album or making a video of a bicycle ride on their vacation to save in a '2019 folder' on their computer. To measure the activation of a sharing goal, participants reported how much they had thought about sharing their UGC on a 7-point Likert scale with endpoints, 1 = "Not at all" and 7 = "Very much." To measure the activation of a memory preservation goal, participants reported the extent to which they thought their UGC was 'proof of their past' and something that should be "preserved as part of their history" on 7-point Likert scales with endpoints, 1 = "Not at all" and 7 = "Very much." Participants reported the maximum amount of money in dollars that they would be WTP for an application that could restore their UGC items on an analog scale with endpoints, $0 and $10. As in our earlier studies, we found that participants were WTP significantly less to restore UGC they intended to post on social media (M_{WTP} = $2.10, SD_{WTP} = 2.62) than UGC they intended to ar-

chive (M_{WTP} = \$5.25, SD_{WTP} = 3.25; $F(1, 404)$ = 114.82, $p < .001$, η_p^2 = .221). In addition, participants who created UGC to post thought significantly less of their UGC as a memory asset (M = 4.03; SD = 1.70) than did those who created it with the intention of archiving it (M = 5.11; SD = 1.38; $F(1,404)$ = 50.12, $p < .001$, η_p^2 = .110). A sharing goal was more active for participants who intended to post their UGC on social media (M = 5.18; SD = 1.83) than for those who intended to archive it (M = 4.85; SD = 1.74); $F(1,404)$ = 4.19, p = .04, η_p^2 = .010). The mediation analysis produced a significant negative indirect effect of UGC intention (0 = archive, 1= post) on WTP through activation level of the memory preservation goal (b = -0.48, SE = 0.13, 95% CI = [-0.753, -0.255]). Activation level of the sharing goal did not mediate willingness to pay for the application to restore UGC (b = 0.06, SE = 0.05, 95% CI = [-0.005, 0.184]). Together, the results of these process studies (Studies 2A, 2B) suggested that posting UGC to social media was less likely to activate a memory preservation goal than archiving the same or similar content.

Finally, we found that the value of posted UGC can increase even when the context changes the active goal. In study 3 (N=404), we explored these contextual effects using a paradigm based on lawsuits by families suing platforms for access to the UGC of their relatives (Kunkle 2013; Olsen 2005). In a 2(user: self, other) × 2(life

status: living, dead) between-subjects design, participants reported their willingness to expend their money, on a sliding scale ranging from \$0 to \$50, to preserve the UGC on Instagram of one target: either their own UGC, or the UGC of their present or most recent romantic partner. To manipulate the value of their UGC as a memory asset, participants made decisions about whether to preserve that UGC either while the target was alive, or after his or her death. Suppose the value of UGC is high when the goal of memory preservation is focal. In that case, participants should ascribe higher value to their partner's UGC when that partner is not available than when the partner is available —i.e., higher when the partner is deceased than when they are living. By contrast, participants should attach similarly little value to their content, whether they are living or dead, as they should not associate the goal of preserving memories to their content in either case. Our results revealed a significant interaction effect of user and life status on WTP ($F(1,400)$ = 25.96, p <.001). We found that participants were willing to spend the most money to preserve the UGC of unavailable close others (M = \$20.64); more than available close others (M = \$7.56); and more than their own content in under either living (M = \$9.27); or dead circumstances (M = \$8.15). We also measured the extent of the activation of the memory preservation goals across all conditions and found a significant interaction

Table 1: Summary of Results

Study	Description	Tested Effects	Statistics	Interpretation
1A	UGC Shared on Social Media vs. Archived UGC	Main Effect on WTP (\$)	$(F(1, 269) = 22.77, p < .001)$.	$Mean_{post\_WTP}$ =\$\$2.74 $Mean_{archive\_WTP}$ =\$4.48
2A	Priming Sharing vs. Memory Preservation Goals	Main Effect of priming goals on WTP (\$)	$F(2,603) =0.48, p =0.622$	$Mean_{control\_WTP}$ =\$1.52 $Mean_{sharing\_WTP}$ =\$1.88 $Mean_{memory\_WTP}$ =\$4.14
2B	Mediation Via Memory Preservation Goals	Main Effect on WTP (\$)	$F(1, 404) = 114.82, p < .001$	$Mean_{post\_WTP}$ =\$\$2.10 $Mean_{archive\_WTP}$ =\$5.25
		Activation of the sharing goal		$Mean_{post}$ =5.18 $Mean_{acrchive}$ =4.85
		Activation of the memory preservation goal		$Mean_{post}$ =4.03 $Mean_{acrchive}$ =5.11
		Mediation of WTP via memory preservation goal	(95% CI: -0.753, -0.255)	
		Mediation of WTP via sharing goal	(95% CI = -0.005, 0.184]	
3	Value of Social Media as a Digital Legacy	Significant Interaction Effect of (user: self vs. others; between subjects) X 2(life status: living vs. after death on WTP (\$)	$F(1,400) =25.96, p <.001$	$Mean_{self-living}$ =9.27 $Mean_{self-dead}$ =8.16 $Mean_{others-living}$ =7.56 $Mean_{others-dead}$ =20.64
		Significant Interaction Effect of (user: self vs. others; between subjects) X 2(life status: living vs. after death on Memory Preservation Goal	$F(1,400) =7.95, p=.005$	$Mean_{self-living}$ =3.75 $Mean_{self-dead}$ =4.00 $Mean_{others-living}$ =3.93 $Mean_{others-dead}$ =5.20

effect of user and life status ($F(1,400) = 7.95$, $p =.005$). We find that that activation of a memory preservation goal for the UGC of unavailable close others (Mean = 5.20) was more than that of the available close others ($M = 3.93$) and more than their own UGC in under either living ($M = 3.75$) or dead circumstances ($M = 4.00$). These results suggest that when the UGC served as a meaningful reminder of a close other who had passed away, participants attributed more value to a user's posted UGC. These effects were independent of how often participants created or consumed UGC on these platforms and the extent to which they believed their content to reflect their identity accurately. It is important to note that mortality salience did not drive the results; participants were WTP almost nothing to preserve their UGC after their own death.

This paper adds to a nascent line of research exploring how motives within the consumer can determine the value ascribed to novel digital goods with no analog in the physical world (for a review, see Morewedge, Monga, Palmatier, Shu, and Small, 2021). Our results show that the goal platforms fulfill for consumers may dictate which revenue model is more appealing to consumers. Social media platforms that emphasize sharing UGC have mostly adopted a digital advertisement revenue model and provide consumers access to the platform for free. In contrast, platforms attempting to monetize by charging users a monthly subscription fee, such as google photos, emphasize archiving content for preserving memories (google photos says 'a home for your memories'). Lastly, our findings inform debates surrounding digital remains issues. The issue of posthumous ownership of user-generated content on social media platforms will only become more complex as the number of deceased users on these platforms rise (Ambrosino 2015; Brown 2016). As many as 4.9 billion Facebook users will die by 2100, assuming the social media platform continues to expand at its current rate (Öhman and Watson 2019). Consumers enter into hazy laws related to ownership of their digitized assets when participating on social media platforms. Our findings illustrate how active goals modulate new digital objects' value and provide insights for firms, policymakers, and the law seeking to understand when consumers will feel ownership for the enormous trove of content they generate.

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What Makes Robots Appear to Have a Mind? Customer Reaction to Robot Anthropomorphism in Frontline Service

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INTRODUCTION

Advances in Artificial Intelligence are vastly extending the capabilities of machines. Their deployment in frontline service leads to new service archetypes where employees can be substituted or augmented by these technologies (De Keyser et al. 2019). Indeed, AI systems are able to complete numerous tasks ranging from basic ones requiring mechanical intelligence to more sophisticated jobs requiring empathetic intelligence (Huang and Rust 2018). Even if we expect in the near future a large deployment of robots capable of emotional intelligence in service settings (Huang and Rust 2021), they will hardly replace the human touch in tasks with significant ethical implications (Pagani and Champion 2020). For this reason, it is essential to examine the customer emotional and behavioral response to robots capable of or appearing to have feeling abilities. In this research, we contribute to filling this gap by examining a basic component of robots' perceived emotional intelligence: the robot's perceived ability to have feelings. Knowing that users make different inferences about the robot cognitive and emotional abilities from the robot's physical appearance, this research investigates the antecedent anthropomorphic features that lead customers to see robots with human-like mind. This latter is perceived through two dimensions: experience abilities (capacity to feel and sense) and agency (capacity to think and do). Considering the fundamental role of facial expressions in social interactions (Ekman and Keltner 1997; Frith 2009), we examine the robot face specifically as a predictor of agency and experience abilities. We also examine the consequent customer emotional response (irritation) and behavioral response (intention to use the robot in a service environment). We inspect these effects in the absence of body (study1), and in the presence of body (study2). We find that the face generates a perception of the robot agency only in the presence of body, while it generates a perception of the robot experience abilities in both absence and presence of body. We confirm this counterintuitive finding by manipulating the robot body in study3. To the best of our knowledge, the effects of these specific anthropomorphic dimensions on mind perception have not been examined separately.

LITERATURE REVIEW

Questions about whether non-human entities may have human-like minds have been of the interest of many philosophers such as Dennett (1996). Addressing this question implies the identification of an in-group, a class of mind-havers, which may include non-human entities such as an animal or a personal engine. More recent research suggests that mind perception can be decomposed into two dimensions: agency and experience (Gray, Gray, and Wegner 2007). Agency refers to the capacity to act and do, and to the related cognitive capacities such as communication, memory abilities, and exercising self-control (Gray and Wegner 2012). Experience refers to experience abilities and capacity to feel and sense such as feeling pain, fear, desire and joy. Assigning agency and experience are common attributions in anthropomorphism, defined as the tendency to ascribe humanlike characteristics to non-human entities such as objects (Epley et al. 2007, 2008; Waytz et al. 2010) or God (Guthrie 1995; Barrett et al. 1996). The intent is to facilitate rationalizing the object's actions in a particular social context (Duffy 2003). This phenomenon corresponds to the intentional stance strategy introduced by Dennett

(1996), used in interpreting, explaining, and predicting the behavior of non-human entities. This means to consider the object as a rational agent with beliefs and desire, capable of controlling its behavior according to its own mental states; by applying human-centered anthropomorphism to make sense of the object behavior from a human point of view, instead of an object-oriented anthropomorphism which attempts to explore reality from the object perspective (Hoffman and Novak 2018). It is acknowledged that the design plays a major role in attributing mental life to inert objects. This even applies to geometric shapes displayed on a device screen, whose position and movement can elicit a perception of animacy (Scholl and Tremoulet 2000). Robots are no exception to this phenomenon, people are more likely to perceive robots with human-like appearance with more humanness. The robot anthropomorphic design influences its likeability and trustworthiness (Castro-González et al. 2016; Mathur and Reichling 2016), its perceived sociability and the intention to rely on its guidance (Powers and Kiesler 2006), its perceived intelligence and hostility (Sims et al. 2005), and its influence on human partners in decision-making tasks (Burgoon et al. 2000).

If existing research brought to light how the users' attributions depend on the robot's anthropomorphic appearance, to the best of our knowledge, the specific anthropomorphic effects have not been explored. Previous research examined the robot's physical anthropomorphism as a one-dimension construct, while it can be decomposed in three distinct categories: surface look, body-manipulators, and facial features (Phillips et al. 2018). Surface features include eyelashes, head hair, skin, gender, eyebrows, and apparel; body-manipulators include hands, arms, torso, fingers, and legs; facial features comprise face, eyes, head, and mouth. We focus on two specific anthropomorphic feature: facial features and body. The Theory of Mind, which describes the process of attributing mental states such as cognitions, intentions, and desire to others (Baron-Cohen, Wheelwright, and Jolliffe 1997) states that facial features are crucial in attributing mind to others. This applies also to robots as displaying a face on a screen robot induces a perception of a human-like mind (Broadbent et al. 2013), and the display of eye gaze in robots triggers a perception of the robot as having mental states (Fong, Nourbakhsh, and Dautenhahn 2003). Robot humanlike appearance was also found to influence the robot's moral judgment: humanoid robots were blamed following the same moral judgments patterns applied to humans, while mechanical robots were blamed differently (Malle et al. 2016). Subsequently, we propose:

Hypothesis 1:   *A robot with human-like face (vs control) elicits a higher perception of experience abilities.*

Hypothesis 2:   *A robot with human-like face (vs control) generates a higher perception of agency.*

Experience abilities are considered in different studies as a discriminating factor between humans, as an in-group, and other species as out-group (Chalmers 2003; Dennett 1996; Descartes 1641; Haslam 2006). Robots with experience abilities (Haslam 2006), can be perceived as blurring the intergroup boundaries between the humans and machines, and thus trigger irritation. Research from social categorization and social identity specify that blurring intergroup

boundaries represent a threat to the distinctiveness motive and to the group member's identity (Crisp and Hewstone 2006; Dovidio et al. 1998; Hall et al. 2009; Hornsey and Hogg 2000). Appel et al. (2020) found that robots with feeling abilities create higher eeriness than the robots with agency, and this latter elicits higher eeriness than the absence of a perceived mind in the robot. Furthermore, the uncanny valley theory (Mori 1970) confirms that displaying robots with feelings can violate deep-rooted expectancies (Olson et al. 1996) about humans and machines and generate irritation. Thus, we propose:

Hypothesis 3: *The perception of a robot with high experience abilities generates feelings of irritation.*

Hypothesis 4: *The more customers experience irritation, the less is the intention to use the robot in service settings.*

Gray et al. (2007) show that robots are traditionally categorized among entities with a moderate level of agency but without experience abilities. People prefer robots capable of doing things rather than robots capable of feelings (Gray et al. 2012). Moreover, we know from the Technology Acceptance Model (TAM) literature (Davis, Bagozzi, and Warshaw 1989) and its theoretical extension (TAM2) (Venkatesh and Davis 2000) that the perceived usefulness is a predictor of technology adoption. Therefore we propose:

Hypothesis 5: *The more a robot is perceived with agency, the greater is the intention to use the robot in the service setting.*

STUDY 1

Method

Participants were asked to imagine that they were visiting the business school campus, looking for information about the school programs and activities. They were asked to imagine that they would find a service robot when they arrive to the reception desk. We used different robot's designs to ensure that respondents reacted to the specific anthropomorphic dimension we were manipulating and not to other design features. We selected robots from the ABOT database (Phillips et al., 2018) for each experimental condition as follows: in the absence of face or body, robots selected have a face score

or a body score less than 30 out of 100, in the presence of face or body-manipulators, robots selected have a body score or a face score more than 60 out of 100. In study1 we examine the effects of face in the absence of body-manipulators. 77 participants (46% female, 54% male, 85% 21-34) were randomly assigned to robot with face (vs control); all the seven robots did not display body-manipulators. Manipulation checks confirmed the manipulation was successful. All constructs were measured with 7-point Likert scales. Experience abilities were measured with eleven items ($\alpha=0.94$) (i.e. capacity to feel pain; pleasure) (Gray et al. 2011), and agency was measured with seven items ($\alpha=0.81$) (i.e. capacity to exercise self-control; plan actions) (Gray et al. 2011). Irritation was measured with three items ($\alpha=0.89$) (i.e. uneasy; unnerved) (Gray and Wegner 2012). The intention to use the robot was adapted from patronage intention scale (Wang et al. 2007) with three items ($\alpha=0.887$), (i.e. the likelihood that I would use this robot in a service environment as reception desks is very high).

Results

We have used customized model of Hayes's (2017) PROCESS macro for SPSS (version 3) with 5000 bootstap sample to test the conceptual model. The unstandardized regression weights for all estimated paths in the model are presented in Table1. Face elicits perceived experience (b=0.812, SE=0.276, p=0.004<0.05, 95% CI = [0.262; 1.362]), but it does not generate perceived agency (b=0.408, SE=0.280, p=0.150>0.05; 95% CI = [-0.150; 0.966]). Perceived experience creates irritation (b=0.412, SE=0.167, p=0.016<0.05, 95% CI = [0.079; 0.745]), and irritation negatively impacts intention to use the robot (b=-0.528, SE=0.098, p<0.001, 95% CI = [-0.722; --0.333]). The indirect effect of face on intention through perceived experience abilities and irritation is negative (b=-0.177, 95% CI = [-0.401; -0.023]). Perceived experience on intention to use the robot is not significant (b=0.167, SE=0.159, p=0.302>0.05; 95% CI = [-0.151; 0.481]), while the indirect effect via irritation is negative and significant (b=-0.177, 95% CI = [-0.401; -0.023]). Perceived agency increases the intention to use the robot (b=0.468, SE=0.158, p=0.004<0.05; 95% CI = [0.154; 0.783]), while the indirect effect of face on intention through perceived agency is not significant (b=0.134, 95% CI = [-0.121; 0.452]).

Table 1: Summary of Empirical Results Across Studies

			Direct effects on:		Indirect effects on Intention via:	
			Experience	Agency	Experience & Irritation	Agency
Study	Independent variables	Control	H1	H2	H3 & H4	H5
1	Face	Absence of Body	**.812***	.408	**-0.177***	0.134
2	Face	Presence of Body	**.621***	**1.283*****	-0.061	**0.467***
3	Body	Presence of Face	.163	**.633***	-0.020	**0.405***

Unstandardized regression weights

*** p<.000, ** p<.001, * p<.05

STUDY 2

Method

In study2 we examine the effects of face in the presence of body-manipulators. 72 participants (43% female, 57% male; 88% 21-34) recruited following similar snowball approach were assigned to a robot with face (vs control). Participants imagined interacting with it in business school reception desk. Seven robots were selected following the same procedure in study1. All seven robots in this study have body-manipulators. The dependent variables include: experience abilities (α=0.925), agency (α=0.749), irritation (α=0.823), intention to use the robot (α=0.811).

Results

Face creates a perception of experience (b=0.621, SE=0.307, p=0.008<0.05, 95% CI = [0.007; 1.234]), and agency (b=1.283, SE=0.240, p<0.001; 95% CI = [0.805; 1.761]). The effect of perceived experience abilities on irritation is not significant (b=0.276, SE=0.142, p=0.055>0.05, 95% CI = [-0.007; 0.559], includes 0). The indirect effect of face on intention through perceived experience abilities and irritation is not significant (b=-0.061, SE=0.050, 95% CI = [-0.187; 0.006]). Perceived agency increases the intention to use the robot is significant (b=0.468, SE=0.158, p=0.004<0.05; 95% CI = [0.154; 0.783]). The indirect effect of face on intention through perceived agency is significant (b=0.467, SE=0.235, 95% CI = [0.016; 0.935]).

STUDY 3

Method

In study3 we examine the effect of the body in robots displaying a face in order to explain study1 and study2 counterintuitive results. 83 participants (46% female, 54% male; 88% 21-34) recruited following similar snowball approach were assigned to a robot with body features (vs control). Participants had to imagine an interaction with a robot in business school reception desk. Eight robots were selected following the same procedure in study1. All eight robots in this study display face. The dependent variables include: experience abilities (α=0.937), agency (α=0.717), Irritation (α=0.845), the intention to use the robot (α=0.869).

Results

The body does not elicit perceived experience abilities (b=0.163, SE=0.308, p=0.598>0.05, 95% CI = [-0.450; 0.776], includes 0), but it generates perceived agency (b=0.267, SE=0.240, p<0.05; 95% CI = [0.202; 1.064]). Perceived experience does not create irritation (b=0.258, SE=0.131, p=0.053>0.05, 95% CI = [-0.003; 0.519], includes 0). The indirect effect of body on intention through perceived experience abilities and irritation is not significant (b=-0.020, SE=0.043, 95% CI = [-0.114; 0.069], includes 0). Agency increases the intention to use the robot (b=0.640, SE=0.167, p<0.001, 95% CI = [0.307; 0.973]). The indirect effect of body on intention through perceived agency is significant (b=0.405, SE=0.158, 95% CI = [0.123; 0.741])

DISCUSSION

Unlike previous research on mind perception, where the general concept of the robot human-like appearance was manipulated broadly, we examined the distinct effects of the anthropomorphic factors: face and body. We find that face generates a perception of the robot's experience abilities regardless of the presence or absence of body features. Contrary to what was expected, facial features do not elicit a perception of agency in the absence of body. This finding can be explained by the fact that a robot without a body is perceived as a toy or as an incomplete human. Therefore, customers fail to perceive its utility or capacity to accomplish certain tasks. Displaying face and body on robots generates a perception of both agency and experience abilities. Surprisingly, perceived experience in the presence of body features does not create irritation. Similarly to research on algorithm adoption (Castelo et al. 2019), we find that when the robot is perceived as competent, the feeling of unease is attenuated. We confirm that effects of perceived usefulness from Technology Acceptance Model (Davis, Bagozzi, and Warshaw 1989) remain valid for service robots; the robot perceived agency increases the intention to use the robot in a service setting. From a design perspective, if designers decide to display a face or a body on a robot, they should know that customers will expect that the robot is capable of specific abilities. Thus, the human-robot interaction should be in line with the perceived capabilities conveyed by the design. Otherwise, the risk of expectation gap and dissatisfaction may be higher for the end-user. Implementing robots that have or appear to have feelings in service settings with no human supervision, could not only be rejected by customers, but may have worse consequences. Knowing that affective abilities are more central to the concept of humanness than cognitive abilities (Haslam et al. 2005), we expect that customers will not only refuse to use these robots but much more than this, they can harm these machines. Whitby (2008) brought to light the evidence of robots abuse by humans when they display physical or behavioral similarity with humans. Future research should investigate assigning feelings to robots as an antecedent to hostile attitude toward robots.

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Show Me You or The Goods? Effect of Image Content on Review Helpfulness

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INTRODUCTION

Imagine that you saw three reviews while researching a restaurant. Three friends all visited and reviewed the same restaurant. Anne only wrote about the experience but Benson and Claire both uploaded an image with their reviews. Benson's image showed his fellow diners enjoying drinks after their meal, Claire's image featured a close-up of her drink. Which review will you find more helpful, assuming that all other review elements are identical?

Prior work has examined what makes a review helpful (Mudambi and Schuff 2010; Nguyen et al. 2020; Pan and Zhang 2011; Yin, Bond, and Zhang 2014), yet few looked beyond rating and text. The images accompanying the review have received limited attention while access to digital and smartphone cameras means images in online reviews have proliferated. In this work, we use mixed-methods to investigate how images in online reviews impact consumers' evaluation of review quality. We measure review quality by the number of helpfulness votes. Such helpfulness is rated by readers, i.e., the users of reviews. Thus, review helpfulness is associated with review quality in the sense that it helps the reader with their product search.

Our research contributes to the literature in several important ways. First, we add to the burgeoning literature on online word of mouth (WOM). While prior work has mainly focused on text and ratings of a review (e.g., Berger, Sorensen, and Rasmussen 2010; Büschken and Allenby 2016), we examine how images, a form of non-verbal communication, influence consumers. Given the rapid increase in images accompanying reviews, it is timely that we expand the current knowledge on online WOM by examining the effect of images and image content on review helpfulness. Second, our study investigates the differential impact of image across purchase domains (experiential vs material). Importantly, our paper demonstrates that consumer preference for image content also differs across product domains. While prior work suggests that reviews for experiential purchases are less helpful than those for material purchases (Dai, Chan, and Mogilner 2020), we show that this effect is more nuanced. Specifically, including images of person (rather than the product) can make the review more helpful for experiential purchases than for material purchases.

BACKGROUND AND THEORY DEVELOPMENT

With the prevalence of online reviews, consumers are often overwhelmed by the seemingly endless streams of information on review platforms. As such, consumers use review helpfulness votes, a peer-rating mechanism, to help them identify the most important reviews (Jones et al. 2004). Platforms (e.g., Amazon) also adopt consumer helpfulness votes in their algorithms to rank reviews (Sipos et al. 2014). As a result, helpful reviews are weighted more heavily in purchase decisions (Chen et al. 2008). Our research proposes a novel factor that affects how consumer evaluate helpfulness – the review's images.

Visual information has always been important in marketing — image content can significantly impact user engagement (Li, Shi, and Wang 2019) and appropriate image use helps increase brand perception (Dzyabura and Peres 2019; Liu et al. 2020). Compared to text, images are more easily understood and evoke the use of mental imagery (Childers and Houston 1984). Therefore, we posit that including images in a review can increase its perceived helpfulness.

Two important factors must be considered when assessing the helpfulness of images in reviews, image content and the purchase type.

First, different image contents provide different information about the purchase. Intuitively, an image of a chair can convey information about the physical attributes of the product, whereas an image of a person cannot convey that same information. Second, a plethora of research suggests that consumers exhibit different purchase behaviors when making experiential and material purchases (e.g., Caprariello and Reis 2013; Carter and Gilovich 2012; Gilovich et al. 2015). While experiential purchases are "made with the primary intention of acquiring a life experience" (e.g., movies and concert), material purchases are "made with the primary intention of acquiring a material good" (e.g., camera, coffee mug) (Van Boven and Gilovich 2003). We argue that, depending on the purchase type, the type of images included may influence how helpful a review is. Notably, when a product is depicted, consumers can extract information about its physical features. For example, the product dimensions or whether the material looks sturdy. Such information is useful when quality depends on assessments of the product tangible attributes (Dai et al. 2020). However, for an experiential purchase, a consumer's judgment of quality depends upon more subjective, holistic judgments. Therefore, the same image that only depicts a product might be less helpful because comparisons about the whole experience are more difficult to make. Compared to making a material purchase, where consumers often compare feature-by-feature, assessment of experiential purchases is more holistic (Gilovich and Gallo 2020) and people choose more intuitively. Thus, when making an material purchase decision, reviews that include images of a person (compared to a product) could be perceived as less helpful because there is a mismatch in processing style (Schwarz 2004).

STUDY SUMMARY

Three studies test our predictions. We first employ an event study to examine the importance of images in reviews. Taking advantage of an exogenous event (the shutdown of the image uploading feature on Amazon), we compare outcomes with and without the event and take the difference as the treatment effect. We demonstrate that images do indeed make reviews more helpful and that images are especially helpful for reviews with longer text. Specifically, our results show that the image uploading feature increase review helpfulness ($\beta = -.015$, $p < 0.05$). Further, additional analysis reveals that images complement the text ($\beta = -.001$, $p < .001$), such that reviews with longer texts became more helpful. This event study allows us to suggest a direct relationship between the presence of images and review with real-world support.

In Study 2, we use field data from Yelp and Amazon to examine image content's impact on evaluations of review helpfulness. Specifically, we see the impact on experiential or material purchases. We also examine the interaction between image and text, and image and rating. We first employ a neural network classification method to analyze the content of digital images attached to consumer reviews.

We find that, first, the number of images shared has a significant positive effect on review helpfulness, for both experiential ($\beta_{\text{Image Count}} = .32$, $p < .001$) and material purchases ($\beta_{\text{Image Count}} = .82$, $p < .001$). More images make for a better review. The content of the images, however, also matters. For both experiential and material purchases, images of a product are positively associated with review helpfulness. ($\beta_{\text{Image of Product; Experiential}} = .093$, $p < .001$; $\beta_{\text{Image of Product; Material}} = 1.91$, $p < .001$). However, images of a person are only positively correlated with review helpfulness for experiential purchases ($\beta_{\text{Image of Person; Experiential}} = .252$, $p < .05$).

Showing an image of a person in reviews for material goods is not helpful ($\beta_{Image\ of\ Person;\ Material}$ = .66, $p > .1$).

The use of different platforms in study 2 raised the possibility that platform features unconnected to our theory drove the results. To alleviate this concern, we use experimental methods in study 3 to test the Hypothesis that we tested with secondary data in study 2. These studies focus on understanding whether image content, specifically whether the image contains a product or a person, exerts differential effects on review helpfulness depending on the purchase type, experiential or material. Furthermore, we also examine the underlying mechanism that could help explain these effects by looking at how participants processed information.

In study 3, a total of 398 participants (M_{age} = 26.08, 8% female) completed the study on Prolific in exchange for compensation of £1. We used a 2 (purchase type: experiential vs. material) x 2 (image content: product vs. person) between-subjects design in this experiment. Unlike in the empirical studies, we kept the purchase consistent across both the material and experiential conditions. We followed prior work to frame whether the purchase was material or experiential (Bastos and Brucks 2017). All participants were instructed to imagine themselves reading a review for a grill. After reading the framing manipulations, participants were shown a review. For those in the product image condition, participants viewed an image of a BBQ. For those in the person image condition, participants saw an image of a woman cooking at a BBQ grill. To control for the effect of text length, we ensured that the text portion of the review contained the same content across conditions. After participants were shown the review, they were then asked to indicate how helpful the review was on a seven-point Likert scale: "Do you think that overall this review is helpful/useful/informative?", 1 = "not at all," 7 = "very much"; α = .85 (adapted from Study 5, Moore 2015). To test the underlying mechanism, we ask participants to evaluate the extent to which they perceived the grill as an integrated entity: "To what extent did you view the grill as (1 = a bundle of attributes, 7 = an integrated entity)?"(Huang, Wong and Wan 2019). Finally, participants were shown definitions of experiential and material purchases and were asked to complete a manipulation check about whether they perceived the purchase as experiential or material ("Thinking back to the review you read about, to what extent does the decision seem like..." 1 = "definitely an experiential purchase," 11 = "definitely a material purchase").

We found no significant main effect of image content on perceived helpfulness ($F(1, 396)$ = .11, p =.74), but a significant main effect of purchase type on perceived helpfulness ($F(1, 396)$ = 10.96, p = .001), such that on average, those in the material condition (M = 2.64, SD = 1.25) found the review to be less helpful than those who were in the experiential condition (M = 3.06, SD = 1.25). More importantly, we found a significant interaction between image content and purchase type ($F(1, 396)$ = 7.28, p =.007). In the material purchase condition, those who saw a review containing a product image (M = 2.83, SD = 1.34) found the review to be more helpful than those who viewed a person image (M = 2.45, SD = 1.14, $F(1, 396)$ = 4.67, p = .031). In the experiential condition, this pattern was reversed, such that those who saw a review containing a person image (M = 3.20, SD = 1.23) found the review to be marginally more helpful than those who viewed a product image (M = 2.90, SD = 1.23, $F(1, 396)$ = 2.75, p =.098).

To understand the mechanism that drove this pattern of results, we conduct a moderated mediation analysis (Model 14; Hayes 2017, with 5000 bootstraps). We use photo content as the independent variable, whether participants saw the purchase as an integrated entity as the mediator, purchase type as the moderator, and review helpfulness as the dependent variable. Results reveal a marginally significant interaction between the purchase type and whether participants viewed the purchase as an integrated entity (B = -.15, SE = .09, p = .08). In particular, the indirect effect of photo type on review helpfulness, via

product perception, was significant for material purchases (B = -.085, SE = .05, 95% CI = [-.1927, -.0017]) but not for experiential purchases (B = -.043, SE = .03, 95% CI = [-.1052, .0027]).

GENERAL DISCUSSION

With rapid technological advancement, sharing images has become commonplace. Visual information is potentially more engaging than texts and star ratings because it is easily processed (Lurie and Mason 2007). Indeed, recent work examining the role of visual information and social media engagement shows that the presence of images can enhance consumers' engagement with the platform (Li, Shi, and Wang 2019). This is especially relevant given that work has suggested that consumers have decreasing attention spans. The average attention span was reported to have dropped from 12 seconds in 2000 to just 8.25 seconds in 2013 (Gausby 2015). Thus, visual information is an attractive option given the risk of information overload in the digital space (Bawden and Robinson 2009), making it even more critical to understand the role of image in online reviews.

We contribute to the literature in several ways. First, we add to the online word of mouth literature by identifying a critical, but understudied aspect of reviews, namely, the role of images and image content on the helpfulness of online reviews. Past work has focused on how textual content and ratings shape the helpfulness of reviews. However, advances in smart-phone technology and the availability of fast cellular networks have made taking and uploading images increasingly easy. Because images are more concrete and easily processed, they provide information to a review that goes well beyond the text.

Second, we also contribute to the experiential vs. material purchase literature by identifying how the content of the images shared can have a differential impact on the consumer depending on whether the purchase is material or experiential. While prior work has identified that consumers find reviews for experiential purchases less helpful than those for material purchases (Dai, Chan, and Mogilner 2020), we show that reviews for experiential purchases can be more helpful when an image of a person, rather than a product, is included. This helps to deepen our understanding about how consumers react to reviews.

Our results have several practical implications. First, our findings provide important implications for user generated content systems aiming to help consumers. We suggest what may help determine review helpfulness. This will allow platforms to optimize incentives to encourage high-quality reviews. For example, platforms can improve review quality by rewarding reviewers that post images, and the reward's size may depend upon the image content. Indeed, Google's Local Guides uses points to encourage the uploading of images to reviews —a text rating gives 1 point but uploading an image gives the reviewer 5 points, allowing the reviewer to move to the next rank more quickly (Google. com 2020). In addition to implementing a points system, it is also easy to imagine how a platform might encourage the most helpful reviews. For example, they might say "post a picture of the product in your kitchen" for material goods like a kitchen chair or "post a picture of yourself at the restaurant" for experiential purchases.

Second, our research offers insights into how review sites could improve algorithms that rank reviews. Reviews containing especially useful images might be featured earlier on the page to help consumers find relevant information.

Third, our results shed light on how businesses could better manage reputation. For example, managers may offer incentives to customers to encourage them to post helpful images. Finally, our research can help the reviewers themselves improve their review quality. Being helpful is a social currency, many reviewers, whether for altruistic or self-promotion reasons, will find our advice useful in improving the service they provide to other consumers with their reviews.

Study	Main Findings
1	Image uploading feature increase review helpfulness (β = -.015, $p < 0.05$)
2	Number of images shared has a significant positive effect on review helpfulness, for both experiential ($_{\text{Image Count}}$ = .32, $p < .001$) and material purchases ($_{\text{Image Count}}$ = .82, $p < .001$) Images of a product are positively associated with review helpfulness. ($_{\text{Image of Product ; Experiential}}$ = .093, $p < .001$; $_{\text{Image of Product; Material}}$ = 1.91, $p < .001$). Images of a person are only positively correlated with review helpfulness for experiential purchases ($_{\text{Image of Person; Experiential}}$ = .252, $p < .05$).
3	Significant interaction between image content and purchase type ($F(1, 396)$ = 7.28, p =.007). Material condition: review containing a product image (M = 2.83, SD = 1.34) was more helpful than review containing person image (M = 2.45, SD = 1.14, $F(1, 396)$ = 4.67, p = .031). Experiential condition: review containing a person image (M = 3.20, SD = 1.23) was marginally more helpful than a product image (M = 2.90, SD = 1.23, $F(1, 396)$ = 2.75, p =.098).

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Gender Stereotypes Be Gone: Creating Marketspace Inclusivity

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INTRODUCTION

When purchasing clothes, men go to the "Men's section" and women go to the "Women's section." It's simple; but not for Alex. Purchase encounters are anxiety-eliciting events for Alex that often end in tears of frustration shed in quiet solitude at home. "Why can't it feel simple for me like everyone else" thought Alex. Externally, Alex possesses a male body, but on the inside a feminine soul. Alex can't bear selecting men's clothing (and products) knowing and feeling that her focus should be on selecting feminine attire. Reinforcing instore signage, clerks continually compound the problem when they steer Alex to the Men's section, where she knows that she doesn't belong. Alex knows it is all wrong – not only for her, but for virtually all her transgender friends, who similarly experience the pain, frustration and hurt associated with gender stereotyping – a fixture in most marketspaces, especially for products oriented to particular sexes.

Alex is transgender (trans); people whose gender identity is different from the gender they were assigned at birth, which is determined by bodily appearance based primarily on genitalia (Tannehill 2019). It's estimated that the number of transgender adults has significantly increased over the past decade, with a current best estimate of 390 per 100,000 adults (one in every 250 adults), or almost 1 million Americans, with greater numbers expected in the future as more precise surveying occurs (Meerwijk and Sevelius 2017). This is a substantial consideration that must be recognized and addressed in the consumer behavior (CB) discipline.

Sadly, as illustrated in the opening scenario, much psychological trauma and pain can result from gender stereotyping and compromised marketspace inclusivity. Resultantly, important CB research questions emerge. How can organizations avoid gender stereotyping? What actions can organizations take to be more inclusive of the trans community?

The extant CB literature, though strong in many areas, gives insufficient attention to the important and burgeoning subject of gender-related scholarship. This is not surprising given that scholars have only recently begun investigating this subject. Conceptual boundaries vary, religious beliefs are impactful, and it has become politically charged. Notwithstanding, motivating our research, we address the calls for research into this domain by heeding the influential recommendations from CB gender researchers such as: Steinfield et al. (2019a, 2019b, 2019c, 2019d), Hutton (2015, 2019), Takar and Pemberton (2019), and others. Additionally, we recognize and address the important observation made by Coffin, Eichert and Nolke (2019) that suggests that transgenderism from the perspective of consumer wellbeing has largely remained ignored.

We address the aforementioned research questions, inductively, by employing ethnographic research with transgender informants. Using a participant-observer approach, followed by a series of depth interviews, major themes emerge – notably, the criticality of "safe-space" – that yield key insights into the role of gender and dangers of gender stereotyping. These insights are in turn submitted as implications that can be used by organizations (not-for-profit organizations, retailers, services, restaurants, etc.) to create an inclusive marketspace – a safe-place, free of gender stereotyping.

The present research is positioned within the limited, but burgeoning, CB literature on gender and consumer wellbeing. In so doing, several key contributions are advanced: we develop a practical set of guidelines for organizations; we provide recommendations for implementation (of the guidelines); and importantly, from a theoretical perspective, the CB literature is enriched as theory from other disciplines is employed. To inform the present work, empirical research from: transgender studies, queer studies, feminism, sociology, social psychology, marketing, and CB is employed.

THEORETICAL UNDERPINNINGS

We begin by considering the concept of gender – what it is and what it is not. Traditional approaches have conflated it with sex (female/male); we do not – gender follows sex. Gender has been assumed to be stable; we do not make this assumption – gender is fluid. Gender has been viewed as being binary entrenched; we do not make this assertion. Our research is informed by the perspective that gender is not a static, nor a binary condition. Gender is fluid, complex, and nonbinary (Herdt 1996). The scholarship of gender within the CB discipline is in its nascent stages, where researchers are only beginning to examine its relevance and complexities.

Transgender is a term that has been defined in a variety of ways throughout academic scholarship (Tannehill 2019). Although the plethora of existing definitions have nuanced variations, most agree that transgender is an umbrella term that is expansive and encompasses a variety of gender identities beyond the binary of male and female (Williams 2014). We adopt the perspective of Norman (2017) who defines it as, "a person whose self-identity does not correspond to the gender linked with their biological sex and/or their initial gender role, or who experiences dysphoria in conforming to conventional notions of a male or female binary gender role" (xiii).

The separation between biological sex and gender identity is a foundational concept. The French philosopher Simone de Beauvoir famously proclaimed distinction between sex and gender in 1949 by stating, "one is not born, but rather becomes" (de Beauvoir 2010, 238). Notably, within the feminist literature in response to de Beauvoir was Rubin's (1975, 159) creation of the "sex/gender system" to explain that sex is what one is born with while gender is what one becomes (Parker 2011). Further Parker (2011, 157) stated, "feminists … use the terms female and male to refer to sex, and the terms feminine and masculine to refer to gender." Reinforcing this notion, Butler (1986, 35) claimed that this sex/gender distinction is "crucial to the long-standing feminist effort to debunk the claim that anatomy is destiny; sex is understood to be the invariant, anatomically distinct, and factic aspects of the female body, whereas gender is the cultural meaning and form that that body acquires, the variable modes of that body's acculturation." Further, Butler (1986) emphasized that gender is not only a cultural construction imposed upon identity, but it is a process of constructing ourselves. This notion of "becoming" is a significant theme throughout transgender literature; cis and trans people go through individual processes of *becoming* their gender (Garner 2014).

For Butler (1986), gender is not a costume that one could choose to wear. It's a repetitive system of norms that is reproduced across time and culture, which is what gives meaning to "masculine" and "feminine" in society. It is Butler's use of the transgender subject to illustrate gender performativity that causes contention among trans scholars. Prosser (2006, 258) asserted that foundational texts of queer studies are "crucially dependent on the figure of transgender" and suggested that Butler's implication that transgender identity is

queer and therefore, problematic. Despite the criticism of Butler's work, scholarship generally agrees that her literature advanced academia in a way that created space for transgender studies and allowed it to become oriented in existing research.

Much of the literature in this domain builds on Butler's notion of gender performativity to explain how transgender research examines how trans bodies are oriented in space and time while analyzing what kind of meaning is imposed upon a trans body. Being misgendered by people or society's strong imposition of gender roles and expectations are major contributing factors resulting in pervasive dysphoria among many trans people. A way that trans people often describe their gender dysphoria experience is that of feeling "trapped in the wrong body" (Carter 2013, 131). Our findings will expound these notions.

RESEARCH DESIGN, METHOD, AND FINDINGS

Research Setting and Informants

Our research was conducted at a North American residential summer camp (the "camp") for 2 spirit, lesbian, gay, bisexual, and transgender (2SLGBT+) youth aged 12 to 17 years. Campers could express themselves in an environment of kindness and acceptance – very novel experiences for most. Over a summer, four two-week sessions are conducted, each with 50 campers, most of whom are transgender. Activities emphasize community-building: social dance participation; a talent show; drag workshops; and singing around a campfire.

Our research objective was to elucidate as many aspects of the community as possible, revealing the interplay between all actors. We derived our data from prolonged participant observation over a summer (Jorgensen 1989) and depth interviews (McCracken 1988). Informants felt secure and readily shared their innermost thoughts. This gave us deep insights that were valid and authentic.

Informants represented different transgender identities, however, all were from the 2SLGBT+ community. We anonymize the informants with names unrelated to their real names. Here, to enhance brevity, we report on three illustrative informants from our depth interviews. Aaron, a trans-male, openly discussed his challenges with mental illness, poverty, and homelessness. Aaron experienced homelessness and had to live in a shelter, despite growing up in a family with financial privilege. His family disagreed with his trans identity, which created a hostile home life. JJ identified as transmasculine non-binary and preferred they/them pronouns. They had an education background in kinesiology and exercise physiology. JJ has worked as a Drag King professionally and loved performance, especially dance. Mya was a trans woman who worked professionally as a Drag Queen. She had a passion for performing arts and trans activism.

METHOD

First, observations were made. The focus of this field work was to observe the degree to which transgender youth expressed themselves through camp activities, while considering the influence these had on dysphoria, self-esteem, and mental health issues.

Second, depth interviews were conducted that focused on three topics: (1) informants' lives and how they evolved over time; (2) how informants enact their gender identities; and (3) informants' views of the community and how space and place allow them to safely navigate the presentation of their gender identity. To facilitate a broad and wholistic reflection of the camp experience, conversational-based interviews occurred over Skype, two-weeks after informants had completed their camp sessions. Following Strauss and

Corbin's (1990) procedures, we analyzed each transcript, thread, and set of field notes individually. We uncovered important themes using an iterative, back-and-forth reading process, uncovering patterns within and between informants, and within and between data sets.

FINDINGS

Observations were focused on camp events/activities/situations, and depth interviews enabled discovery of fine-grained insights. Resultantly, a major theme , – the importance of "safe-space" – of relevance to organizations that operate within a marketspace, that seek to minimize gender stereotyping and enhance inclusivity. Within this community, the notion of "safe-space" was highly salient. Informants' life experiences were often plagued with internal/personal and interpersonal tensions, which threatened their sense of belonging. Thus, a key benefit of the "safe-space" is a strengthening of belonging. Our findings, overviewed in table 1, are described herein.

GENERAL DISCUSSION AND IMPLICATIONS

The recognition of "safe-space" was pervasive in observations and interviews. Additionally, other key notions emerged: waiting for body to match identity; physical/bodily movement and posture; and dysphoria.

All informants identified "waiting" for medical gender affirmation as one of the largest trans challenges. This is consistent with the common theme of "becoming" in transgender scholarship – both cis and trans people "become" their gender. Butler (1986, 36) stated, "gender is not only a cultural construction imposed upon identity, but in some sense, gender is a process of constructing ourselves." The cultural constructs, "masculine" and "feminine" cause anxiety for trans people. Our findings illustrate that performative aspects of the male and female binary is frequently cogitated by the trans community.

Pervasively high rates of mental illness among trans youth were reflected in our research – consequential effects from frequent rejection, lack of validation and support in transition, and general discrimination in society. It is this notion of external influence on mental health that Iacono (2018) explained as resulting from distinct stressors induced by hostile homo/bi/transphobic cultural, social and institutional structures. Iacono (2018) suggested trans youth internalize societal oppression, which adversely impacts their wellbeing. Thus, safe-space is important.

For many, camp was a safe-space; the first time that they experienced the relief from anxiety. They were accepted and their identities celebrated. The concept of a "safe-space" is common in queer and trans advocacy communities. Poynter and Tubbs (2008) explained that it is unclear where the "safe" idea originated since the term has been widely spread to define inclusion-based campaigns, programs, and locations. "The hallmark of these 'safe' programs is the public identification of allies by placing a 'Safe' symbol, usually incorporating a pink triangle or rainbow or the word 'Ally' or a combination of all three, on office doors or within living spaces" (Poynter and Tubbs 2008, 123). Therefore, the importance of designating a space as "safe" is key and is consistent with *minority stress theory* – "many LGBTQ people will assume a space is not safe until shown otherwise. Prejudice and discrimination based on sexual orientation or gender identity often goes unchallenged, and because a person may not be recognizable as LGBT, she/he may hear heterosexist or homophobic comments from people who are not aware of whom they offend. Furthermore, potential LGBT mentors may be hidden within a hostile climate" (Poynter and Tubbs 2008, 128). By promoting a safe-space, organizations can convey a clear recognition that con-

Table 1. Depth Interviews: Highlights and Commentary

Theme		Quotation from Interview	Context and Commentary
Exploration and experimentation with gender with drag performance.	Mya	"Doing drag was a long therapeutic experience. It helped me come to terms with my gender, helped my confidence, now I have a career going with it. It has really built me up in a lot of ways." "I started to do drag to explore my femininity. It felt really natural to dress like that which was what made me think more about being trans – it became unavoidable question."	Mya first came out as a gay man at age 17 years. She admitted that at that time, she was not yet ready to start thinking about her trans identity even though it was a thought at the back of her mind. At age 24, Mya came out as trans and described it as a positive experience, especially in the drag community.
	JJ	"Drag helped me try on expressions that I would later on adopt in everyday life. Helped gauge reactions, and if the look actually worked… It is where I met the first trans person. There are a lot of trans people in the drag community." "Drag is just a different way to express yourself. It allows you to try different clothes, and you could try something different everyday. It is normal in the drag community. You need time to find your drag persona, which is really just your alter ego. Like you could be a pretty quiet person and be confident in drag and people accept it as being that other-named person that you are… that is exactly what I did. I have been a drag king for quite a number of years. That character evolved, just as I did in my transition, although my transition ultimately brought me to look a lot like my drag character."	JJ explained that now that they have been on testosterone for a number of years and have a beard, they make a more masculine appearing drag king than the cis-female drag kings who have to use make-up to create a beard aesthetic.
	Aaron	"It is just another way to affirm my identity through drag; like being able to be hyper-feminine during drag is the opposite of my identity. It is fun. It helps you release tension from your body and get energy out through movement. Being able to do drag as a character, you get to do things you normally wouldn't do because it is not you, it is the character you put on. The separation of make-up and dressing up helps a lot to make a distinction between your character and yourself. It gives you an excuse to wear things you normally couldn't because of the amount of transphobia you would have to deal with. It would just make me really anxious in general to wear a dress in public."	Adopting the archetypal façade was a way of gaining acceptance and enhancing their perceptions of belonging.
Transgender experience in everyday settings (informal gender performance)	JJ	"We are told to love ourselves, but when everyone is telling you to hate yourself, it makes it hard." "Your first-time slow dancing is awkward because you have to figure out what to do with your hands, like it changes if you are a boy or a girl: taking the lead while dancing with somebody… like hand position and all that kind of stuff."	Low confidence was pervasive; relates to self-esteem development as a trans. Thought patterns of negative self-talk were normal to many trans youth due to harsh judgement from mainstream society.
	Aaron	"I remember googling in high school 'how men dance.' It was like club dancing. And what came up was very casual, slow, almost not moving at all. That kind of swaying type thing." "I always was trying to make myself look smaller/less noticeable … the posture is like slouching but your shoulders are in together more. So normally slouching would just bring your shoulders forward but I would bring them in and my arms together; almost making yourself into a ball. Holding your shoulders or arms." "Being trans eliminated my ability to have neutral relationships with people because every time I interact with someone, I am visibly trans. Every interaction I have with someone, it is now impacted by this. Even interactions with people at fast food places or stores can be impacted … You can't escape being visibly trans and it provokes people that don't like trans people just by existing. Knowing you can't control that; every time you leave the house you think about the possibility of someone yelling at you. This could totally be enough to cause someone social anxiety because it is completely out of your control. You are always evaluating people and trying to pick up on subtle things that might tell you if they are OK with you being trans… It is difficult to exist in public, so you can start to want to isolate your-self and not leave the house. It can make you feel hopeless and help-less and feel despair."	Discomfort going to school dances as a teenager because of the gendering of dance movement. This illustrated the pervasive nature of gender stereotyping. Though Aaron considered confident posture to be more masculine as a transitioning teenager, he described how he never could embody this posture because of his struggle with dysphoria.

sumers' physical, emotional, and psychological safety is important and valuable. For 2SLGBT+ persons, this could serve to lessen the habitual anxiety and stress that they experience and allow benefits of this inclusive approach to accrue to the organization.

Examining bodily/physical movement during our observations offered interesting insights. The construct of what movements/gestures society reads as masculine vs. feminine was a source stress/discomfort among our informants. JJ explained that they always moved in a way that is read as masculine. Likewise, Mya said that she always moved femininely and no longer worried about socialized movement because moving as a woman in society is generally criticized less than for men. She explained, "I think the struggle is the pressure to adhere to masculinity at all times as a man, because women can get away with being a little butch and it isn't really an issue." While both Mya and JJ always had gender-affirming movement patterns in alignment with their identity, Aaron continued to be anxious about movement in his trans male body. He explained, "having to worry about how you move all the time is very common for me. Masculine and feminine movement is really about 'passing' or being read as male because you want to blend in."

When a space is liberated from the traditional gender expectations of society-at-large, it can become a place for trans youth to participate and enjoy the benefits of free and natural body movement without having to think about external stress as they engage with movement in a way that they find affirming.

Our observations regarding body posture were noteworthy. Some of the trans-male counsellors jokingly called this posture the "dysphoric hunch," because it was how they also carried themselves as teenagers prior to gaining bodily confidence. Aaron exemplified this posture by rarely making eye-contact, hunching forward, and tipping his head down. He addressed his experience with posture (table 1) – the desire to make himself smaller and less noticeable because of struggles with mental illness, and the location of his hunching posture would align with where he felt the physical discomfort of dysphoria. He explained, "sometimes the pain was in the back of the neck, where you would get a lot of tension from slouching and curling up … sometimes pain was in the centre of the chest … it is hard to identify where I hold the stress. I also hold trauma in different places in my body, so I think I would have a hard time distinguishing between which one the discomfort is (trauma vs. dysphoria). I think it might be the places I'm in, or dangerous situations, when I tense up the most."

Giving space for gender experimentation and discovery can be extremely valuable for improved mental health among transgender youth. Mya suggested that, "realizing I was trans and coming out as a woman has been one of the most positive experiences for my mental health. I was really struggling before. It was a really good affirmation that coming out was the right choice because I just feel better about everything. I am finally myself and feel comfortable in my skin for the first time. I describe it as all the dominoes falling in place."

IMPLICATIONS AND RECOMMENDATIONS

Managers/practitioners, must recognize the fluidity of gender and understand the human harm of gender stereotyping. To fulfill the marketing concept of *meeting the needs and wants of consumers profitably*, managers must not alienate consumers. Managers must create a safe-space via the following suggestions: non-binary washrooms/changerooms; signage should use terms such as "masculine" vs "men's" and "feminine" vs "women's;" label organizations as "Transgender Safe-space" and as "LGBTQ-friendly" on their Google listing to create an inclusive/welcoming environment. Like-

ly, profitability would increase as positive word-of-mouth regarding these businesses spreads through local transgender communities. Employees must be trained to be gender inclusive (use of appropriate pronouns, use non-binary language, avoid gender assumptions, etc.). Employees should realize that all consumers are unique in their self-identities. Organizations should avoid gender-based assumptions regarding activities and use appropriate LGBTQ+ terminology in marketing efforts.

The CB literature has been incrementally enhanced by our research. We have imported theory from other disciplines into the CB domain and thus, enriched the CB discipline. We have positioned our work outside of the binary male/female context of gender by recognizing an important reality – that gender is fluid; femininities and masculinities are in motion. As greater numbers of CB scholars continue to recognize these realities, the CB literature (as a whole) will evolve and robustness increase.

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Beauty is Pain: Understanding How Gift Card Design Influences Acquisition, Redemption, and Product Evaluations

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INTRODUCTION

The gift card market has grown exponentially in recent years, revealing staggering growth in 2020. In the first six months of 2020, customers purchased an average of 4.7 gift cards per quarter, representing a 20% increase compared to the 3.9 purchased per quarter in 2019 (InComm 2020). Such growth is in addition to their holiday season domination – gift cards have long been the most requested holiday gift, with 94% of customers claiming they planned to buy at least one gift card during the holiday season (NRF 2019). Furthermore, purchases of gift cards for self-use have also recently climbed — from January to June of 2020, 49% of consumers bought gift cards for themselves, up from 31% during the same period in 2019 (Moeser 2020). Such increased self-use may be attributable in large part to consumers acquiring gift cards to support struggling businesses during the COVID-19 pandemic (Pendrill 2020). Even as the pandemic has wreaked havoc on retailers worldwide, the global gift card market is projected to reach $1.92 trillion by 2027 (Goswami et al. 2020).

Despite their ubiquity, there has been limited work exploring the levers of gift card selection and redemption. This gap is surprising considering that companies have invested significant resources in the design of their gift card offerings, efforts that have made gift cards feel more personalized and desirable (Knaus 2020). Indeed, 84% of gift cards are gifted in additional packaging (Incomm Payment 2021), and many retailers offer attractive complementary packaging that is either visually integrated with the gift card itself or sold separately alongside the cards (Knaus 2020). This strategy certainly pays off, as more attractive gift card displays generate a 14% increase in gift card sales (Incomm Payments 2018).

As a result, there are now myriad innovative ways to display and package gift cards including miniature tins, baskets, slide out sleeves, and other intricately designed carriers (Knaus 2020). Sometimes, the card is physically sealed in the packaging to prevent fraud and theft (Cogan 2020), and other times, the packaging is visually integrated with and complements the gift card design itself, such that the gift card and carrier together form an aesthetically cohesive unit. For example, Starbucks routinely releases carriers that complement specific card designs, such as a recent collection of Christmas sweater-shaped cards packaged with corresponding "coat hanger" card holders (BucksCards 2020), while Amazon offers a "Reveal" line of gift cards that are embedded in attractive pop-up paper packaging like flowerpots or Easter eggs (Amazon 2021). Likewise, retailers from Finish Line to Nike promote gift cards featuring iconic sneaker designs in complementary miniature shoebox carriers (Hunter 2021), while Target regularly markets their WOW! gift cards in packaging containing lights, sound, and motion that increase the card's overall charm (Target 2011). In sum, attractive gift card presentations play a pivotal role in capturing consumer attention and driving gift card sales (Hunter 2021).

Notably, the production of attractive gift cards that are visually complemented by their packaging also implies that consumers must eventually compromise the gift card's integrated aesthetic appeal to redeem it, which can happen in at least one of two ways. First, at the subtlest level, the packaging may visually complement the design on the gift card, so that removing the gift card from the packaging involves separating, and by extension, *conceptually* destroying the visual unity made possible by the gift card and packaging presented together. Second, at a more obvious level, consumers may have to tear open the packaging to access the enclosed gift card, thereby *physically* destroying the card packaging. Importantly, both actions ultimately reduce the gift card's overall aesthetic appeal, so for simplicity, we refer to such compromising of aesthetics as "destruction," a construct that includes both conceptual and physical destruction.

In the current research, we investigate how investments in gift card design, which includes the gift card, its packaging, and the complementarity between these two elements, can impact gift card acquisition, redemption, and product evaluations. We find that givers are drawn to aesthetically appealing gift cards, many of which are visually complemented by their packaging and presented together as an aesthetically congruous unit. Notably, such visual complementarity also implies that, in the process of redemption, consumers must inherently compromise the gift card's aesthetic appeal, such that redemption requires the card's aesthetic appeal to be destroyed. Because people can be averse to breaking up entities sharing an emergent relationship (Mourey et al. 2013) and are reluctant to damage aesthetics (Wu et al. 2017; Young 1989), gift card recipients are subsequently less likely to redeem them. Moreover, when they do redeem them, they form more negative purchase evaluations, a pattern of results driven by what we denote the "pain of redemption," a specific form of pain of payment unique to gift card redemption. Notably, we posit that the pain of redemption emerges whenever gift card aesthetics is marred, whether this occurs when someone removes a gift card from its complementary packaging before the point of sale, or at the time of purchase. In this manner, we contend there are two factors that play a fundamental role in shaping responses to gift card design: the aesthetic appeal of the card's presentation, and whether accessing the enclosed card necessitates destruction of such integrated appeal. We examine these two factors across our studies and isolate and test gift card aesthetics and destruction as orthogonal constructs in our final study.

Study 1 (N=45,755), a field experiment conducted on Facebook, shows that gift givers are indeed drawn to attractive gift cards that are visually complemented by their packaging. Using Facebook Ad Manager's Split Test function, we compared the effectiveness of two gift cards in a 2-cell (visual complementarity: yes vs. no) design. Both ads featured the same ad settings and only differed in the ad image itself. In the visual complementarity condition, users saw an ad for a gift card featuring Super Mario, whose image on the card was visually complemented by graphics on the packaging showing the video game's iconic green pipe. Specifically, the gift card's placement on the carrier depicted Mario ascending from the pipe, just like in the video game. Thus, to redeem the card, consumers must separate Mario from the green pipe and inherently compromise the gift card's integrated aesthetic appeal. In the non-visual complementarity condition, users saw an ad for a similar gift card, but the packaging itself did not feature graphics and all the design elements were instead placed on the card itself, so redemption would not compromise the card's aesthetic appeal. Users who clicked on the ad were brought

to an actual registered website describing highly rated gaming gift cards.

As predicted, the ad featuring the gift card that was visually complemented by its packaging generated a higher click-through rate (2.00%) compared to the one not complemented by its packaging (1.20%; *p*<.0001). Study 1 documents, in a real-world social media setting, that people are more attracted to gift cards that are visually complemented by their packaging, which implies that they are also drawn to cards that require destruction of their aesthetic appeal at the point of redemption.

Importantly, neither the imminent separation of the gift card from its packaging (and the ensuing destruction) was made salient. In study 2 (N=503), a 2-cell (destruction salience: high vs. low) design, we examine how the salience of such imminent destruction shapes preferences for gift card aesthetics at acquisition. Further, we examine how the gift card's aesthetic appeal influences choice when consumers encounter higher and lower aesthetic options simultaneously, like actual gift card displays in real life. Participants imagined they were getting a Starbucks gift card for a friend and were presented with both the higher and lower aesthetic gift card options at the same time. In the high destruction salience condition, participants read that to use these gift cards, the recipient would first have to tear the packaging and destroy the design, heightening the salience of the packaging's destruction. Participants in the low destruction salience condition were not given this information and proceeded directly to the choice task. Subsequently, participants selected the gift card they would acquire. Consistent with our theorizing, participants were less likely to choose the higher aesthetic gift card when the salience of packaging destruction was high (vs. low) (56.97% vs. 67.86%; *p*=.0116). Study 2 demonstrates that when it is evident that a gift card's overall aesthetic appeal must be compromised through redemption, people shift their preference toward the less attractive option. In other words, when destruction salience is high, consumers avoid compromising beauty by selecting a less attractive gift card in the first place.

The next two studies shift from the acquisition stage to actual redemption decisions by examining how gift card aesthetics impact redemption when paying compromises their appeal. In study 3 (N=198), a second field experiment, we hold packaging destruction high and constant (i.e., all packages had to be torn open to access the enclosed gift card) and manipulate the aesthetic appeal of the gift card packaging to examine its causal impact on redemption decisions. Collaborating with a bookstore, we created two versions of gift card packaging—one with plain packaging, and one with attractive graphics on the package. The gift cards were distributed in front of the bookstore, and redemption was tracked for two weeks before the start of summer break. Fewer of the higher aesthetic gift cards were redeemed (14.14% vs. 25.25%; *p*=.0481), demonstrating that higher gift card aesthetics can deter redemption when paying requires ruining the gift card packaging's aesthetic appeal.

In study 4, using secondary data from a large retailer, we focus on highly aesthetic gift cards and examine the extent to which gift card packages which require (vs. do not require) their aesthetic appeal to be compromised through redemption can affect redemption at the aggregate retail level. Our retail partner has a nationwide footprint of more than 1,000 stores and an active gift card program. The retailer's gift cards are available for purchase in-store or on its online platform, with a minimum required purchase amount of $5, which it offers in a wide range of attractive designs and motifs. Most gift cards feature attractive designs directly on the plastic card itself and are packaged with generic removable gift card sleeves, which represent the no-destruction control condition. Importantly, a subset of the retailer's gift cards are integrated with and complemented by their packaging, such that customers who wish to redeem must either tear open the attractive packaging to access the enclosed card, or separate the gift card from its visually complementary packaging, thereby reducing the gift card's integrated aesthetic appeal. Such gift cards represent the destruction condition. In this sense, we compare two sets of attractive gift cards, one that requires their packaging to be compromised for redemption, and one that does not. Redemption rates for both types of cards were tracked for 35 months.

Of the attractive gift cards in the no destruction control condition that were sold, 90.1% were redeemed by the end of the 35-month window. On the other hand, for attractive cards that required some degree of destruction for redemption, only 75.9% were redeemed. As such, consistent with our theory, redemption was lower when the gift card's overall aesthetic appeal must be compromised before redemption, as reflected by the 14% lower redemption rates (*p*<.0001). Across two studies in real-world settings with consequential dependent measures, we show that higher gift card aesthetics can reduce actual redemption and spending when the gift card's aesthetic appeal must be compromised for redemption. First, in a controlled field experiment, study 3 examined the causal role of higher (vs. lower) aesthetic gift card packaging on redemption when redemption compromised the gift card's packaging. Second, using secondary data from a nationwide retailer, study 4 provides additional support for our conceptual model, examining redemption rates for attractive gift cards that required (did not require) their integrated aesthetic appeal to be destroyed for redemption.

In study 5 (N=398), a 2(aesthetics: higher vs. lower) x 2(destruction: yes vs. no) design, we test the full conceptual model, providing evidence for the underlying process by examining how gift card aesthetics and destruction jointly shape product evaluations. Participants received a paper token that had either been folded into an attractive design or simply folded into a similarly-sized rectangle, and were given the opportunity to buy something in the lab's store with the token (i.e., lip balm or chewing gum). All participants were asked to make a purchase. Participants in the destruction condition were asked to unfold the token before paying, whereas participants in the no-destruction condition were simply asked to turn in the token as-is. Next, participants evaluated the product they purchased (α = .97) before indicating how painful it felt to redeem the token (α = .92).

Results revealed significant interactions for product evaluations (*p*=.0106; Figure 1). In the destruction condition, product evaluations were more negative after redeeming the higher (vs. lower) aesthetic token ($M_{destruction, higher aesthetic}$=5.70 vs. $M_{destruction, lower aesthetic}$=6.05; *p*=.0134), but in the no destruction condition, product evaluations did not differ ($M_{no destruction, higher aesthetic}$=6.11 vs. $M_{no destruction, lower aesthetic}$=5.94, *p*=.246). Looked at another way, whereas product evaluations were more negative when participants had to destroy (vs. not destroy) the higher aesthetic token through redemption (*p*=.0051), product evaluations were unaffected by destruction when redeeming the lower aesthetic token ($F < 1$). Thus, consistent with our conceptualization, when redemption involves compromising the payment's appearance, higher (vs. lower) token aesthetics reduces product evaluations.
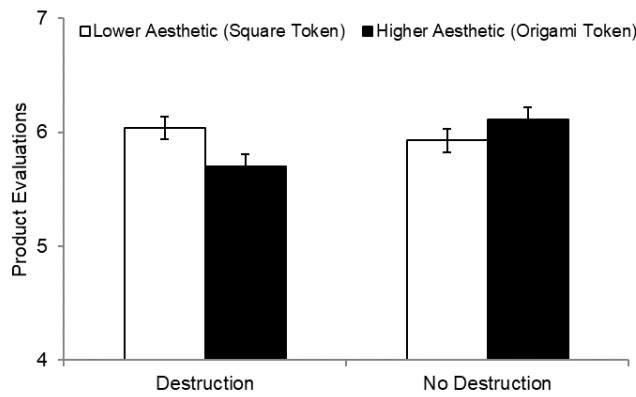
Figure 1: Study 5: Token Aesthetics X Destruction on Product Evaluation

Figure 2: Study 5: Token Aesthetics X Destruction on Pain of Redemption

The same analysis on the pain of redemption revealed a significant interaction ($p=.0185$; Figure 2). In the destruction condition, participants experienced greater pain from redeeming the higher (vs. lower) aesthetic token ($M_{destruction, higher}=1.88$ vs. $M_{destruction, lower}=1.52$; $p=.0200$), whereas in the no destruction condition, pain of redemption did not differ ($p=.3080$). Finally, we conducted a moderated mediation analysis (model 8, Hayes 2017) to test our proposed mediation path, whereby the pain of redemption mediates product evaluations, contingent on token destruction. The index of moderated mediation was significant (CI=-.1887, -.0214]), such that in the destruction condition, the indirect effect through the pain of redemption was significant (CI=-.1461, -.0075), but the indirect effect in the no destruction condition was not (CI=-.0251, .0846).

Across five studies combining lab, field, and secondary retail data, we examine how gift card design shapes acquisition, redemption, and product evaluations after purchase. While givers are drawn to attractive gift cards, many of which are visually integrated with and complemented by their packaging, because redemption requires the gift card's appeal to be compromised, consumers are subsequently less likely to redeem them. Moreover, when they do redeem them, they form more negative product evaluations, a pattern of results driven by the pain of redemption. As gift card designs continue to grow in complexity and ubiquity, understanding when and how this trend might shape gift card acquisition, spending, and product evaluations could have broad implications for consumers and practitioners alike.

Summary of Results

Study	Context	Design	Focal Dependent Variable(s)	Findings
1	Field Experiment	• 2 (Visual Complementarity: Yes vs. No)	• Click-through rate (as a proxy for acquisition) • Cost Per Click	• **Acquisition:** Gift cards that are visually complemented by their packaging (and thus more susceptible to destruction during redemption) increased click-through rates ($p < .0001$) and reduced cost per click
2	Online Experiment	• 2 (Destruction Salience: High vs. Low)	• Gift card choice	• **Acquisition:** Gift card aesthetics increased choice under low destruction salience, but decreased choice under high destruction salience ($p = .0116$)
3	Field Experiment	• 2 (Aesthetics: Higher vs. Lower)	• Gift card redemption	• **Redemption:** Gift card aesthetics reduced redemption ($p = .0481$), holding destruction high and constant
4	Secondary Data	• 2 (Destruction: Yes vs. No)	• Gift card redemption	• **Redemption:** Attractive gift cards that must be destroyed through redemption (vs. not) reduced redemption ($p < .0001$)
5	Lab Experiment	• 2 (Aesthetics: Higher vs. Lower) x 2 (Destruction: Yes vs. No)	• Product evaluations • Pain of redemption	• **Product Evaluations:** 2-way interaction ($p = .0106$) • Token aesthetics reduced product evaluations in the destruction condition ($p = .0134$), but not the no destruction condition ($p = .2469$) • **Pain of Redemption:** 2-way interaction ($p = .0185$) • Token aesthetics increased pain of redemption in the destruction condition ($p = .0200$), but not in the no destruction condition ($p = .3080$) • **Moderated Mediation:** 1. Destruction: Aesthetics → pain of redemption → product evaluations (95% CI=[-.15, -.01]) 2. No destruction: Aesthetics → pain of redemption → product evaluations (95% CI=[-.03, .08])

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Appendix – Study Stimuli

Study 1: Visual Complementarity Gift Card Ad

Non-Visual Complementarity Gift Card Ad
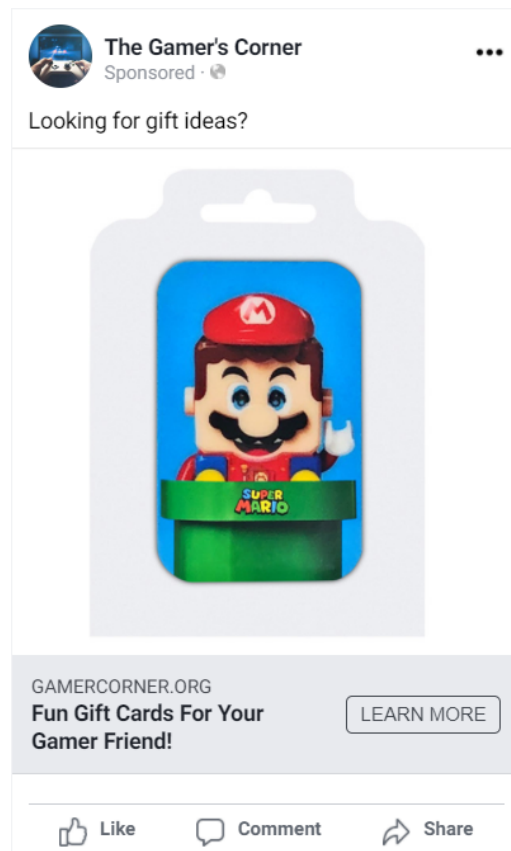
Study 2: Higher Aesthetic Gift Card   *Lower Aesthetic Gift Card*

Study 3: Higher Aesthetic Gift Card   *Lower Aesthetic Gift Card*
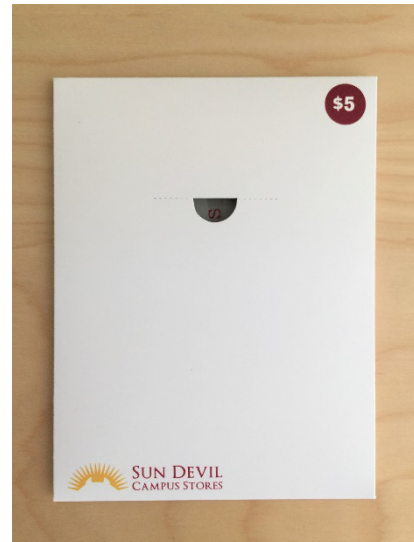
Study 5: Higher Aesthetic Token   *Lower Aesthetic Token*
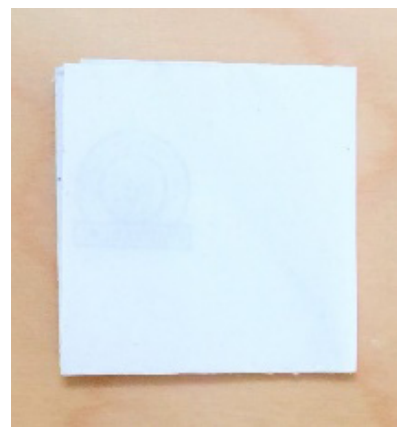
Conversational Agent Design and Consumer Decision Journey: Research Synthesis; Direction

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INTRODUCTION

Firms have discontinued 60% of chatbots used in the initial stages due to its poor performance; they were not meeting customer expectations because of poor chatbot design; inadequate appearance, lack of intelligence and autonomy in particular (Ben Mimoun et al., 2012). Later advancement in technology like Artificial Intelligence (AI) and Machine Learning (ML) have offered possibilities for developing much improved (intelligent) chatbots resulting in the increased usage of virtual assistants in different stages of the consumer journey on digital platforms. This led to the emergence of a second wave of more intelligent chatbots (Adam et al., 2020).

Conversational Agents (also known as chatbot, digital assistant, dialogue system, virtual assistant) are "natural language computer programs designed to approximate human speech (written or oral) and interact with people via a digital interface" (Thomaz et al., 2020). Early chatbots also known as rule based chatbots showed lower level of intelligence characterized as mechanical AI. Modern chatbots showed higher level of intelligence characterized as intuitive intelligence as they reply to customer queries based on contextual understanding and show an adaptive learning based on experience or past interaction which are key characteristics of intuitive AI (Huang & Rust, 2018). As chatbot's level of intelligence has increased, they showed successively higher level contextual awareness and has been able to simulate human conversations as oppose to responding to pre-defined set of questions/queries. These capabilities led to increased use of chatbots by organisations to interact with its customers in different stages of consumer decision journey. Brands are now increasingly using Conversational Agents (CAs) to interact with customers across all stages of consumer journey; at pre purchase stage; for advertising (Van den Broeck et al., 2019), for recommending services/ products to customers (Rhee & Choi, 2020), providing personalized services/ offers (Van den Broeck et al., 2019); at purchase stage for assisting customers in purchasing process as shopping assistant (Pantano & Pizzi, 2020) and at post purchase stage for helping customers in after purchase interactions such as customer query/compliant handling agent and customer feedback gaining tool (Trivedi, 2019; Araujo, 2018; Adam et al., 2020).

Most of the existing studies on CAs in information systems (Schuetzler et al., 2018; Pfeuffer et al., 2019; Ben Mimoun et al., 2017) and human computer interaction (Feine et al., 2019; Araujo, 2018; Burgoon et al., 2016; Go & Sundar, 2019; Hill et al., 2015), examined CA from a technology perspective. Despite recognition of CA application in consumer interactions, there are only a few studies that have examined chatbot from customer perspective (Ben Mimoun & Poncin, 2015; Adam et al., 2020). Literature examining effect of design of CA in human-computer interaction and information systems seems to be fragmented, with researchers focusing on specific aspects, separately in different studies. While theoretical foundations are in development, there is a need for synthesising extant research examining effect of CA design on customer based outcomes (Kumar et al., 2016). The objectives of this paper is to synthesise extant research examining the effect of socio-behavioural design of CA on customer responses.

The literature for review was selected from search in EBSCO host database using keywords bringing the research on *"conversational agents"* (conversational AI, chatbot, digital assistant, conversational agents, voice assistant, voicebot) and " *marketing*", "*consumer behaviour*", "*human –computer interactions*". The twenty-four empirical papers examining effect of socio behavioural design of CA on customer responses were synthesised based on their use in different stages in the consumer decision journey (use context) and in different industries (industry context) in the second section ; research findings from the synthesis and direction are provided in the third section.

CA DESIGN AND CUSTOMER RESPONSE: SYNTHESISING EXTANT RESEARCH ACROSS USE CONTEXTS AND INDUSTRY CONTEXTS

Empirical research modelling the effect of socio-behavioural design of CA on customer responses has picked up especially in the last decade. Research has examined effects across different stage of the consumer journey (use context) as well as across different industries (industry context).We have analysed the empirical research across the use context and industry contexts to synthesise the extant knowledge and identify areas for further research.

The implementation of online socialization agents (advanced chatbots) in firm–customer interactions is still in an experimentation phase (Köhler et al., 2011). Studies examining design cues of chatbot (CA) has analysed single design cues in different stages of consumer decision journey namely pre purchase, purchase and post purchase and in different industries including ecommerce, banking & finance, learning & education. There has not been any attempt to synthesise these findings to evolve a holistic understanding of the effect of CA design on customer outcomes.

Most studies found that CA and its anthropomorphic design cues results in positive customer response/outcomes (Araujo, 2018; Go & Sundar, 2019; Rhee & Choi, 2020; Coronado et al., 2018; Qiu & Benbasat, 2009; Ben Mimoun & Poncin, 2015). However some studies have reported negative effect of anthropomorphic cues/ features of chatbot (Fryer et al., 2017; Longoni et al., 2019; S. Kim et al., 2016). The need to resolve these inconsistencies underlines the need for the synthesis of extant literature.

EFFECT OF SOCIO BEHAVIOURAL DESIGN OF CA ON CUSTOMER RESPONSES: INSIGHTS, DIRECTION

(a) Effects of CA design on customer responses across USE contexts

Conversation agents empirical research were conducted across different stages in the customer interactions in decision journey; pre purchase, purchase and post purchase, termed as use contexts. Of the twenty-four empirical articles modelling the effect of design cues, conversation agents were employed at pre purchase in fifteen, purchase in four and post purchase stage in five studies.

Pre Purchase Stage

In pre-purchase stage, anthropomorphic design cues of CA as product recommendation agent, advertising tool and customer assistant resulted in positive customer responses such as enhance shopping experience, positively affect attitude towards product and enhance user satisfaction of CA across all industries (Ho et al., 2018; Van den Broeck et al., 2019; Dawar & Bendle, 2018; Araujo, 2018).

However, there is evidence from multiple studies on the negative effect of anthropomorphic cues such as impairing self-disclosure and evoking socially desirable response while using CA as a data collection tool (Schuetzler et al., 2019; R. Schuetzler et al., 2018; Pickard & Roster, 2020). Perceived understanding of CA and disclosure intimacy mediated the effects on customer responses (self-disclosure).

One reason for the lower perceived understanding of CA may be the lower acceptance of CA as it is in the early stage of adoption. It needs to be seen if incentives to use the CA or the perceived value of the CA could positively influence the perceived understanding and hence acceptance of CA. Hence it would be interesting to explore if consumer's willingness to try new technologies or consumer's age itself would moderate these relationships. Another mediator, disclosure intimacy, points towards the privacy concerns affecting the adoption of CA's. It is possible that the customer trust in the firm could also moderate these relationships; with higher customer trust, the disclosure intimacy could also be higher. Future research modelling the moderating effect of chatbot adoption/acceptance levels could consider varying effect of consumer related variable such as age, consumption motive, privacy concern as well as firm related variables such as corporate brand trust, type of service on customer responses.

Underlying mechanisms influencing customer's responses in different industry contexts: Five studies in e-tailing context used chatbots as a product recommendation tool. In the banking, it was used as customer assistant tool, in media industry as an advertising tool and in multiple industries as data collection tool. In ecommerce, visual, auditory and communication cues were used to anthropomorphise chat bots and affects customer behavior and responses primarily through perceived social presence. While using as a data collection tool the visual, communication cues used were human like face, human like voice and name identity etc.; however, these cues were mediated by perceived understanding, disclosure intimacy and did not positively influence self-disclosure.

Purchase Stage

In purchase stage, four studies (16%) examined the effects of socio-behaviour design, of which three were in e-tailing and one in banking & finance context; they used chatbot as a sales agent. In banking & finance, it was found to have negative outcomes such as decrease in purchase rate whereas in ecommerce it results in positive customer responses such as favourable attitude towards product, intention to use website (Luo et al., 2019; Pantano & Pizzi, 2020; Rhee & Choi, 2020;Trivedi, 2019). While social presence, perceived homophily, shopping value were modelled as mediators in ecommerce context, in banking and finance industry context the mediators were the perceived knowledge of CA, and perceived empathy of CA. Most of the studies employed text based chatbots, testing visual cues of chatbots on customer responses. There are evidence of increasing popularity of voice based chatbots among users pointing towards a need to explore the effect of auditory cues on customer responses. Voice based CA (e.g Alexa) gaining place in customers' everyday life, making it a relevant medium for marketers to connect and interact with customers which in turn demands a further understanding of customer adoption and usage of such CA.

Underlying mechanisms influencing customer's responses in different industry contexts: The effects of socio behavioural design cues, in particular visual cues on customer outcomes was modelled as mediated through "social presence, perceived homophily and shopping value" in the ecommerce context while "perceived knowledge and perceived empathy" of CA were the mediating mechanisms in the banking and finance contexts. The different mechanisms in

different industry context points to specific efforts required for enhancing customer acceptance and successful deployment of CA.

Post Purchase Stage

In post purchase stage, CA has been used for service delivery/consumption and found to evoke negative customer responses (Kim et al., 2016; Longoni et al., 2019). Replacing human agent with CA and its anthropomorphic design found to evoke varying customer responses while delivering educational services. For instance, when used as pedagogical agent, it resulted in positive customer response (increased motivation to study and engagement of students) (Pérez-Marín & Pascual-Nieto, 2013), whereas when used as language learning partner resulted it resulted in negative customer responses (reduce interest in course/task) (Fryer et al., 2017). One possible reason for contradicting results could be age of customers/students as in first case, it was tested on early adolescence and in the second case, it was tested with adults. There could be possible factors such as gender, age, technology readiness which might moderates the effect of CA on customers in various type of service delivery. Future research can identify and test such possible moderators and mediators as current studies in education service delivery roles does not identify any mechanism to explain CA design effect on customer/students' response.

Underlying mechanisms influencing customer's responses in different industry contexts: Studies examining the effect of CA's socio behavioural design on customer outcomes in education (Fryer et al., 2017), health care (Longoni et al., 2019) and in online gaming (S. Kim et al., 2016) resulted in negative effects (reluctance to use, decrease in motivation & interest in task, decrease in enjoyment) . The negative effect of these studies raised further questions on the mechanisms resulting in these negative outcomes. In the health care context, the effect of design cues on use intention of CA was mediated through the variable "uniqueness neglect". It is possible to improve the technical ability or intelligence to learn from interactions and customise service delivery to reduce the impact of design cues on uniqueness neglect. Hence there is a need to model the effect of the intelligence levels of the conversation agents along with the design cues to understand their moderating effects on uniqueness neglect.

In the computer gaming context where the CA was used a virtual helper, the effect of design cues was mediated by consumer's perceived "autonomy". The use of CA negatively impacted consumer's perceived autonomy which adversely affected customer responses. These studies point out the need to explore underlying mechanisms explaining the effect of socio- behaviour design cues on customer responses. Given that chatbots are continuously replacing human agents in different industries to enable 24*7 service and the paucity of studies in this area there is a need to undertake research using CA 's as service agents in different industries to offer enhanced understanding on factors affecting the adoption of CA.

(b) Effects of CA design on customer responses across INDUSTRY contexts

The design cues had positive influence on customer outcomes in different industry contexts except in the case of banking and finance sector. There were three studies in banking and finance industry context one in pre purchase stage and two in the facilitating the purchase transaction. In all the three studies the effect of socio- behavioural design cues has negative influence on customer outcomes, perceived knowledge and perceived empathy of the CA were the mediating variables used. Given the potential for CA's in this industry to further factors that would positively influence consumer perceived knowledge and perceived empathy; some of these factors could be consumer characteristics (like age or specific consumer segments/

cohorts) or firm characteristics (e.g. corporate brand trust), situational factors (e.g. nature of service, type of interaction). Consumer perceived risk in the transaction has been found as moderating variable in the finance and banking context (Trivedi, 2019) as well. Future research including these variables in modelling may offer better understanding of the different factors influencing customer responses other than the design cues themselves.

CONCLUSION

This emerging area, early stage review synthesises the empirical research examining the effects of socio behavioural design cues of CA on the customer responses based on the application of CA (use context) in different stages of the consumer decision journey namely pre purchase, purchase and post purchase across different industry contexts. The synthesis brings out reasons underlying the effects, differences across consumer decision stages and industry contexts, examining the mediators and moderators affecting consumer responses in different industry contexts. The understanding across multiple industries and multiple use contexts is expected to fuel further research to enhance the understanding of the factors affecting the adoption and enhance value to both the firms employing CA's as well as the customer's using them.

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TABLE1: Research Issues, Direction

Effect of CA design on customer responses: Modelling Elements	Extant Research; Direction
Design Cues (Qiu & Benbasat, 2010; Qiu & Benbasat, 2009; Rhee & Choi, 2020), (Pantano & Pizzi, 2020; Go & Sundar, 2019) , (Ben Mimoun & Poncin, 2015)	*Visual Cues:* ○ At purchase and post purchase stage, most of the studies examined visual cues whereas there is lack of research examining design cues (auditory cues) of CA at these two phases. ○ Differential effect of visual cues on customer responses and outcomes across use contexts and industry contexts *Auditory Cues:* ○ Few studies examined auditory design cues such as voice gender, pitch, tone, volume and frequency. ○ As voice search is rising and increasing adoption of voice based conversational agents (e.g Alexa), auditory cues becomes imperative area for marketing and consumers researchers to explore in future. *Research Questions:* ○ How voice design elements (tone, pitch, celebrity voice) evoke various customer responses and its effect on customer loyalty and relationship? ○ How to design dialogue and linguistic features to increase customer engagement? ○ In which use and industry contexts do customers prefer voice based CA over text based CA?
Customer responses (Luo et al., 2019; Pantano & Pizzi, 2020; Rhee & Choi, 2020;Trivedi, 2019; Ho et al., 2018; Van den Broeck et al., 2019; Dawar & Bendle, 2018; Araujo, 2018)	*Customer Responses Examined:* ○ Most of the studies have examined customer relational (credibility of /trust in CA), behavioral (purchase intension, recommendation) and cognitive customer responses (perceived usefulness of CA, product evaluation) whereas there are very few studies which examines customer affective responses to brand/firm such as emotional connection/bond, engagement with brand/firm evoked by CA. *Research Question:* ○ What are the factors influencing the adoption of CA and how will it affect customer-brand relationship? ○ How CA can be used to build emotional connect between brand and customer and enhance loyalty?
Moderators (Trivedi, 2019; Qiu & Benbasat, 2010; Qiu & Benbasat, 2009; Rhee & Choi, 2020;Pantano & Pizzi, 2020)	*Moderators:* ○ Different moderators influencing the effect of design cues on customers offered were modelled across use contexts and industry contexts ○ In ecommerce, user gender moderated effect of CA design on customer responses while in finance & banking, customer perceived risk moderated CA effect on customer responses. ○ Future research modelling the effect CA design on chatbot acceptance levels could consider varying effect of consumer level variables (culture, age, education), firm level variable (firm trust, firm type/services) as well as other contextual variable (service/ product type) as moderators to examine the effect on customer responses.. *Research Question:* Future research could examine ○ To examine the effect of demographic (age, education), consumption goal (hedonic, utilitarian), personality, culture, privacy concern and technology readiness moderates effect of CA design on customer experience across various setting? ○ How firm level variables such as firm/brand trust, firm services (person oriented vs. object oriented) and nature of service (high touch vs. low touch) moderates effect of CA on customer responses? ○ How the nature of interaction (informational, transactional and relational) across various stages of consumer journey (pre purchase, purchase, post purchase) moderates customer responses to CA and its design cues?

| *Mediators* (Pérez-Marín & Pascual-Nieto, 2013; Fryer et al., 2017; Coronado et al., 2018; Qiu & Benbasat, 2010; Qiu & Benbasat, 2009; Luo et al., 2019 | *Mediators:* Mechanism which explains effect of CA and its design cue on customer responses differed across phases and industry context. In ecommerce, perceived social presence; in online gaming, perceived autonomy; In healthcare, perceived uniqueness neglect and in media & entertainment perceived interaction enjoyment and In finance and banking *"perceived empathy"* and *"understanding of CA"* were modelled to explain effect of CA's various anthropomorphic design on customer outcomes/responses. Future research can take a holistic approach to explain these differential effect and different mechanism across phases and industry/service context. *Research Question:* Future research can examine; What are the possible mediators explaining customer responses to CA across stages of customer decision journey? Does various design cues (visual, auditory, cognitive) affect customer responses through different mechanism? |

Competitive Papers—Extended Abstracts

When a Gift Exchange Isn't an Exchange: Why Gift-Givers Underestimate How Uncomfortable Recipients Feel Receiving a Gift without Reciprocating

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EXTENDED ABSTRACT

The basic tenet of the norm of reciprocity in gift-giving is that, when someone receives a gift, they are generally expected to reciprocate. In many cases—for example, on Valentine's Day, Christmas, and anniversaries—reciprocation is expected to occur immediately (Wooten 2000). Unfortunately, however, when it comes to these "reciprocatory occasions," recipients do not always abide by the norm of immediate reciprocity. Indeed, in a Pilot Study, 93% of participants reported that they have received a gift without giving one in return and/or gave a gift without receiving one in return, for such an occasion.

This research studies whether givers accurately forecast the feelings of discomfort that recipients experience during such situations, the psychological process that underlies givers' forecasts and recipients' feelings, and a downstream consumption consequence. My predictions are as follows:

Hypothesis 1-Hypothesis 2: Givers underestimate how uncomfortable recipients feel when they fail to reciprocate a giver's gift (H1) because givers feel less strongly than recipients that the actions of the two parties imply an imbalance in appreciation (H2).

Hypothesis 3: When givers know before a reciprocatory occasion that a recipient will not have a gift for them, they give gifts more often than recipients prefer.

Study 1 tested **H1-H2**. It was a 2 (Role: *Giver* vs. *Recipient*) × 2 (History: *Prior Gifts Exchanged* vs. *Prior Gifts Not Exchanged*) between-subjects design. In the [*Prior Gifts Exchanged*/*Prior Gifts Not Exchanged*] condition, participants listed a friend with whom they [had/had not] exchanged winter holiday gifts in the last five years (this manipulation tested **H1**'s generalizability). Next, participants read a vignette which explained that it was just after the winter holidays and that they and their friend decided to meet for coffee. Some vignettes (*Giver*) explained that, when they met their friend, they gave their friend a $25 Amazon gift card, and their friend gave them nothing, whereas other vignettes (*Recipient*) explained the opposite. Next, [givers/recipients] indicated the extent to which [their friend/they] would feel uncomfortable, awkward, ashamed, and guilty (*1-7*; henceforth called the "Discomfort-Index") and the extent to which the actions of the two parties would imply an imbalance in appreciation, care, value, and gratitude (*1-7*; henceforth called the "Appreciation-Imbalance-Index").

Givers underestimated how uncomfortable recipients felt, regardless of whether the giver and recipient had ($M_{Giver} = 3.77$ vs. $M_{Recipient} = 4.63$, $p = .002$) or had not ($M_{Giver} = 3.55$ vs. $M_{Recipient} = 4.48$, $p = .001$) recently exchanged winter holiday gifts. Also, givers did not feel as strongly as recipients that the actions of the two parties implied an appreciation imbalance, regardless of whether the giver and recipient had ($M_{Giver} = 2.02$ vs. $M_{Recipient} = 3.43$, $p < .001$) or had not ($M_{Giver} = 1.98$ vs. $M_{Recipient} = 3.10$, $p < .001$) recently exchanged winter holiday gifts.

Study 2 tested **H1-H2**. It employed two conditions (Role: *Giver* vs. *Recipient*), and another between-subjects factor served as a control variable (Giver/Recipient Genders: *Female Giver, Male Recipient* vs. *Male Giver, Female Recipient*). Participants read a vignette which explained that it was Valentine's Day and that they had recently gone on a few dates with someone named Alex. The vignette then explained that the pair made plans to meet for tea at a teahouse that evening. Some vignettes (*Giver*) explained that, when they met Alex, they gave Alex a box of chocolates, and Alex gave them nothing, whereas other vignettes (*Recipient*) explained the opposite. Participants then responded to the Discomfort-Index and the Appreciation-Imbalance-Index. I planned to control for the genders of the giver and recipient (*Giver/Recipient Genders*) because the extent to which reciprocation is expected on Valentine's Day may differ based on this factor.

An ANCOVA on the Discomfort-Index with *Role* as an independent variable and *Giver/Recipient Genders* as a control variable, revealed a significant effect of *Role* ($p = .021$), such that givers underestimated how uncomfortable recipients felt. Also, an ANCOVA on the Appreciation-Imbalance-Index with the same predictors, revealed a significant effect of *Role* ($p < .001$), such that givers did not feel as strongly as recipients that the actions of the two parties implied an appreciation imbalance.

Studies 3A-B tested **H1-H3**. *Study 3A*: The study employed two conditions (Role: *Giver* vs. *Recipient*). Participants listed the name of a friend and read a vignette involving their friend. The *Giver* vignette explained that it was just after the winter holidays and that they and their friend made plans to meet for coffee since they had not seen each other during the holidays because their friend was on vacation. The vignette then explained that, before the participant left for the coffee shop, they remembered they had purchased a variety pack of artisan tea as a gift for their friend; however, they recalled that their friend had said that, because s/he did a vacation in place of the holidays, s/he did not purchase any gifts. Thus, they were not sure whether to give their friend the gift or to not give it. The *Recipient* vignette described the same scenario, only from the recipient's perspective. Next, [givers/recipients] indicated whether they would [give the gift/want to receive the gift] and responded to the Discomfort-Index and the Appreciation-Imbalance-Index as if the giver had given the gift.

Study 3B: The study was like Study 3A, except that the giver had not already purchased the gift and was deciding whether to stop at a store beforehand purchase it.

Givers gave the gift more often than recipients preferred (Study 3A: *Giver*: 88% vs. *Recipient*: 43%, $p < .001$; Study 3B: *Giver*: 72% vs. *Recipient*: 16%, $p < .001$), underestimated how uncomfortable recipients would have felt receiving the gift (Study 3A: $M_{Giver} = 3.03$ vs. $M_{Recipient} = 4.03$, $p < .001$; Study 3B: $M_{Giver} = 3.07$ vs. $M_{Recipient} = 4.47$, $p < .001$), and did not feel as strongly as recipients that the giver giving the gift and the recipient not reciprocating would have implied an appreciation imbalance (Study 3A: $M_{Giver} = 1.72$ vs. $M_{Recipient} = 2.82$, $p < .001$; Study 3B: $M_{Giver} = 1.73$ vs. $M_{Recipient} = 3.31$, $p < .001$).

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Transgender and Gender Diverse Consumer Narratives on the Stigmatized Process of Gender Affirmation

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EXTENDED ABSTRACT

Interviews were conducted with 27 TGD individuals about their gender affirmation journeys. Consumer culture theory and stigma management theory were implemented for interpretation of the data. Results illustrate affiliation cycles, information control, covering techniques, identity pegs, courtesy memberships, and market alliances in relation to consumer choices for the TGD individual.

Transgender and gender diverse (TGD) individuals who choose to begin a gender affirmation journey often find the experience challenging. TGD consumers must strategically interact with brands and products to successfully construct a new identity.

Theoretical Framework

Gender is performative, and the public performance of the TGD gender affirmation journey can be a highly stigmatized process. Stigmatized individuals are those who do not possess full membership in their given culture (Goffman 1963). As a result, these individuals often develop stigma management techniques. In the consumer behavior literature, stigmatized individuals often engage in compensatory consumption activities (Rucker and Galinsky 2008). They are said to have a shaken self (Gao et al. 2009) who engage in restorative consumption behaviors. Although ample research exists on consumer behaviors related to gender, little research exists on transgender and gender diverse consumers. The goal of this paper is to deconstruct the identity creation and communication processes that occur for TGD individuals through the lens of consumer culture (Arnould and Thompson 2005).

Methodology

In-depth interviews were conducted with 27 transgender and gender diverse individuals. Participants were recruited through a community-based participatory research process. Fifty-two percent of the participants identified as transgender women, 37% identified as transgender men, and 11% identified as gender diverse. Each interview lasted an hour and was then transcribed. The data was then inductively analyzed using Weiss's (1994) method of coding, sorting, local integration, and inclusive integration.

Results

The origination of one's TGD status can occur at any point in the individual's life. Several participants mentioned a recognition of this status in their earliest memories, while others acquire this identification at a much later stage in life. One frequently reported life stage by interview participants on when they began their gender affirmation journeys was during the adolescent phases of their lives.

Although being TGD can be an important aspect of one's overall identity framework (and can become highly salient during a gender affirmation journey), it is just one of a complex array of identifiers. For individuals whose authentic self is a binary gender category, once they near their desired self-expression, the TGD element may once again become a more secondary self-identifier. In other words, they may no longer wish to identify as TGD (e.g., transgender man, transgender woman). Instead, they just identify their authentic self as a man or a woman.

Once an individual has come to understand their TGD identity, there are many potential steps along the way in a gender affirmation journey. One of the first steps is often a change in one's dress and appearance. For many interview participants, this is an important step, because this modification of consumer behavior creates an immediate change in the way they are treated by others during social interactions. Information control and disidentifiers are often early practices in stigma management. Here, the individual is still wearing his or her social mask during routine business hours but dabbles in new presentations of self during off-hours. Later, the individual may venture out with this new presentation during more routine interactions with others. In our study, some participants noted rapid changes in dress, hair, etc., while others reported gradual shifts taking place over several years.

Whereas the activities related to information control are the intentional withholding of stigmatizing evidence from others, covering is the act of disclosing one's stigmatizing blemish in as graceful as a manner as is possible. The changing of one's name is a classic covering technique. Participants in our study noted that an informal name change, later followed by a legal name change, and subsequent changes to identification cards were stressful but liberating experiences. Also, once someone had changed their name, they also tended to request from others a change in the use of pronouns.

Stigmatizing traits are sometimes physical elements that are on continuous display. Therefore, if alterations could be made to these traits, then the social identity cue might be muffled or even rectified. Surgery and/or medical treatments are thus a common stigma management technique. The TGD individuals in our research study often laboriously considered these types of consumer purchases. Several participants asserted that hormone replacement therapy helped to bring about desired physical changes that aided in their shift to a more authentic presentation of self. Surgery is another potential healthcare purchase for TGD individuals. Not all interview participants engaged in this step, and the specific surgical procedures they pursued varied according to personal preferences and barriers to access. A few participants described purchasing additional medical services such as electrolysis for hair removal or voice training lessons from audiologists.

As stigmatized individuals flow through the stages of information control and covering, they must continually assess the levels of knowledge others possess about the individual's stigma. The world is divided into the wise, the questioning, and the oblivious. Research participants noted that the reactions from family, friends, co-workers, and significant others were especially salient. As the consumer behavior literature shows, reference group influence is one of the strongest external influences on the individual (Escalas and Bettman 2005). Several participants highlighted how the negative reactions by others to their new presentations of self were acutely stressful. Negative comments from others may even cause the TGD individual to pause and reconsider whether or not they want to continue on their gender affirmation journey.

Some participants reported neutral and positive reactions from others. In these social acceptance activities, the TGD individual is being given a courtesy membership to the social collective. The individual is now treated as if the stigmatizing trait does not exist. As social acceptance grows, the stress attached to the stigma fades.

When transgender and gender diverse individuals are actively engaging in a gender affirmation journey, they often must confront old-fashioned and even outdated perceptions of masculinity and femininity. Also, the reactions of others to the TGD individual's presentation of gender identity are particularly interesting instances of identity negotiations during social interaction. Here, societal gender roles are deconstructed, and social concepts of what is appropriate behavior for men and women are in flux.

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Bias Neglect: When Human Bias, but not Algorithmic Bias, is Disregarded

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EXTENDED ABSTRACT

Previous research has shown that consumers view machines as cold and unemotional (Haslam et al. 2008). While consumers might regard humans as emotional and biased decision-makers, but see algorithms as unemotional and neutral entities, unemotionality does not indicate a lack of bias. Bias is a systemic and unfair discrimination against specific individuals or groups of individuals in favor of others (Friedman and Nissenbaum 1996). When we think about bias, we often think about systemic human biases. Recent work has found that those biases can extend to algorithms as these algorithms' data sets are often based on the actions of biased people. Therefore, although algorithms substitute human processes, it does not mean that they are unbiased.

Algorithms are often biased because the data that the algorithms use come from a biased society (Barocas and Selbst 2016). Human bias is transmitted to or even augmented through algorithms by various means such as training data and data preparation. Therefore, algorithmic decisions can often reflect the existing discrimination, especially if they are trained on past decisions. For instance, Amazon's hiring algorithm had to be terminated since its training data came from the hiring patterns in a male dominant technology sector (Dastin 2018); the algorithm preferred male applicants over female applicants. Although consumers may often consider humans as more biased than algorithms, this paper addresses whether or not this erroneous perception diminishes trust in and satisfaction with human (vs. algorithmic) decisions. We reveal a "bias neglect" phenomenon, i.e., consumers disregarding human bias and trusting human (vs. algorithmic) decisions.

Study 1 ($N = 640$, Amazon Mechanical Turk) used a 2 (Decision type: Human, Algorithm) x 2 (Decision context: Loan application, Employee bonus) between-subjects design. These different scenarios were employed since we aimed to test our Hypothesis in contexts with varying degrees of objectivity. Consumers trust and use algorithms more for objective (e.g., financial) than subjective (e.g., dating) tasks (Castelo, Bos, and Lehmann 2019). Other work has demonstrated that algorithmic decisions were viewed as less fair than identical decisions by humans, in the case of a subjective context (Newman, Fast, and Harmon 2020). As we are interested in perceived bias, we wanted to conduct our study in both an objective context and a subjective context (financial vs. HR decisions) to address these findings and examine our research question in tasks that differ in terms of objectivity. Loan application participants read that they applied for a bank loan and that their application was evaluated either by financial advisors or an algorithm. Employee bonus participants read that their bonus was determined by either human resources or an algorithm.

We predicted and found that loan application (vs. bonus allocation) context was viewed as more objective: $F(1, 640) = 5.43$, $p = .020$. Across both scenarios, algorithmic decisions were deemed less satisfactory ($F(1, 640) = 37.98$, $p < .001$), trustworthy ($F(1, 640) = 29.35$, $p < .001$) and biased ($F(1, 640) = 12.28$, $p < .001$). There was no (Decision type) x (Decision context) interaction. This does not support Castelo et al.'s findings which was that consumers trust and use algorithms more for objective than subjective tasks. A serial mediation analysis uncovered an indirect effect of the human (vs. algorithm) decision on satisfaction through bias and trust, indirect effect = -.073, 95% CI = [-.119, -.032]: human decisions were perceived

as more satisfactory through higher bias and trust. Despite high perceived bias, human decisions were more satisfactory because bias did not have a significant effect on satisfaction, while trust had a large positive effect on satisfaction. This was true in a more objective decision task (loan application) and a less objective decision task (bonus allocation). Hence, Study 2 was conducted to determine why humans were more trustworthy and satisfactory, despite being more biased, consequently demonstrating bias neglect. We also asked could we get a situation where bias is so strong that it diminishes trust? Since bias reduces trust, if we could get trust low enough by increasing bias, then algorithms could be similarly or more acceptable, eliminating bias neglect.

Study 2 ($N = 1280$, MTurk) had a 2 (Decision type: Human Decision, Algorithmic Decision) x 2 (Outcome Fairness: Fair Outcome, Unfair Outcome) x 2 (Outcome Valence: Loan Approval, Loan Rejection) between-subjects design. In this study, we had two goals. First, we wanted to learn why people disregard human bias and trust human decisions more than algorithmic decisions. Based on the affective human-likeness literature, we hypothesized that emotionality could explain this effect. Research has shown that machines such as robots are viewed as lacking human nature abilities, which are emotional (Haslam 2006; Loughnan and Haslam 2007). Affective human-likeness (which are the human capabilities that are affective/emotional) increases the use of algorithms in certain tasks (Castelo et al. 2019). Human-likeness can also indicate being biased. Our second goal was to determine whether unfairness influences perceptions of bias similarly for humans and algorithms. We aimed to create a scenario where bias is so strong that it diminishes trust in humans? Since bias reduces trust, if we could get trust low enough through an unfair outcome, then algorithms could be similarly or more trustworthy and bias neglect might disappear. Accordingly, we manipulated choice type, outcome fairness, and outcome valence in the context of a loan application decision.

We replicated the main effects and the bias neglect mediation in Study 1. Additionally, we confirmed that the bias neglect existed in unfair decisions, indirect effect = -.129, 95% CI = [-.099, -.024]. Importantly, bias neglect existed even in unfair decisions with negative outcomes: indirect effect = -.052, 95% CI = [-.099, -.024]. We wanted to investigate why bias neglect was such a robust enough effect that it even held for negative unfair decisions. A serial mediation revealed why human (vs. algorithmic) decisions were more trustworthy, despite being acknowledged as more biased. Human decisions were more trustworthy because they were viewed as more emotional and therefore biased, indirect effect = -.033, 95% CI = [-.055, -.013]. The positive influence of emotionality on trust was greater than the negative effect of bias; humans were trusted more because they were more emotional, leading participants to disregard the negative influence of bias. Therefore, people might find human decision makers more biased but this does not offset the positive effect of emotionality on trust.

Study 3 ($N = 641$, MTurk), in a 2 (Data handler: Human, Algorithm) x 2 (Decision-maker: Human, Algorithm) between-subjects design, broke down the two stages of receiving a decision in the digital world: data handling and decision-making. We aimed to investigate whether there is bias neglect in both stages. Participants read that their personal data for a loan application was handled either by a human or an algorithm and decided by a human or an algorithm. Hu-

man (vs. algorithmic) data handlers were viewed to be less biased, leading to higher trust and therefore satisfaction. In the same mediation, higher algorithmic bias negatively influenced satisfaction (B = -.086, 95% CI = [-.133, -.043]). Conversely and as in previous studies, human decision-makers were perceived as more biased, trustworthy, therefore satisfactory, while higher human bias had no effect on satisfaction (B = .036, 95% CI = [-.034, .103]). Hence, there was no bias neglect in the data handling stage, while bias neglect existed in the decision-making stage.

In study 4, we examined the differing effects of emotion as an input versus an experience on trust, bias, and satisfaction. We recruited 1044 MTurk participants who were randomly assigned to one of eight conditions in a 2 (Decision type: Human, Algorithm) x 2 (Emotion type: Input, Experience) x 2 (Decision context: Loan application, Health club application) between-subjects design. Emotion as input participants were informed that their application was evaluated, either by a human or an algorithm, who took the participants' feelings into account when making the decision. In contrast, emotion as experience participants learned that the decider determined their application based on the decider's personal feelings at the time of making the decision.

Regardless of which emotion type condition participants were in, we find that when emotionality was made a key part of our manipulations, unlike the previous studies, bias neglect disappeared. Specifically, our serial mediation analysis where we investigated the influence of decision-maker type on satisfaction through bias and trust showed that bias negatively impacted satisfaction: $b_1 = -.055$, SE = .021, 95% CI = [-.097, -.012]. Additionally, a moderated mediation analysis revealed that the influence of decision-maker type (human versus algorithm) on trust through bias was more important when emotion was used as an input (vs. experience): ACME (Emotion as input) – ACME (Emotion as experience) = .111, *p* = .004. This finding was replicated with satisfaction as the dependent variable. In other words, when participants' own emotions were utilized in the decision-making process, human decisions were viewed as more trustworthy and satisfactory due to higher bias than when the decision-maker was experiencing emotions.

In conclusion, across four studies we studied "bias neglect": although algorithms were viewed as less biased, human decisions were more trustworthy and satisfactory. This is true even in unfair decisions with negative outcomes. We also find that bias neglect applies to decision-makers, but not to data handlers. We find that bias neglect occurs since human emotionality is highly desired. Addition-

ally, we find that bias neglect disappears when emotionality is incorporated in the decision-making process by humans and algorithms. Ongoing studies investigate the perceived nature of bias. That is, we go beyond whether individuals think bias is present or not and look into the direction of bias. If people think that a subjective human decision maker implies that the human would favor them, human bias would be desirable. Moreover, we study whether we can reverse bias neglect, with bias decreasing satisfaction for humans and lack of bias becoming highly favorable for algorithms. In particular, we run studies with vulnerable populations (e.g., Asian Americans in the context of college admissions) to see how perceptions of bias can change when the bias is perceived as racially motivated and potentially more impactful if comes from humans (vs. algorithms).

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Distinctive Ugliness as a Signal of Luxury

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EXTENDED ABSTRACT

Consumers choose attractive products. Yet, luxury that is distinctively ugly (e.g., outrageous patterns, unflattering shapes, clashing color combinations) is selling well. This research identifies distinctive ugliness as a signal of luxuriousness and fashion-forward nature that consumers recognize. Thus, they choose distinctively ugly products as often as their attractive counterparts.

Drawing on costly signaling theory (e.g., Zahavi 1975; Bird, Smith, and Bird 2001), we identify the value of distinctively ugly luxury. We propose that, because beauty is universally appreciated (Bell 1914; Redies 2007), ugliness can be perceived as costly. Thus, it can signal something of equal or greater value (Zahavi 1975). However, for ugliness to signal, there must be an indication that it is a deliberate choice. Distinctiveness suggests intention; it is not a misjudgment or mistake (Kordes-de Vaal 1996). Thus, we predict that an aesthetic that is both highly unattractive and distinctive (i.e. eye-catching, non-normative, or extreme; Dinwoodie 1996; Fiore 2010) will suggest that the cost sustained was in order to gain something of equal or greater value, that is being from a luxury brand.

Hypothesis 1: *A distinctively unattractive aesthetic is a signal of luxury. Distinctively unattractive products are more likely to be perceived as from a luxury brand than non-distinctively unattractive, as well as both distinctively and non-distinctively attractive, products.*

Furthermore, we propose that distinctively unattractive aesthetics offer the additional signal of being fashion-forward, but only when identified as from a luxury brand. In the context of luxury, the intentional non-normativity of distinctive ugliness suggests innovation, as occurs with technological products (Truong et al. 2014).

Hypothesis 2: *While generally attractive products are perceived as more fashion-forward than unattractive products, when from a luxury brand, distinctively unattractive products are perceived as more fashion forward than non-distinctively unattractive, as well as both distinctively and non-distinctively attractive, products.*

Given that luxury is purchased for its signaling power (Han et al. 2010), we propose that while ugliness will negatively impact product choice in general (Bloch 1995; Bloch et al. 2003), this will not be the case when the product is distinctive and from luxury. The downside of ugliness (Page and Herr 2002; Townsend and Shu 2010) is counterbalanced by the upside of the ability to signal luxury and being fashion-forward. This will mediate the effect of aesthetics on choice.

Hypothesis 3: *While generally, choice is greater for attractive products than unattractive ones, when from a luxury brand, distinctively unattractive products are at least equally as likely to be chosen as distinctively attractive, as well as non-distinctive attractive and unattractive, products.*

Hypothese 4: *Choice of distinctively unattractive luxury products is driven by their ability to signal luxury and be fashion-forward.*

Study 1: Distinctive Ugliness Signals Luxury

Study 1 reveals that a distinctively ugly aesthetic signals the product is from a luxury brand (H1). Participants (1,170 Mturkers) evaluated a random four of 250 non-labeled fashion items.

A regression of luxury perceptions on attractiveness, distinctiveness, and logo prominence, controlling for brand fixed effects and clothing item gender (model adjusted R^2 = 67%) reveals main effects of attractiveness (= .14, t(236) = 4.85, p < .001), distinctiveness (= .17, t(236) = 5.07, p < .001), logo prominence (= .12, t(236) = 4.55, p < .001), and a three-way interaction (p < .01). A spotlight analysis (Spiller et al. 2013) at -1 S.D. of logo prominence (i.e., non-branded items) shows that items rated as unattractive and distinctive rated highest on luxury perceptions ($M_{DistinctiveUnattractive}$ = 6.92, SD = .07; all ps < .01; η^2 > .045; H1).

Study 2: Drivers of Choice of Distinctively Ugly Luxury

Study 2 examines Hypothesis 1-4. Participants (648 undergraduates) were randomly assigned to one of 8 conditions in a 2 (Brand: luxury (Christian Dior) vs. non-luxury (Old Navy)) by 2 (Attractiveness: attractive vs. unattractive) by 2 (Distinctiveness: distinctive vs. non-distinctive) design. Participants saw one of eight versions of a sweatshirt as per condition, rated it, and reported likelihood of selecting the sweatshirt over 20% of its cash value.

The distinctively unattractive sweatshirt was the most likely to be perceived as from a luxury brand (all ps < .038, H1). When the sweatshirt was Dior, the distinctively unattractive one was: 1) Perceived as at least marginally more fashion forward (all ps < .082, H2); and, 2) More likely to be chosen than the attractive non-distinctive one (t(171) = 2.073, p = .040), and equally as likely to be chosen as the unattractive non-distinctive and the attractive distinctive ones (all ps > .247, H3). Moderated mediation (Process macro, model 8, Hayes 2013) reveals that the negative effect of aesthetics on choice, via luxury signaling and fashion forward, was significant only when the sweatshirt was from a luxury brand (H4).

Study 3: The Price of Distinctively Ugly Luxury vs. Non-Luxury

Study 3 examines the real-world list prices for 1,596 luxury and non-luxury products as a function of their attractiveness, distinctiveness, and logo prominence. We find a three-way interaction (t(2773) = 2.19, p = .029, η^2 = .002); a spotlight analysis (Spiller et al. 2013) at -1 S.D. of logo prominence finds that for distinctively unattractive luxury products there is no price premium for attractiveness (F(1, 1669) =.21, NS). This study identifies the exception to the rule that beauty has value; luxury brands charge the same for distinctively unattractive and attractive products.

Study 4: Logo Prominence as a Boundary Condition

Study 4 identifies logo prominence within the luxury context as a boundary condition to the signaling benefit of distinctive ugliness. Supporting H1 and H3, we predict and show that, while loud branding increases choice of an attractive luxury product, with a dis-

tinctively unattractive product, the logo is redundant and does not increase choice (interaction of aesthetics and logo prominence on choice: $(F(1, 201) = 4.72, p = .031, \eta^2 = .023)$.

Discussion

We identify two benefits that a distinctively ugly aesthetic provides its users: it is a signal of luxury and is perceived as fashion forward. Therefore, in the context of luxury, the downside of not being attractive can be counterbalanced by these benefits of distinctively ugly fashion.

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I Choose; Therefore, I Am? Impact of Identity Choice on Brand Evaluation

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EXTENDED ABSTRACT

Individuals define their sense of self to include multiple identities. While some of these identities are assigned to the individual by nature, their parents, coworkers, or the society, such as our national, gender, and ethnic identities. Others can be deliberately chosen or acquired by the individual through desires, choices, or achievements, such as our professional identity (Baumeister 1987; Oyserman, Gant, and Ager 1995). This indicates significant variation in the extent of *choice* inherent in any identity. We examine the effect of highlighting this choice associated with an identity on brand evaluations.

Identity choice refers to the extent of autonomy or intentionality associated with a particular social identity. When an identity is chosen, we argue that individuals are more likely to feel invested in entities associated with this identity. Individuals are known to categorize themselves into ascribed, chosen, or even arbitrary social groups (Garcia et al. 2005), driven by motives of control, belonging, and reduction of uncertainty (Ashforth 2001; Baumeister and Leary 1995). When these groups are chosen, rather than ascribed or random, individuals show higher levels of identification with and affective commitment to the group (Ellemers et al. 1999). Brands targeting a chosen identity may help provide individuals with an affirmation about their choice and likely to make individuals feel a higher sense of self-esteem. Therefore, targeting chosen identities is likely to lead to an increase in favorable brand attitudes. Conversely, targeting an assigned identity may not provide such attitudinal benefits for individuals as they may identify less with these identities in comparison. Thus, we hypothesize that brand evaluations are more positive when brands target chosen rather than assigned identities (*Hypothesis 1*).

The relationship between identity choice and brand evaluation can be explained through the role of psychological empowerment. Targeting a chosen identity is likely to evoke positive affect due to heightened feelings of self-determination and control. Thus, beyond merely the fit between brand and consumer identity, brands targeting a chosen identity reinforces individuals' agency and choice by activating a feeling of psychological empowerment, thereby resulting in favorable brand evaluations. Because assigned identities involve a sense of resignation, targeting assigned identities is likely to be invoke a lower sense of empowerment and a relinquishing of control, which in turn leads to negative feelings towards the brand. In response to the threat to their agency, consumers may evaluate the brand unfavorably to reassert their agency (*Hypothesis 2*).

We, further, hypothesize the boundary effect of self-construals (Markus and Kitayama 1991). Personal choice provides independents an opportunity to express themselves and establish a unique identity. While interdependents prefer choices made by a relevant in-group or an authoritative figure (e.g. mother) as it promotes social harmony and fulfills a sense of group belongingness (Iyengar and Lepper 1999). Thus, independents (and not interdependents) would be more likely to react more positively to a brand emphasizing a chosen identity through an enhanced sense of empowerment, than an assigned identity (Hypothesis 3). We test our predictions across three studies and five identities.

Study 1 (N = 110) showed that a chosen identity in a marketing message garnered more favorable brand evaluations, than an assigned identity. Participants were exposed to advertisements of Brand XYZ that either emphasized an assigned (nationality) or chosen (university affiliation) identity. They saw advertisements for ten miscellaneous products of the same brand, one at a time, and evaluated the brand and indicated the sense of empowerment the brand instilled. ANOVA revealed that participants in the chosen identity condition evaluated the brand more favorably ($M = 4.41$, $SD = 1.47$) than those in the assigned identity condition ($M = 3.46$, $SD = 1.65$), $F(1, 109) = 10.12$, $p = .002$. Bootstrap analyses using 10,000 bootstrap re-samples (Hayes 2013) revealed that the indirect effect of identity choice on brand evaluation through empowerment was significant (point estimate = .53; 95% bias-corrected confidence interval of .18, .94), supporting Hypothesis 2.

To demonstrate the consequences of choice independent of identity importance, we conducted Study 2, where we allowed individuals to choose an identity that is most important to them. 165 participants were presented with four identities, Gender and Nationality (assigned), Koç and Business Graduates (chosen). Participants were asked to rank the identities, the identity ranked as most important was inserted in the advertisement. ANOVA revealed that participants in the chosen identity condition evaluated the brand more favorably ($M = 4.56$, $SD = 1.11$) than those in the assigned identity condition ($M = 4.06$, $SD = 1.32$), $F(1, 164) = 6.93$, $p = .009$. Bootstrap analyses using 10,000 bootstrap re-samples (Hayes 2013) revealed that the indirect effect of identity choice on brand evaluation through empowerment was significant (point estimate = .25; 95% bias-corrected confidence interval of .06, .49), supporting Hypothesis 2.

Study 3 (N = 239) examined self-construal as a boundary condition for the relationship between identity choice and brand evaluations. Participants were randomly assigned to one of the four conditions, identity choice (nationality vs. professional) X self-construal (independent vs. interdependent). The experiment began by priming self-construal using Brewer and Gardner's (1996) word search method. After completing the task, similar to Study 1, participants saw an advertisement and brand evaluation and psychological empowerment were assessed. The conditional indirect effects with bootstrapping (10,000 samples) indicated that the mediation effect of identity choice on brand evaluation via empowerment is positive when primed with an independent self-construal (effect = 0.37, SE = 0.16, 95% CI: .07, .68) but not significant when primed with an interdependent self-construal (effect = -0.09, SE = 0.17, 95% CI: −.44, .23). The index of moderated mediation is significant (estimate = 0.46, SE = 0.23, 95% CI: .02, .93), suggesting that the indirect effect of identity choice on brand evaluation via psychological empowerment varies significantly depending on self-construal.

Scholars have suggested that agency, and the motivation to maintain and reinforce it (Kivetz 2005) is an important consideration in consumer decisions (Bhattacharjee et al. 2014). We extend this assertion and demonstrate empirically that identity choice, which pertains to agency in self-definition, has important consequences for consumer empowerment, and brand evaluations.

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In the Face of Self-threat: Why Ambivalence Heightens Consumers' Willingness to Act

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EXTENDED ABSTRACT

Be it the choice to ask for a promotion, negotiate a job offer, or even ask a potential romantic partner out on a date, consumers frequently find themselves faced with the decision of whether to approach or avoid desired outcomes that carry a risk of failure. Approach and avoidance have long been recognized as two fundamental motivations driving human behavior (Elliot 2006; Freud 1920; Higgins 1997; James 1890). Research on reason-based choice suggests that when choosing to approach or avoid, people are more likely to approach options based on their positive features (pros) and avoid options based on their negative features (cons; Shafir et al. 1993). In contrast, we propose that for choices where there is a risk of failure that is self-threatening, consumers who consider both pros and cons of an outcome, that is, generate ambivalence (Priester and Petty 1996), will be more willing to pursue the outcome than those who consider only the outcome's positive features. In seven studies (*N*=1,995), we show that bringing to mind the negatives of an outcome mitigates the threat of failure by reducing the outcome's desirability, while keeping in mind the positives of the outcome encourages consumers to pursue it. Further, we show that consumers do not intuit this effect and are likely not taking advantage of it.

Pretests of the designs of Studies 1-4B and the high self-threat manipulation in Study 5 confirmed that consumers perceived the contexts in these studies as self-threatening (*p*<.001 for all).

Participants in Study 1 considered negotiating their dream job's number of vacation days and wrote either three pros about getting more vacation days (low ambivalence) or one pro and two cons (high ambivalence). Control condition participants simply decided whether to negotiate. The omnibus was significant (χ^2(df=2, n=300)=11.71, *p*=.003). Those generating high ambivalence were more willing to negotiate (79.6%) than those generating low ambivalence (61.6%; *p*=.006) and those in the control condition (58.3%; *p*=.001), the latter two groups not differing (*p*=.626).

Participants in Study 2A considered asking someone who looks like their celebrity crush out on a date and wrote either three pros of dating their celebrity crush lookalike (low ambivalence) or one pro and two cons (high ambivalence). Those generating high ambivalence were more willing to ask their celebrity crush lookalike out (*M*=58.2) than those generating low ambivalence (*M*=49.34; *p*=.021). Those generating high ambivalence also felt more ambivalent (*M*=4.60) than those generating low ambivalence (*M*=3.89; *p*=.011), confirming that our manipulation induced ambivalence.

Participants in Study 2B were given the details of Study 2A, and the majority of them (81%) incorrectly predicted that participants in Study 2A's low ambivalence condition would be more likely to ask out their celebrity crush lookalike, χ^2(1) = 76.88, *p*<.001.

Currently employed participants in Study 3 generated either high or low ambivalence towards a promotion at their workplace. Participants who generated high ambivalence towards the promotion were more willing to ask for a promotion (61.0%) than those who generated low ambivalence (44.0%; χ^2(df=1, n=200)=5.79, *p*=.016). Participants who generated high ambivalence towards the promotion (*M*=2.97) reported lower self-threat than those who generated low ambivalence (*M*=3.56; *p*=.003). Bootstrap analysis (Hayes 2017) revealed that participants who generated high ambivalence felt less self-threat, resulting in greater willingness to ask for a promotion [95% CI: 0.02, 0.36].

As in Study 3, currently employed participants in Study 4A generated either high or low ambivalence towards a promotion at their workplace. Those generating high ambivalence reported that the promotion was less desirable (*M*=5.11) than did those generating low ambivalence (*M*=5.79; *p*<.001). Those generating high ambivalence also reported less self-threat (*M*=2.79) than did those generating low ambivalence (*M*=3.64; *p*<.001). Those generating high ambivalence indicated higher willingness to ask for a promotion (36.3%) than did those generating low ambivalence (11.2%; χ^2(df=1, n=200)=17.19, *p*<.001). Bootstrap analysis (Hayes 2017) revealed that participants generating high ambivalence desired the promotion less, and consequently felt less self-threat, serially mediating greater willingness to ask for a promotion [95% CI: 0.04, 0.58]. The reverse model with self-threat preceding outcome desirability found no mediating path from self-threat to outcome desirability leading to greater willingness to ask for a promotion (95% CI for the indirect effect: [-0.01, 0.15]).

Currently employed participants in Study 4B generated either positive, negative, or ambivalent attitudes towards a promotion at work. The omnibus was significant (*F*(2, 292)=3.20, *p*=.042). Participants indicated higher likeliness to ask for the promotion in the ambivalent condition (M=39.25) compared to both the positive condition (*M*=26.90; *p*=.019) and the negative condition (M=28.89; *p*=.049), which did not differ from each other (*p*=.703).

Participants in Study 5 generated either high or low ambivalence towards an IQ task, described as quicker than a Math task, before choosing between the two. Self-threat was manipulated by varying if one's ability to take the IQ task did (high threat) or did not (low threat) depend on performance on a pre-task. The interaction was significant (*b*=1.20; *p*=.001). In the high self-threat conditions, participants chose the IQ task at higher rates when they generated high ambivalence (76.2%) than when they generated low ambivalence (62.9%; *p*=.016). This reversed in low self-threat conditions; participants chose the IQ task at lower rates when they generated high ambivalence (68.4%) than when they generated low ambivalence (79.1%; *p*=.029).

The current research offers insight into how and when ambivalence leads to an approach motivation, adding to literature on the functional consequences of ambivalence (Cornil et al. 2014; Hershfield et al. 2013; Larsen et al. 2003; Lipkus et al. 2005). Second, it contributes to work on reason-based choice, qualifying the finding that people are more likely to approach an outcome only for its positive features (Barber et al. 2003; Hoch 1984; Shafir et al. 1993; Simonson 1989) by demonstrating that the generation of both positive and negative features can counterintuitively make action towards the outcome more likely within self-threatening contexts. Finally, it extends research examining the relationship between ambivalence and threat (Pagliaro et al. 2012; Reich and Wheeler 2016; Rothman and Vitriol 2021) by illuminating that ambivalence reduces self-threat.

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Mobile Ethnography: A New Research Tool in Launching A New App

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EXTENDED ABSTRACT

Research Purpose:

Why is *Mobile Ethnography (ME)* important as a research method tool and what is its importance for future researchers and managers.

Method and Data:

- With millennials as highest users of mobile phones (90.3%) and the heaviest users and adopters of new apps, it is only natural to assume they are likely to be first ones to adopt the Vimi app.
- Recruiting students should not be mixed with students being a convenience sample as is perceived with most academic research in marketing.
- Since the goal of this study is to understand how college students use Vimi in practice, the researchers recruited 25 students from colleges throughout the U.S.
- All were pre-screened and fell into the category of medium/high mobile and social app usage.
- The participants used Vimi for a week and answered questions throughout the seven days on a mobile ethnography app called (OTS) that tracked their opinions as they completed assignments and explored Vimi's various organizational and chat tools.
- The students were told the specific dates that they would use the Vimi app and answer questions on the app during and after their app experience.

Summary of Findings

This timely research makes conceptual and methodological contributions in a few ways. First, this paper highlights ME as a timely, cost-effective research method tool that allows the researcher to probe the participants for greater insights and get immediate results. Second, through an ME study, this paper demonstrates the steps and procedures that are followed in using ME in testing a new app. Third, the specific in-the-moment insights through comments and videos through ME offer results and reflection on launching a new app such as Vimi and collecting real-time data in a very unique way. Thus, by using ME, researchers can successfully circumvent lapses in memory by capturing observations in real-time.

Key Contributions

ME is an important and timely marketing research tool that captures specific in-the-moment insights through comments and videos and offers reflections on launching a new app such as Vimi in a very unique way. This research could provide the managers with the benefits of using ME as a research method tool that can generate rich data and insights hitherto unknown. Insights such as the positive reactions and the ease with which files could be organized and shared, organizational and filing utility as the main positioning of the app, constructive qualitative feedback on minor UX changes to make the app feel immediately familiar to users are unlikely to be obtained through a traditional research method. These insights not only help with improvising a product but also with insights on positioning the product.

Strike While the Iron is Hot: Temperature Affects Consumers' Appetite for Risk

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EXTENDED ABSTRACT

Risk is inherent in many consumer decisions, from trying an unfamiliar product to choosing between brands at the grocery store. Accordingly, risk has been widely studied by researchers, who have focused on both the elements of the decision itself, such as its similarity to previous decisions (Webb and Shu 2018), as well as personal characteristics of the decision-maker, such as their level of cognitive depletion (Lisjak and Lee 2014). However, the impact of atmospheric cues on consumer decisions involving risk is largely unstudied (Jami 2019), with the exception of two studies regarding auditory pitch (Lowe, Loveland, and Krishna 2019) and elevation (Esteky, Wineman, and Wooten 2017).

We address this gap and extend the risk literature by introducing a situational variable that has been overlooked despite its ubiquity—temperature. Humans are extremely sensitive to temperature, able to detect variations as small as 0.02° C (Jones 2009). Further, consumers experience a wide range of temperatures throughout any given day (e.g., moving outdoors from indoors, walking through the freezer section of the grocery store, etc.). Thus, these mundane experiences may well be impactful on a wide array of consumer behaviors. Across three studies, we find support for a positive relationship between temperature and risk-taking. As temperature increases, consumers' appetite for risk also increases. Further, we find that this relationship is mediated by consumers' response to cues about the opportunity for reward, engagement of the Behavioral Activation System. Finally, and that the relationship between temperature and risk is moderated by the consumer's level of self-confidence.

We theorize that warm temperatures serve as reward cues. This is based on research demonstrating reward-seeking behaviors among monkeys and pre-humans in response to warmth. For example, monkeys are known to engage in rewarding activities such as play, grooming, and mating during warm conditions; meanwhile, they avoid conflict and pursuit of resources during cold (Bernstein 1975, 1976). These behaviors are consistent with theory suggesting that early humans pursued rewards such as sustenance during warm seasons (Watson et al. 1999) and that such search behaviors and reward dependence are linked to neural activity, such as that of the Behavioral Activation System (Cloninger 1986).

Self-confidence (SC) represents individuals' subjective evaluations of their ability to generate positive outcomes (Adelman 1987). The feelings of capability and self-assurance associated with high SC result in different reactions to environmental conditions. Those who feel more capable and self-assured are not as responsive to external influences on their perceptions and behaviors (Mossman and Ziller 1968). In discussing the resistance of those high in SC to environmental influence, Bearden, Hardesty, and Rose (2001) note that these individuals display more consistent decision-making over time. Thus we hypothesize that higher levels of SC will attenuate the effect of temperature.

Study 1 was conducted on Mturk using a conceptual manipulation of temperature. Participants (N = 152, 45% female) viewed a thirty second slideshow of images associated with either heat or coldness. This manipulation has been used in prior work (Halali, Meiran, and Shalev 2016; Zhang and Risen 2014) and produced significant differences in subjective temperature $(= 5.86, = 4.42; t(1, 137.7) = -6.71; p < .001)$. Risk engagement was measured with an incentive-compatible gamble, whereby participants could bet any amount of their $0.30 bonus, and using a scale measure of risk inclination, DO-SPERT (Blais and Weber 2006). Carver and White's (1994) measure of behavioral activation drive was included to gather process evidence. Those in the hot condition gambled significantly more of their income ($= 18$ cents, $= 13$ cents; $F(1, 150) = 6.75, p = .01$) and reported marginally greater inclination toward risky behavior ($= 3.38, = 3.04; F(1, 150) = 3.28, p = .072$). This relationship was found to be significantly mediated by an individual's drive to pursue reward.

Study 2 used therapeutic packs and a student sample (N = 120, 36% female) and utilized a mock retail environment to observe the effect of this manipulation on brand selection. Participants were tasked with finding and selecting five items in the retail store, requiring them to select a national or private brand for each. Private brands are viewed as inherently riskier compared to national brands (Dunn, Murphy and Skelly 1986; Gonzales-Mieres, Diaz-Martin and Trespalacios-Gutierrez 2006) and so their selections served as a measure of risk taking through the portion of private vs. national brands chosen. Those in the hot condition showed greater risk engagement than those in the cold ($= 0.604, = 0.494; F(1, 108) = 4.9, p < .029$). This effect was attenuated at levels of self-confidence higher than average ($\beta = -.153; t(109) = -2,74, p = .007$).

Study 3 analyzed Nielsen Retail Scanner data from the years 2015 to 2018 and from across the United States. We used the sales of twelve product categories, covering over 13,000 UPCs, that were pretested to differ in inherent risk. To assess the effect of temperature we used weather data compiled by the National Oceanic and Atmospheric Administration and utilized a fixed-effects linear regression model. This model controlled for local precipitation and windspeed, product price, systematic monthly differences, and idiosyncratic differences between stores. To observe the interactive effect of temperature and category risk, each product was coded with a risk level $1 - 4$, according to the results of a pretest. This model revealed a significant interaction between temperature and each level of inherent risk such that temperature had a negative effect on the sales of products in the lowest level of risk ($\beta = -.068$, robust SE $= .008, p < .001$), a null effect on the second lowest ($\beta = -.001$, robust SE $= .003, p > .05$), and positive effects on moderate ($\beta = .023$, robust SE $= .005, p < .001$) and high-risk products ($\beta = .018$, robust SE $= .005, p < .001$). These results demonstrate that the relationship between temperature and sales became increasingly positive as the risk associated with purchase increased, indicating that consumers' appetite for risk is attenuated under cold conditions and enhanced under warm conditions.

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The Facilitating Effect of Physiological Self-tracking on Organ Donation

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EXTENDED ABSTRACT

Encouraging people to support organ donation is not an easy endeavor. Although many people profess to support organ donation, the percentage of organ donors remains low around the world[1] (IRO-DaT, 2020). One of the main impediments to organ donation is the perception that when one donates an organ, one gives up part of the self (Belk, 1990; Belk, 1987). Addressing such belief is a key step in encouraging greater organ donation. In this research, we argue that people may be more willing to donate their organs if they perceive the body as a conglomeration of multiple parts (instead of a singular whole) as this bodily perception reduces the feeling that one is giving up the whole self when donating an organ. More importantly, we propose that physiological self-tracking, or the practice of recording, analyzing, and reflecting on one's biometric data (e.g., steps, heartbeat, and calories consumed; Sjöklint, 2014), may shift people's bodily perception in such a way that facilitates organ donation. We conducted four studies to test our predictions.

We first conducted a pilot study (N = 343) on Amazon Mechanical Turk (MTurk) to ascertain if there is any prima facie evidence to support our proposition. We asked participants to report whether they used a self-tracking device/app and to indicate their opinion on a list of issues, one of which measured the extent to which they supported organ donation. Results showed that compared to non-trackers, self-trackers were more supportive of organ donation ($M_{self-trackers}$=4.28; $M_{non-trackers}$=3.83; $F(1,341)$=16.40, p<.001), confirming our prediction about a positive effect of physiological self-tracking on organ donation.

Study 1 aims to provide causal evidence for the effect of physiological self-tracking on organ donation. We recruited 200 students from a Singaporean university. Participants were randomly assigned to either self-tracking or control condition. All participants were told that the purpose of the study was to obtain their opinion on a self-tracking device. Each participant was asked to wear the device, complete several physical tasks around the campus, and finish a survey about the device afterward. Participants across conditions received identical devices and completed similar physical tasks, but the instructions differed across conditions. Self-tracking participants were instructed to pay attention to the biometric information (i.e., steps, heart rate, and distance) provided by the device, while those in the control condition were instructed to pay attention to how comfortable the device felt on the wrist (i.e., biometric data were not shown to control participants). After the device-evaluation task and in a presumably separated survey, we ask all participants to indicate how comfortable they were to donate their organs and whether they would like to receive an organ donation pledge form. Results showed that participants in the self-tracking (vs. control) condition were more comfortable donating organs ($M_{self-tracking}$=5.49, $M_{control}$=5.08; $F(1,168)$=4.44, p=.04), and more likely to opt to receive the organ donation pledge form ($M_{self-tracking}$=29.8%, $M_{control}$=15.6%; $Wald$=4.17, p=.04).

Study 2 aimed to show that the observed effect is driven by whether people see their body as being unitary or fragmented. Study 2 was also designed to rule out an alternative explanation that self-tracking facilitates organ donation because it enables people to feel a greater sense of bodily self-control (Lupton, 2013; Sjöklint, 2014). We randomly assigned 249 MTurkers to either a self-tracking or no-tracking condition. In the first part of the study, we asked participants to evaluate a computer program (i.e., our self-tracking manipulation). Self-tracking participants were told that the program can track users' physiological information when they perform cognitive tasks. These participants then tested the program by completing an anagram task. After completing the task, self-tracking participants were provided with fictitious feedback on their biometric measures (i.e., calories, heartbeat, sweat rate, and respiration) during the task. Participants in the no-tracking condition completed the same anagram task without receiving any feedback on their physiological performance. In a subsequent and presumably unrelated study, all participants indicated the extent to which they supported organ donation. Participants also completed a scale measuring whether they viewed their body as a unitary whole and another scale measuring the extent to which they felt they had control over their body. Results showed that self-tracking participants were more supportive of organ donation than no-tracking participants ($M_{self-tracking}$=4.31, $M_{no-tracking}$=4.01; $F(1,214)$=4.78, p=.03). Furthermore, a mediation analysis revealed a full mediation through body view (95% CI=[.01; .32]; p<.05) but no mediation through perceived self-control (95% CI=[–.02; .03]; p=.75).

Study 3 provides additional evidence for the proposed mechanism by adopting process-through-moderation approach. We randomly assigned 451 Prolific participants to each condition in a 2 (self-tracking vs. no-tracking)×2 (holistic body-view vs. control) between-participants design. The first part of the study manipulated participants' self-tracking behavior in a manner similar to Study 2. The second part of the study was a reading task meant to manipulate participants' holistic body-view. Participants in the holistic body-view condition read an article that discussed a holistic therapeutic approach, which views all body parts as connected and treats the body as a singular whole. Those in the control condition read an excerpt about three new books. Afterward, participants indicated how comfortable they would be to donate their organs. Results showed a significant interaction between tracking condition and body-view condition ($F(1,432)$=4.28, p=.04). A follow-up contrast analysis showed that in the control condition, self-tracking participants were more supportive of organ donation than no-tracking participants($M_{self-tracking}$=5.83, $M_{no-tracking}$=5.30; $F(1,432)$=4.74, p=.03). Meanwhile, in the holistic body-view condition, participants across tracking conditions did not differ significantly in their support for organ donation ($M_{self-tracking}$=5.33; $M_{no-tracking}$=5.55; $F(1,432)$=.68, p=.41). These results demonstrated that when self-tracking participants were made to think of the body as a unitary whole, the effect of self-tracking was mitigated, further supporting our proposed mechanism.

Findings from four studies demonstrate that physiological self-tracking facilitates more organ donation tendencies. The effects of self-tracking on organ donation were robust across different samples (US, UK, and Singapore) and different manipulations of self-tracking. As such, we suggest promoting self-tracking practice as a means for addressing the current shortage of donor organs and saving more lives.

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1   Less than 50 donors per million of population (IRODaT, 2020)

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Are Preference Reversals due to Decision Contexts or Elicitation Procedures? A Theoretical Reconciliation

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EXTENDED ABSTRACT

Consumer research has documented a variety of decision contexts that produce preference reversals–where people prefer option X over Y in context A, but prefer Y over X in context B due to changes that should not matter from a normative perspective (e.g., intertemporal tradeoffs, adding decoy to choice sets, acquisition versus forfeiture; Ainslie, 1975; Huber, Payne, & Puto, 1982; Shafir, 1993).

While preference reversals have been studied across a variety of decision contexts and from many different theoretical perspectives, most of this research shares one common feature—it elicits preferences through a choice of options. In the present research, we revisit several decision context effects and test whether these preference reversals are solely due to changes in the decision context. We compare preferences for products elicited through choice and monetary valuation (WTP/WTA) in three classic paradigms of decision context effects: intertemporal tradeoffs, acquisition versus forfeiture, and the attraction effect. We propose that preference reversals attributed to decision contexts might be produced by the interplay between decision contexts and preference elicitation methods, and that using choice to elicit preferences is an important factor. In other words, preference reversals between decision contexts might be, paradoxically, more prevalent when preferences are elicited through choice than through WTP/WTA.

Our theory builds on the notion that market-relevant attributes (i.e., attributes that are commonly used to infer the price for an option) are more salient and weighted heavily in monetary valuation than in choice. When pricing a package of macarons, for example, people are likely to pay more attention to the number of macarons contained in the package than to how much time they must wait for delivery. When pricing an apartment, they pay more attention to its square footage or amenities than to its location convenience. We suggest that increasing the salience and weighting of market-relevant attributes should reduce sensitivity to decision contexts that produce a preference reversal by shifting the salience or weighting of attributes in choice. Consideration of market-relevant attributes to comparison standards outside the decision context should reduce the influence of decision context on attribute weighting in preferences elicited through WTP/WTA.

Across scenario-based Experiments 1-4, the results support our hypothesis that decision contexts are less likely to lead to a preference reversal when preferences are elicited with WTP/WTA than with choice. Experiment 2, for example, examined preferences elicited with choice and WTP/WTA in an acquisition versus forfeiture paradigm. In this paradigm, participants were presented with two lotteries, an impoverished lottery and an enriched lottery (Shafir 1993). We used the same choice paradigm as Shafir (1993) and added two additional versions, in which participants expressed their preferences through WTP and WTA. Replicating the original finding, we find that participants were more likely to choose the enriched lottery (over the impoverished lottery) in the acquisition mode than in the forfeiture

mode (76% vs. 47%, $p < .01$). However, in WTP/WTA, participants did not differ in their preferences for the enriched lottery between the acquisition mode and the forfeiture mode (87% vs. 90%, $p = .67$).

Next, we examined our process account by directly manipulating preference elicitation measures, response scales, attribute prioritization, and evaluation order (Experiments 5-8). We show that the difference cannot be explained by the different types of response scales (i.e., typically binary in choice versus continuous in WTP) but rather by a difference in the weight that the attributes receive. When expressing preferences through WTP, relative to choice, people allocate more weight to the attribute that is most related to its market price (e.g., the size of an apartment rather than idiosyncratic commuting times).

This research offers several theoretical contributions. First, decision contexts and preference elicitation methods are often considered separately in the constructed preferences literature (Payne et al. 1993). Our findings suggest that the construction of preferences reflects the deep interplay between decision contexts and the preference elicitation process. Second, preference reversals across decision contexts in choice have been interpreted as showing that consumers have an incomplete preference ordering. Our findings challenge the generalizability of this proposition and suggest that choice may be a less stable measure of preferences than alternative measures like WTP/WTA. Third, prior research demonstrates the violation of the procedural invariance axiom by showing preference reversals between different preference elicitation methods in a single context (e.g., Lichtenstein & Slovic, 1971; Tversky, Slovic, & Kahneman, 1990). Our findings illustrate how decision contexts can create and negate preference reversals between preference elicitation methods.

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Donations in Japan: Hometown Tax Donation and Reciprocal Gifts

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EXTENDED ABSTRACT

Though Japan has historically had lower rates of charitable giving (Ouchi 2004), it has recently seen an expansion of donations through the introduction of the hometown tax donation system (HTD) by the Japanese government. The HTD allows taxpayers to write off donations to local municipalities as tax deductions based on adjusted income. Municipalities' competition to attract donations led to emphasis on reciprocal gifts, and led to concentration of tax revenue to the most "generous" municipalities with luxurious reciprocal gifts. This trend was criticized as counter to the pro-social origins of the system and mostly benefiting high-income individuals with high deduction limits (Sato 2017). While HTD is a relatively new system for charitable giving in Japan, it has seen wide adoption despite such criticism. This paper aims to further understanding of HTD and consider what drives charitable giving in Japan.

Bekkers and Wiepking's 2011 literature review found reputation to be an important mechanism that drives charitable giving where donations lead to social recognition and approval. Donations are perceived to impress others, and visibility tends to increase willingness to donate (Lee et al. 2020; Winterich et al. 2013). Yet, in Japan, there are critical views of publicly "doing good." Activities related to social good are expected to be done in secret under the beauty of a virtue called *intoku* (literally "hidden good") (Stanislawski et al. 2014). As society expects charitable behavior to be hidden, visible charitable acts can lead to minimal or even negative social reinforcement (Yamamoto and Tanaka 2018). How is HTD influenced by this cultural norm?

Costs and benefits were another major mechanism identified by Bekkers and Wiepking (2011). As costs go down (tax deductions) and benefits increase (reciprocal gifts), donations are predicted to increase. Yet, these factors can shift emphasis from giving to exchange, and "crowd out" intrinsic motivations and psychological benefits such as the "warm glow" effect (Andreoni 1989), dampening giving. Indeed, HTD's emphasis on reciprocal gifts has been widely criticized and led to government intervention limiting the value of reciprocal gifts (Hidaka and Mizukoshi 2018). Yet, this system has also been credited for making donations more accessible to the average Japanese as seen through considerable donations collected in response to disasters (The Mainichi 2018). This is significant because individual charitable giving is historically less common in Japan than in the West (Ouchi 2004). How do donors perceive HTD in relation to self-benefit vs. other-benefit?

To answer these questions, an exploratory research was conducted by interviewing twelve HTD donors using purposive sampling (Etican et al. 2015). As HTD aims to help areas with weak revenue bases, urban interviewees were primarily selected. Additionally, those with various motives (ranging from purely for reciprocal gifts to more altruistic) were recruited. Thematic analysis was conducted on interview transcriptions (Braun and Clarke 2006), and emerging themes were discussed among researchers until agreement was reached.

The appeal of realizing social benefits is said to be effective when donation behavior is visible, while the appeal of self-interest received by the individual donor is more effective when behavior is not visible (White and Peloza 2009). In HTD, the appeal of self-interest is enhanced given that donors do not want to publicly claim donations (since it does not lead to positive reputational effects due to *intoku*) and because donations are linked to income (which most consider private and do not wish to disclose). However, the focus on self-benefit was not seen to "crowd out" intrinsic motivations or prevent "warm glow" as might be expected.

Economic self-benefit was not perceived as problematic by respondents. Rather, reciprocal gifts were credited for stimulating local economies and fulfilling the original intent of HTD to help municipalities struggling with reduced tax bases. Moreover, the act of participating in this system was perceived as intrinsically rewarding, counter to expectations of extrinsic motivations crowding out intrinsic motivations and warm glow effects.

Past studies have shown that social recognition can facilitate donation behavior (Winterich et al. 2013). However, in Japan, donations are influenced by the norm of *intoku*, which is against "showing off" good deeds. Not only that, people are also generally expected to make modest self-presentations that refrain from appearance of self-enhancement (Kitayama et al. 1997). This is considered rational behavior aimed at displaying humility to maintain good relationships with others in mutually cooperative cultures (Heine et al. 2000; Yoshida et al. 2004). In this context, the existence of self-benefitting reciprocal gifts seemed to act as an "excuse" for the charitable act. In essence, reciprocal gifts "hide" the charitable act and make it socially acceptable to practice publicly.

It was found that HTD is driven by people seeking self-benefit from reciprocal gifts. However, people simultaneously found social significance and justified their enjoyment of these goods as contributing to social good by interpreting the reciprocal gift as a way to stimulate local economies. Under this understanding, it is "normal" to get returns for donations, and this act of what is in essence "responsible consumption" is interpreted (at least partially) as socially motivated rather than solely for oneself (Giesler and Veresiu 2014). In HTD, the benefits of reciprocal gifts are a target of vague positioning with dual meaning. This allows room for nurturing intrinsic motivations, and may even influence donor identities where past giving leads to more future giving (Kessler and Milkman 2018).

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How and When does a Used (vs. Unused) Account Affect Consumption Behavior?

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EXTENDED ABSTRACT

Consumers frequently have to make choices to spend their resources on an item that they may not need, but want, or hold on to it for later. These resources may be in a used account or an unused account. How does a used (vs. unused) account affect subsequent consumption in the same account? Building off of research on relative judgments (e.g., Morewedge, Holtzman, and Epley 2007; Sharif and Oppenheimer 2016; Stewart et al. 2002), we propose that people engage in within-account comparison, comparing the amount remaining to the original amount. Consumers then perceive the used account as closer to exhaustion, leading them to devalue and be more likely to spend their resources on non-essential items and activities from this account. We provide evidence of this effect in one archive dataset (N=210,586) and six preregistered studies (N=6055).

In the American Time Use survey, we find that consumers are more likely to spend their time on leisure activities, when they are closer to the end of an hour (a used account) than at the start of an hour (an unused account) (p<.001). In Study 2 (N=567), participants considered how to spend their time at 1:50 pm or 2:00 pm; we found that consumers were more likely to spend their time on leisure activities when it was part of a used (vs. unused) account (p=.002).

Study 3 (N=585) replicated the used account effect in a different domain – credit card reward points. In the used account condition, participants imagined that they had accumulated 100K points in a reward program, had spent 70K points, and now have 30K points. In the unused account condition, participants imagined that they had accumulated 30K points in a reward program and now have still 30K points. Participants valued the 30K points less (p<.001), were more likely to spend them (p=.03) in the used (vs. unused) condition; further valuation mediated the used (vs. unused) effect on purchase likelihood.

If our theory is true that a used account increases subsequent consumption due to a within-account comparison, then the likelihood of resource consumption increases only when consumers use resources from the account in consideration, rather than from a separate account. Study 4 (N=1144) introduced a new condition in which participants imagined that they had Card A (70K points) and Card B (30K points). They exhausted Card A but had not used Card B. Consistent with our theory, we found that participants valued the 30K points less in the used account condition than in this two-card condition (p<.001) and thus were more likely to spend the points in the used account condition than in the two-card condition (p=.02).

Study 5 (N=1129) examined how the proportion of account remaining moderates the used account effect in a 3 (available amount: $24, $16, vs $8) x 2 (gift card: used vs. unused) between-subject design. Participants in the used gift card conditions imagined they had $40 on their gift card originally and spent $16, $24, and $32 in the used $24 (60% left), $16 (40% left), and $8 (20% left) conditions. Those in the unused conditions imagined instead they had a $24, $16, or $8 gift card and had not yet spent money from these cards. As predicted, we found the used account effect on subsequent spending depended on how close the account was to exhaustion. In particular, we found a $24 (vs. $8) x used (vs. unused) interaction on the remaining valuation (p=.03) and the spending likelihood (p<.001): participants valued their gift cards less and were more likely to spend their resources in the used (vs. unused) gift card when the used conditions had 20% left in the account compared to 60% left. We found

a similar interaction between the $24 (vs. $16) x used (vs. unused) condition; and no interaction between the $16 (vs. 8) x used (vs. unused) conditions. Thus, our effect is moderated by whether more than 50% is remaining in the used account.

Study 6 (N=1091) examined the impact of the relative account remaining on the used account effect by holding constant the total resources and past spending in a 3 (proportion of account remaining: unused 100%, 75% vs. 25%) between-subject design. In the unused condition, participants imagined that they accumulated points in credit cards A (90K) and B (30K), exhausted Card A, and had 30K on Card B, which had not been used yet. In the used 75% condition, participants imagined they accumulated points in credit cards A (80K) and B (40K), spent 80K of Card A and 10K of Card B, and had 30K left on Card B. In the used 25% condition, participants imagined that they accumulated 120K points in a credit card, spent 90K, and had 30K left. The 30K points were valued less in the used 25% condition than the unused (p<.001) and the used 75% conditions (p=.001), leading to a greater likelihood of spending in the used 25% condition than the unused (p=.03) and used 75% (p=.09) conditions. Thus, we show that the relative proportion of account remaining moderates the used account effect, such that if there is a large proportion of the account remaining, the effect is attenuated.

Study 7 (N=1492) substantiated the used account effect in incentive-compatible online shopping. In the used account condition, participants were endowed with a 1000 reward points account. In the unused account condition, participants were endowed with reward points accounts A (900) and B (100). All participants were asked to spend 900 points on 2 of 20 items (450 points each; $15-$20) that they liked. After two purchases, participants were asked to spend 100 points on 1 of 6 items (100 points each; $2). We replicated the used account effect by showing that participants were more likely to hold onto the 100 points until the last choice with an unused account (56%) than with a used account (48%, p=.003).

This research substantiates our understanding of how the perception of consumers' accounts affects their consumption behavior and provides important implications for consumers and marketers.

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When it is Best to be Last: How Constructed Distributions Influence Sequential Judgments

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EXTENDED ABSTRACT

Some of our most important decisions involve selecting an option from an ordered sequence. From choosing a house, to buying a car, to hiring a candidate, we often select an alternative from a set of options presented sequentially.

In this work, we describe how the decisions consumers make are influenced by the order in which alternatives are presented. Across five pre-registered experiments (N=2773) and a field study (N=7835), we find that consumers evaluate attractive options more favorably when they are presented last than when they are presented first. We also find that consumers are more enthusiastic about both their selected option and the entire choice set when they evaluate alternatives in ascending quality order than descending quality order.

To account for our findings, we introduce a novel theoretical framework, Constructed Distribution Theory. Using a distribution builder, we show that consumers construct—and re-construct—reference distributions as they evaluate alternatives. Absent detailed information about the distribution, consumers judge early observations as more representative and closer to the global average than later observations. As a result, strong candidates rated early in a sequence are relatively under-valued (judged to be close to average), but weak candidates rated early in a sequence are relatively over-valued (judged to be close to average).

When consumers evaluate alternatives late in the sequence, however, they have a well-developed distribution with which to evaluate candidates. As a result, weak candidates rated late in a sequence are rated more harshly than when they are rated early in a sequence, and strong candidates rated late in a sequence are rated more favorably than when they are rated early in a sequence.

In Study 1 (N=198), participants evaluated six monologue performances. In a pilot study, we randomized the order of these performances and had participants rate the quality of these performances. We then constructed two different order conditions: Ascending order in which the performances increased in quality, and descending order in which the performances decreased in quality. After viewing each performance, participants rated the performer and generated a distribution of their perceptions of the entire pool of candidates. Supporting our theoretical framework, participants rated strong performers more favorably and weak performers more harshly when they were presented last. We also find that participants updated their reference distribution consistent with the order in which they viewed the candidates.

In Study 2 (N=745), we replicate our findings in Study 1 with very different stimuli (singing auditions). In addition, in this study, we show that order effects can influence the overall impression of the full set of candidates. Specifically, participants rated the entire set of candidates more favorably when they had evaluated the alternatives in ascending rather than descending order. This finding is akin to an assessment that the particular pool of candidates is particularly strong or weak.

Next, we consider the possibility that people with detailed information about the distribution will exhibit smaller order effects than those without experience. In Study 3 (N=679), we test this by having some participants view the entire set of candidates twice. In the first stage of the experiment, participants viewed all of the performances (Experience condition) or instead viewed unrelated material (six commercial ads; No-experience condition). In the second stage, participants evaluated the six monologue performances either in ascending or descending order. We find that experience diminishes, but did not eliminate the order effects we document in Studies 1 and 2.

In Study 4 (N=572), we replicate our findings in a different domain with a set of high-quality candidates. In this study, we had professional movers from TaskRabbit who had extensive experience and 5-star ratings create videos to describe their moving experience. In the main study, participants watched 1-minute videos of each mover in either ascending or descending order, rated each mover, and created a reference distribution of the quality of the set of movers. As in Studies 1-3, we find that the strongest candidate was rated best when they were presented last and that all five movers were rated more favorably in the ascending order condition than they were in the descending order condition (all p<.001).

In Study 5 (N=579), we manipulated the sequence to investigate how order effects might change who the decision maker selects as their favored candidate. Specifically, we created sequence orders to privilege either the best mover (presented first or last) or the second-best mover (presented first or last). Consistent with our theorizing, participants in Study 5 were more likely to select the best mover when the best mover was presented last (p=.01), but were more likely to select the second best mover when the second-best mover was presented last (p=.02).

In Study 6 (N=7835), we analyze a largescale field dataset of MBA interviews and admissions. We operationalized the quality of applicants as the score admission readers gave to their written application before the interview, and we operationalize the order as the order of interviews an interviewer had on a particular day. Consistent with the findings in our lab studies, high-quality MBA applicants who were interviewed last on a particular day were rated significantly higher than when they were interviewed earlier in the day (p<.001).

Across our studies, the best candidates were rated more highly when they were evaluated last than when they were evaluated earlier in the sequence. Experience moderates this effect (Study 3), but even experts are prone to order effects (Study 6). We find support for Constructed Distribution Theory: the distributions consumers construct were significantly influenced by the order of the sequence. Our findings substantially advance our theoretical and practical understanding of order effects (e.g., Biswas et al. 2010; Janiszewski et al. 2013; Suk et al. 2012), consumer learning, and dynamic belief updating (Erdem and Keane 1996; Erdem et al. 2008; Zhao et al. 2011).

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Sex for Sale: People as Consumable Objects

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EXTENDED ABSTRACT

Women have been stigmatized and commodified for millennia as institutional and structural norms seek to control their sexuality. We examine this condition in the context of sex workers in Calcutta, India who are bought-and-sold through prostitution, culminating in a set of identifiable selves that work to protest this status.

Contextual Framework

A mother neither you are, not a daughter either, or a darling wife Urvashi, as you are, O you remain the dweller of the heavens!!

The above couplet was written by Asia's Nobel laureate as well as poet-philosopher Rabindranath Tagore, who described the situatedness of *Vasabadatta* as a third Century heroine in a Sanskrit drama. She was a *ganika* or courtesan, and part of the profession of prostitution in India that dates back over 5000 years, with its first mention in the ancient text of *Rgveda.* These lines describe the predicament of a sex worker as service provider that is relevant in the context of the contemporary profession that exists on the periphery of society and fails to be fully understood. Hence, it has been subjected to scrutiny without a deeper appreciation of its meanings for consumer research. Specifically, infliction of social dishonor, sexual violence on women, and resulting shame and exclusion that normalizes patriarchal subservience and subjugation have not been considered in this exchange context.

Our emphasis on stigmatization and commodification helps to challenge current understandings of free market systems and people-as-products that is often viewed as an exception which unfolds in limited pockets of illicit sales (Bales 2000). We note that, following Crane (2013), the function of such market-based commodification is to create conditions that dehumanize participants on one side of the exchange equation, who exist in *fringe* zones of institutional legitimacy that are kept beyond the purview of most societal members. The predicament of a sex worker reflects such a bare life, and we examine stigmatization and commodification practices through study of how bodies of *liner-meyes,* or underprivileged sex workers, manifest in Kolkata, India. Through shame, stigma, and physical separation, they are stripped of citizenship rights and subjected to *exchanges*. Yet, women in our study draw on markets to create narratives of protest to stigmatization and commodification in their continuing quest for individuation and, ultimately, social approval.

Etymology of Prostitution

In a sense the terms commodification and prostitution are etymologically connected, as the latter evolved in the 16th Century BCE from the Latin word *prostitutus,* which means women who are *exposed publicly and offered for sale* (Online Etymology Dictionary, retrieved 2020-06-16). Originally, sex workers in India came from four categories of second-class citizenship: "They were born as prostitutes' daughters, or they were purchased, or captured in war, or they were women who had been punished for adultery" (Bhattacharji 1987, 35). Indian societies in the past accepted temporary unions without obligations or *muhurtika*—such affairs were voluntary or professional, depending on the attitude of partners. Over time, prostitution was classified and women were called *varangana, varastri,* signifying she is not the responsibility of a man but looks after herself by accepting payments from men she 'obliges'- hence, the phenomenon of a libidinal market emerged.

This historical and global perspective on women sets the stage for how prostitution and prostitutes have been treated—and for the emergence of two opposing approaches to the profession (Shrage 1994). The first approach is an outcome of patriarchy and capitalism that commodifies women and their sexual activity for the purpose of serving men (see Scott 2020). This paradigm argues that prostitution perpetuates social and economic inequality of women relative to male counterparts, and it implies either that female sexuality can be *owned* by someone other than the woman, or that it is capable of being bought-and-sold by male customers. The alternative paradigm is more libertarian and views prostitution as a natural outcome of varied sexual desires and economic liberties. Prostitutes are, in fact, capitalists who sell their bodies because their decision calculus reveals a net gain relative to what they give up; the profession is little different from other forms of wage labor. Of course, this approach fails to recognize that some women were sold into sexual slavery and may believe that they have little recourse other than to comply (Bertone 2004).

Research Orientation

Therefore, our research team entered into this project with the goal of understanding the process of *coping with stigma* that surrounds these exchange processes. As we learn, uncertainties of sex work in the face of vulnerability revealed efforts to protest stigma. Our research question on stigmatization of sex workers required further analysis and specificity of selves that manifest as women seek to (re)construct their identities (see Pryor and Reeder 2011). This study reveals how people associated with stigmatized individuals are perceived to devalue them, leading sex workers to be fearful and reluctant to disclose their profession (Sanders 2005; Quadara 2008). Ultimately, sex work remains troublesome for governments, even if exchange among prostitutes and clients is decriminalized (Lazarus et al. 2012; Begum et al. 2013; Foley 2017). We also found that sex workers develop an *eudaimonic* self that serves to juxtapose the prostitute with an accomplished social actor. Additionally, identities form around the *provider* self, who justifies her profession by recognizing the good for significant others that higher incomes of sex work provide. Other selves are presented that support more acceptable identities in the face of stigma, and they explicate this social process in a novel consumption-of-person in a libidinal market domain.

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Psychologically Accessing Ownership: How Does Psychological Ownership Affect Peer-To-Peer Access-Based Consumption?

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EXTENDED ABSTRACT

The feeling of ownership one has over an object, in legal terms or not, generates a cognitive state known as individual psychological ownership (IPO) (Pierce, Kostova, and Dirks 2001, 2003). The current research directs its efforts to investigate the effects of IPO in peer-to-peer access-based consumption (P2P-ABC; e.g., Airbnb), that is, over a type of consumer-to-consumer consumption that may be mediated by the market, but where no transference of ownership takes place (Bardhi and Eckhardt 2012). Inspired by notable works applied to ownership-based consumption (OBC) (Felix and Almaguer 2019; Kirk 2019), the present research proposes that the more individuals can exercise IPO mechanisms (control, e.g., touching an object; self-investment, e.g., designing an object; and intimate knowledge, e.g., analyzing an object) over third-party's items, the more they tend to access (share) it. Precisely, this is expected to occur because of increased chances to exert these IPO mechanisms decrease individuals' psychological discrepancies regarding awaited and obtained benefits from the target, even though these benefits are consumed transiently (Gurven 2006). Therefore, this study seeks to answer the following research question: As is ascertained in traditional transactions where ownerships are transferred, does IPO affect transactions based on access (P2P-ABC)?

In an attempt to investigate the effect of IPO on P2P-ABC, answering the research question robustly, this study also incorporates the mediation role of consumers' utilitarian perception (UP) (Quiggin 1982) and the moderating role of basic individual values (BIV) (as proposed by the Values Theory Refined – Schwartz et al. 2012). In this regard, the current research employs four experiments to achieve its goals: test (i) the main effect of IPO on P2P-ABC (Experiments 1a and 1b), (ii) the presence of an indirect effect of IPO on P2P-ABC via individuals' UP (Experiment 2), and, finally, (iii) the conditional indirect effect in previous causal mediation regulated by the presence of value focus expressed by each person (BIV). The current work adopts the utmost diverse experimental drawings, represented by the use of all IPO mechanisms (control, self-investment, and intimate knowledge), widely used targets in real platforms (e.g., money, accommodation, everyday items – books and kitchenware), several alternative accounts (e.g., convenience, satisfaction), two participants' responses facets (attitude and behavior), and two mediation checks (measurement-of-mediation vs. manipulation-of-mediator).

The results confirmed all the current study's Hypothesis. Specifically, Study 1a supported the hypothesis (H_1) that the greater someone's IPO over a potentially accessed third-party target (book), the greater his chances of use (P2P-ABC) [MdnL.IPO = 5 vs. MdnH.IPO = 6; MrankL.IPO = 1.579 vs. MrankH.IPO = 2.162, U = 633, z = 2.531, p < .05, δ = .564].

Study 1b reinforced Study 1a findings (H_1) through a different design (e.g., P2P lending as the target) [attitudinal: MdnL.IPO = 5 vs. MdnH.IPO = 5.67; MrankL.IPO = 748 vs. MrankH.IPO = 1.143; U = 252, z = -3.092, p < .05, δ = .856; behavioral: χ2(1, N = 61) = 3.92, p < .05].

Study 2 confirmed the hypothesis (H_2) that individuals' UP mediates the effect of IPO on P2P-ABC [before: MdnUt = 6 vs. MdnPl = 5.83 ; MrankUt = 1.338 vs. MrankPl = 1.363, U = 622, z = .479, p > .05, δ = .111; after: MUt = 3.34, SDUt = 1.56 vs. MPl = 4.13, SDPl = 1.49; t (71) = -2.21, p < .05, δ = .518].

Study 3 confirmed the hypothesis (H_3) that the effect of IPO on P2P-ABC via UP is regulated by the focus of values (BIV) [Social Focus: (CI95%) = (.04, .87); Personal Focus: (CI95%) = (-.485, -.002)].

Noteworthy that all the alternate accounts were rejected (e.g., involvement).

Theoretically, the study extends IPO (Pierce, Kostova and Dirks 2001, 2003) and ABC research (Teixeira, Caldieraro, and Medeiros, 2020) by seldomly linking them, demonstrating that proportionating individuals with high levels of control, self-investment, and intimate-knowledge over a third-party's target, accessing this item enhances. This conclusion sounds counterintuitive considering that a factor theoretically grounded in pro-ownership practice is used to induce a non-ownership-based consumption. In addition, this work adds to the utilitarian literature (Sheth, Newman, and Gross 1991), extending the importance of targets' functional attributes toward ABC context and revealing, through an experimental technique, the causal mediation of individuals' UP, which is indicated as a displaced critical factor by past research (Eckhardt et al. 2019). Lastly, this works shows that depending on the focus of values individuals hold (personal vs. social), their proneness to access third-party's objects may change, considering that their UP may be threatened or strengthened. This final finding simultaneously adds and contrasts previous studies (Piscicelli, Ludden, and Cooper 2018) in BIV literature (Schwartz et al. 2012).

Managerially, this research proposes a set of actions for ABC practitioners and consumers. For example, considering the importance of the IPO mechanisms to induce P2P-ABC, Airbnb may reduce fees for those hosts that frequently stimulate their guests to fully use the amenities, reminding the visitors to use the accommodations as it were "YOUR" own home (high control). In this regard, DesignerShare, a P2P-ABC fashion company, may financially encourage its providers to permit consumers to adjust and customize the accessed outfits (high self-investment). Furthermore, based on the premise that people must perceive utilitarianism in the accessed targets so that IPO has an effective impact on P2P-ABC, companies like LendingClub (P2P-ABC money lending platform), for example, should highlight their products and services practical benefits such as loan diversity and stimulate their users' IPO over the platform by sending "exclusive" information about them (high intimate knowledge). P2P-ABC transport platforms such as Cabify may take advantage of the BIV prominence proven in this research to promote advertisements directed toward users with a higher personal focus, detaching the company image by its innovative services with regular transport consumption (e.g., private cars) and competitors (e.g., cabs and Uber).

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Enhancing Trustworthiness to Gain Sustainable Development: The Signaling Effect of Voluntary "Hostage Posting" on Consumer Behavior

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EXTENDED ABSTRACT

The impact of Covid-19 has been accelerating consumers' purchasing to change from face to face to online in the world. At the online platforms, consumers have to depend more on the provided information on websites, which is controlled by sellers. Online purchase potentially increases such asymmetry of information, leading for customers to distrust and indecisive on purchasing. Therefore, how to reduce the uncertainty to develop trust from potential customers for sales increase should be worth to investigate.

One way to develop consumers' trust is to voluntarily provide self-sanctioning to signal that the company will compensate consumers if the products do not perform as desired (Nakayachi & Watabe, 2005). Hostage posting (HP) is a commonly used concept in Economics, which refers to a self-sanctioning system in an uncertain situation (Schelling, 2006; Yamagishi, 2011). It would be an effective signal to develop trust from consumers because the self-sanctioning imposes costs to provide and maintain, and it is costly for the company if they do not keep to their promise (Raub, 2004). Since Nakayachi & Watabe (2005) did not examine the HP effects under a buying behaviour context, it is not clear that their argument is the case in consumer service. This research aims to examine the direct effect of voluntary HP on consumer's buying intention, and perceived trust on two types of products with different warranty effect, i.e. sim card and air-conditioner.

The other purpose is to examine the moderating effect of group polarization on the voluntary hostage-posting effects. Group polarization refers to a phenomenon that the opinion of a group after a discussion will tend to be more extreme than the initial opinions of individuals before the discussion (Chen et al., 2001). In addition, this shift of group decision also shifts individual decision toward the same extreme way, known as "risky shift/ cautious shift." Thus, if individuals have chance to group discussion via online communication, the voluntary HP could have more effects on each individual after the discussion. As this possibility has not been tested in the current literature, this research also aims to examine the hypothesis that group polarization would amplify the effect of voluntary HP.

Through experimental approach, this research hypothesized that :

Hypothesis 1a: *Voluntary HP will increase intention to buy the product compared with non-voluntary HP.*

Hypothesis 1b: *The above effect will be stronger with group decision-making than with individual decision-making.*

Hypothesis 2a: *Voluntary HP will increase perceived trust by participant to product makers compared with non-voluntary HP.*

Hypothesis 2b: *The above effect will be stronger with group decision-making than with individual decision-making.*

Research Method

One hundred and thirty-one participants participated in this study. Sixty-six were assigned to the individual condition group, and another sixty-five to the group condition group. This study employed a 2 (voluntary HP vs. no HP) x 2 (individual vs. group) x 2 (sim card vs. air conditioner) experimental design. The manipulated conditions of individual and group used a between-subjects design whereas the voluntary HP and the consumer products used a within-subjects design. The selection of sim card and air-conditioner is to compare the effect of voluntary HP between the condition with lower warranty effect (i.e. sim card) and higher warranty effect (air-conditioner). The data collection was conducted during the covid-19 pandemic period (June-mid of Nov 2020), so online experiment was performed instead of physical experiment. The potential participants were invited via public platforms and online experiments were arranged after the agreement of the participants had been obtained.

Results

Intention to Buy

The results of repeated measures ANOVA reveal that in both sim card and air-conditioner scenarios, participants have higher intention to buy the product with warranty (Wilks' Lambda = 0.865, $F(1, 129) = 20.104$; $p < .001$; partial $\eta^2 = 0.135$). Hence, hypothesis 1a is supported. The repeated measures result also shows that there is a significant difference in terms of behavioral intention between individual and group condition ($F(1, 129) = 10.405$; $p < .01$; partial $\eta^2 = 0.075$). Therefore, hypothesis 1b is also supported.

Perceived Trust

The results show that there is a significant difference in perceived trust between the product with and without warranty ($p < 0.001$). It indicates that participants tend to trust more on product with warranty than those without warranty. Therefore, hypothesis 2a is supported.

In order to compare the perceived trust between individual and group condition, mean difference of Brand A and B, as well as mean difference of Co. A and B were computed for both individual and group condition for both sim card and air conditioner scenario. Thereafter, the mean difference (MD) for brand and company were combined and the total perceived trust scores were compared between individual and group condition. The results show that participants tend to trust more the product with warranty in group rather than in individual condition ($MD_I = 5.2424$ vs. $MD_G = 7.9385$; $F(1, 129) = 4.372$, $p < 0.05$, partial $\eta^2 = 0.033$). Therefore, hypothesis 2b is also supported.

Discussion and Implications

From the results, voluntary HP positively influenced consumer purchase behavior and perceived trust. Furthermore, this effect was enhanced by the group polarization effect. It is worth noting that the moderating effect of group polarization is larger in sim card than air conditioner condition. As the warranty effect in the sim card condition is smaller than the air conditioner condition, the results suggest that group polarization effect may be larger for the product with low warranty than one with high warranty. Including this possibility, future investigation may explore this difference across different types of products in more details. It would also be better if we could have measured actual decisions rather than the hypothetical scenario-based decisions.

This research also provides practical implications that the combination of voluntary hostage posting, and group discussion opportunity would reduce the uncertainty in consumers' purchase decisions. Especially when consumers are not familiar with the company's brand, warranty, and money back guarantee, with an opportunity for an online discussion would positively work.

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Frequency, Probability, or Total Number? A Comparison of Different Mathematically Equivalent Presentations' Effect on Risk Perception During Covid-19

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EXTENDED ABSTRACT

Since the beginning of the COVID-19 outbreak, the release of information about infections rates has been a matter of critical importance. Many governments and media outlets have updated information about infection rates daily. For example, the U.S. Center for Disease Control and Prevention (CDC) releases information on the total number of cases of infection and infection rate every day. In the CDC's information releases, total cases are expressed as a single number, while the infection rate is expressed as cases per 100,000. Similarly, websites such as ourworldindata.org/coronavirus, among others, also have presented total number of confirmed cases and infection rates, the latter expressed as confirmed cases per million. Our research question is: How do different presentation formats influence people's perceived risk of COVID-19 infection?

In the remainder of this paper, we refer to the total confirmed cases as the *total cases* format and the form of A/B (e.g., 1 in 1,000) as the *frequency* format. A third format of a decimal number between 0 and 1 is referred to as the *probability* format (e.g., 0.001). Clearly, probability and frequency can be converted to each other with no loss of information, and all three formats can be converted to one another if population information is available. Furthermore, although both the probability format and the total cases format can take *only* one form, there can be more than one frequency expression of the same probability when numerators and denominators are varied. For instance, 0.01 can be expressed as 1 in 100, 10 in 1,000, etc. Despite researcher have studied the probability-frequency difference across medical, legal, business, meteorological, and psychological domains, little is known about differences in perceptions of mathematically equivalent frequency formats.

Study 1 (preregistered at https://aspredicted.org/blind.php?x=6ap9v7) randomly assigned 359 MTurk participants into five conditions (frequency formats with numerators 1/10/100, total case with/without population information). Participants read the following scenario: "Suppose you are doing business in a foreign country of **1 billion** (bolded in the original material) population. You need to make an urgent business trip to this country, and travel to multiple cities. However, you are hesitating because of COVID-19 there. According to a credible information source, you know that **1/10/1,000 in every 10,000/100,000/1,000,000 people are currently infected.**" In the total case groups, the bolded part read "**100,000 people in total are currently infected in this country.**" The country's population information was not revealed in the total case without population group. After reading the scenario they needed indicated their perceived risk of travelling, perceived likelihood of infection and intention to make the trip. We found no perceived risk differences among the three frequency formats, although there are significant differences among all five groups. Post-hoc pairwise test revealed that the differences among the five groups were mainly driven by the two total cases groups vs. three frequency groups.

Study 2 (preregistered at https://aspredicted.org/blind.php?x=4dv2fn) adopted a similar scenario, and assigned six hundred and twenty –two CloudResearch approved MTurk participants into nine conditions (frequency formats with numerators 1/10/100/1,000/10,000/100,000, total cases, probability, mix of probability and total cases). Overall, there are significant differences among the nine conditions. The first seven frequency conditions can be divided into two groups, with the first four smaller numerators (numerators 1-1,000) constituting Group 1, and latter three (numerators 10,000, 100,000, and total cases) constituting Group 2. Specifically, 1. there were no significant differences among the first four experimental conditions in Group 1, replicating study 1's results; 2. There was a discernable increase in perceived risk from Group 1 to Group 2. That is, there was a significant increase in risk perception when the numerator increased from 1,000 to 10,000 and to 100,000. 3. There were no significant differences among the three groups in Group 2 (numerators 10,000, 100,000 and total cases). 4. The probability format indeed lowered risk perception by a large margin; mixing the probability and the total cases resulted in a medium level of perceived risks. A planned linear contrast with the last three groups showed a significant upward linear trend among the three groups $(t(210)) = 7.30$, $p < 0.001$. Finally, Study 3 replicated that mixing probability and total cases lead to a medium level of perceived risks.

Based on the results, we are offering four pieces of advice for decision makers choosing between the frequency and total number of cases formats when releasing information:

1. If the goal is to make sure people know the total number of cases, directly providing the total number of cases (vs. frequency) is advised.
2. If the goal is to reduce perceived risk, providing a frequency format with a small numerator is advised (e.g., X in 100). In addition, the 1-in-X effect suggests not to use 1 as the numerator.
3. If the goals are both for people not to overestimate risk and to provide them with the correct total number of cases, then using a mix of frequency and total number of cases formats is advised.
4. Although the probability format is less observed in practice, mixing it with the total number of cases can significantly reduce risk perception.

This paper asks a simple question: how do different presentation formats of the same COVID-19 information affect perceived risks? Particularly, we explored whether differences exist for the two most frequently used formats: total cases and frequency. We found people consistently perceived higher risks from total cases than frequency. Practitioners should be aware of this difference and make format choices conscientiously. Theoretically, we have identified boundary conditions for denominator neglect. We found no evidence for denominator neglect among frequency formats of relatively close numerators. Only when the numerators are several orders of magnitude apart discernable differences began to emerge. Last but not least, we found that mixing formats can moderate perceived risks.

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Rating Inflations in Two-way Rating Systems – The Role of Perceived Closeness

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EXTENDED ABSTRACT

As peer-to-peer (P2P) and sharing economy business models have become prevalent, leading online platforms like Uber, eBay, and Airbnb have begun to adopt a two-way rating system. Unlike the conventional one-way rating system in which only consumers rate providers, the two-way rating system allows both consumers and providers to rate each other. In P2P models, individuals can participate as both providers and consumers through a platform that mediates transactions of goods and services between them (Einav, Farronato, and Levin 2016). Thus, the two-way rating system is believed to play a key role in building trust and facilitating transactions among strangers in this P2P setting (Resnick and Zeckhauser 2002). Despite its growing importance, little is known about the impact that the two-way rating system has on consumers' rating decisions. In this research, we investigate whether and how the two-way rating system would cause systematic biases in consumer ratings, relative to the one-way rating system. Specifically, we focus on the consumer's psychological state when reviewing others while also being reviewed by them as a potential cause of bias.

A handful of studies have empirically tested the effect of two-way rating systems on user-generated ratings (Bolton, Greiner, and Ockenfels 2013; Dellarocas and Wood 2008; Zervas, Proserpio, and Byers 2021). While these studies suggested an increase in user rating in the two-way relative to the one-way system, the reason for this increase is largely unexplored. Existing research discusses consumers' fear of retaliation as a potential explanation. Acknowledging this possibility, many platforms adopting two-way rating systems have recently modified their policies to allow consumers and providers to see how they were rated *only* after both parties have submitted their ratings of each other. However, empirical evidence shows that rating inflation still exists even after this modification (Fradkin, Grewal, and Holtz 2020; Zervas, Proserpio, and Byers 2021). This implies that fear of retaliation alone may not explain the whole story and that rating inflation may be a multiplicity effect driven by several factors.

In this research, we propose that a consumer's evoked perception of being closer to the provider may drive this inflation. Previous research on interpersonal closeness documented that subtle and even incidentally induced psychological closeness with another person can lead to behaviors favorable to the individual (Burger et al. 2004; Finch and Cialdini 1989; Dubois, Bonezzi, and De Angelis 2016; Jiang et al. 2010). Research on social identification (Duck 1977) has shown that relatively superficial levels of similarity (e.g., same occupation) influence in-group/out-group distinction and subsequent judgmental evaluations (Duck 1977; Tajfel 1982). From this insight, we predict that when both consumers and providers have an opportunity to rate each other, consumers are more likely to think of their transaction partner as a similar and connected entity that is close to them. An increased feeling of closeness in two-way rating systems makes it easier for consumers to take providers' perspectives and to care more about the providers' benefit and welfare, resulting in more generous consumer ratings.

We further explore a boundary condition of this predicted effect: when consumers experience relational failures with the counterpart providers, the rating inflation in the two-way rating system is attenuated because it hinders consumers' establishment of perceived closeness with the providers. In the context of our research, relational failures are associated with negative experiences that occur in the interpersonal interaction with providers.

Five studies test these predictions utilizing multiple methodologies, real and hypothetical behaviors, diverse samples, and different transaction contexts. In Study 1, we demonstrate that consumer ratings are higher in the two-way system than in the one-way system within a controlled experiment in the context of a used goods online marketplace. Consumers' perceived closeness was also greater in the two-way system. A mediation test revealed that perceived closeness indeed mediated the rating inflation found in the two-way system condition.

In Study 2, we further explored the underlying process of perceived closeness by testing it through moderation. We hypothesize that in two-way rating systems, consumers offer better ratings to the counterpart providers due to their increased perceived closeness with the providers. This implies that the inflation should attenuate if the consumer's perceived closeness to the service provider is already high. To test this idea, we operationalized existing closeness by categorizing participants by whether or not they have worked as a driver for a ride sharing service. The results show that rating inflation in the two-way system was observed only when participants had not worked as a driver and thus the existing perceived closeness to the driver was low, but not when participants had worked as a driver and the existing perceived closeness level was high. Additionally, a moderated mediation analysis found that perceived closeness mediated the rating inflation only for participants without driver experience. A series of parallel mediation analyses did not show a significant indirect effect of fear of retaliation.

In Study 3 we examine the boundary condition described previously within the context of vacation rentals. As expected, in the functional failure condition, participants in the two-way rating system gave better ratings. However, in the relational failure condition, there was no difference in ratings between the one-way system and the two-way system. Perceived closeness mediated the rating inflation when the service failure was caused by functional issues, but not when the service failure was caused by relational issues.

Studies 4A–4B examine our predictions with real user rating data from Tripadvisor and Airbnb, representing a one-way and two-way system, respectively. We specifically compare the ratings of hotels that have been cross listed across the two platforms, and again find that ratings are more positively skewed when using a two-way rating system. In Study 4B, we linguistically analyze the review text (using LIWC) to demonstrate that consumers on Airbnb use more positive words and less negative words in expressing their accommodation experience, compared to those on Tripadvisor. Drawing from previous literature suggesting that interpersonal closeness increases the use of informal language in conversations (Bickmore 2005; Wish and Deutsch 1976), we expect and find that review texts are written more informally on Airbnb compared to Tripadvisor.

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"Does A 'Made In China' Label Make People Show Less Care For Products?"

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EXTENDED ABSTRACT

Country-of-origin labels indicate where a product originates from and serve as cues that allow consumers to make inferences about products and their attributes (Bilkey and Nes 1982; Schooler 1965). Products that are made in less economically developed countries, such as China, are biased with pejorative quality and price expectations (Bilkey and Nes 1982; Interbrand 2005; Schniederjans, Cao, and Olson 2004; Verlegh and Steenkamp 1999). China is currently the world's largest exporter of goods (McKinsey Global Institute 2019), making the label globally widespread, and, the most relevant label to research. While country-of-origin-labels have been found to impact consumers' product perceptions and attitudes (Verlegh and Steenkamp 1999), little is known about how these biased expectations impact product care.

We believe that country-of-origin information may affect product care because it affects quality and price perceptions, which, together, form the perceived value of a product (Zeithaml 1988). Perceived product value is a consumer's assessment of the utility of a product based on a sum of what is received (quality) for what is given (price) (Cronin et al. 1997). Ackermann, Mugge and Schoormans (2018) proposed that products' functionality (quality) and expensiveness explain product care: if the product offers features that are valued by the consumer and when the product is expensive, a consumer is more likely to take care of that product. Moreover, as consumers expect high-quality products to last longer, they are willing to put effort in product care activities (Ackermann et al. 2018). These assumptions, however, have never been tested. We show that the 'Made in China' label makes consumers value a product less, and, therefore show less care for it.

Study 1A (N=79): tests the effect of a 'Made in China' label on product care. Participants imagined doing their laundry and were randomly shown a clothing care label of a white T-shirt; these differed only in country-of-origin label: 'Made in China' or 'Made in Italy' (positive clothing-country image). Afterwards product care, operationalized as the extent to which participants were inclined to abide by the label care instructions (α=.51, see summary table). Results showed that participants were less likely to wash their T-shirt in accordance to the care label instructions when it carried the 'Made in China' label (M=3.84, SD=1.45) than when it was 'made in Italy' (M=4.70,SD=1.40;t(77)=2.67,p=.009,Cohen's d=.61).

Study 1B (N=130): using a similar design like study 1A, explores the proposed underlying process through mediation. Furthermore, product care intentions were measured in a more direct manner than in study 1A. Again participants imagined doing their laundry and saw a care label with either 'Made in Italy' or 'Made in China'. Subsequently, we had participants report the perceived price and quality of the T-shirt (together: value of the t-shirt, r = .64), and their intention to show care for the T-shirt (r = .68; see summary table).

As predicted participants were less motivated to show care for the 'Made in China' T-shirt (M = 4.97, SD = 1.22) than for the 'Made in Italy' T-shirt (M = 5.38, SD = 1.15; t(128) = 1.97, p = .051, Cohen's d = .35). Mediation analysis confirmed that the 'Made in China' label leads to decreased value perceptions of the T-shirt, which in turn lead to decreased care intentions (ab = -.51, Boot SE = .13, 99% CI [-.93, -.23]; 10,000 samples).

Study 2 (N=256): manipulates the mediator value perceptions of the product rather than measuring it (Spencer, Zanna and Fong 2005). Thus, in addition to manipulating country-of-origin label ('Made in China' or 'Made in Italy'), we also created three value conditions. In the control condition, no value information was given (cf. study 1A/B). In the high (low) value condition, participants either saw that the hot beverages maker received a 4.5 out of 5 (1 out of 5) star rating and costed $529 ($59). Here, we expect no significant difference between careful use. Participants were told they were about to make their favorite hot beverage when the machine warned them to "REPLACE FILTER". Participants, then saw the machine with value manipulation/country-of-origin cue, and read the care recommendation to replace the machine's filter as soon as possible to avoid early breakdown. Subsequently, participants reported whether they would immediately replace the filter (careful use) on three items, perceived quality and price (details see summary table). Participants who had seen value information were asked whether they found the price and quality used in the scenario high (manipulation check).

Results showed that our value manipulation had worked, and, that when no additional value information was provided, consumers intended to significantly replace the filter sooner when the machine was 'Made in Italy' than when it was 'Made in China'. Here, participants delay care for the Chinese-made machine, because they value the machine less (ab=-.35,Boot SE=.13, 99% CI[-.75, -.08]). No significant difference in delaying care was found when value was manipulated (see figure 1 and summary table for test statistics). Admittedly, participants' intended care in general is high. In hindsight, this may be explained by the fact that delaying the water filter change may impose a direct risk to the health of participants as harmful contaminants are not removed. Health risk may function as another facilitator of product care which could be an interesting avenue for future research.

Study 3 (N=112) investigates actual behavioral effects of the label by testing whether consumers would exert more pressure on an identical pen when it displayed a 'Made in China' label versus no label. We operationalized product care as exerted pressure on the pen because objects break down or bend more easily the more force is applied to them. Participants were told they were testing the interface of tablet prototypes through an analogy game. In reality, they filled in analogy tests with their pen on a pressure measuring tool. Results show that participants exerted more pressure on the pen when it was labeled 'Made in China' (in grams; M=210.6, SD=66.29) compared to when it was unlabeled (M=171.6,SD=55.34;t(110)=-3.38, p=.001;Cohen's d=.65).

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Why is it Wrong to Sell Your Body? Understanding Liberals' vs. Conservatives' Moral Objections to Bodily Markets

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EXTENDED ABSTRACT

Commercial bodily markets involve the buying and selling of the human body and its components (Hoeyer 2013). These markets include prostitution, commercial surrogacy, the trade of organs (e.g.., kidney, liver) and bodily products (e.g., blood plasma, sperm, breast milk), and even the trade of human cadavers. Needless to say, commercial bodily markets are morally contentious.

Numerous scholars have deliberated upon the morality of bodily markets (e.g., Chadwick 1989; Davis 1937; Erin and Harris 2003; Satz 2012; Weitzer 2010). Notably, existing scholarly research in this area has largely taken a prescriptive approach to discuss the morality of bodily markets. That is, the authors take a stance on whether the bodily market is morally acceptable or unacceptable and then present an argument for their position.

In the present research, we deviate from past research to take a descriptive approach. That is, we do not take a stance on whether these markets are morally right or wrong. Instead, we seek to understand lay consumers' moral attitudes towards these bodily markets. *Why* do people find bodily markets to be morally objectionable? What are the underlying beliefs that shape these objections? Importantly, how do these moral attitudes differ for liberals and conservatives?

Understanding the heterogeneity across the political spectrum is important because the bodily markets provoke heated political debates. Policymakers often struggle to understand the stance of their constituents, resulting in public outcry when misguided regulations are introduced (e.g., New York state's awry attempt to legalize commercial surrogacy (Wang 2019)). Moreover, policymakers also misunderstand the moral stance of the opposing political party, resulting in protracted political battles that stall progress (e.g., the five-year political impasse around India's surrogacy laws (Banerjee and Kotiswaran 2021)). Consequently, it is vital for policymakers to understand the moral objections of their specific liberal or conservative constituents to introduce representative legislation. Furthermore, it is also important for advocacy groups and think tanks engaged with the bodily markets to understand how laypeople's moral objections to the bodily markets might differ across the political spectrum to better engage their target segments.

Hence, this research examines lay consumers' moral objections to the bodily markets and how these objections might differ for liberals and conservatives. To examine this, we utilize a phenomenon-construct mapping approach with a descriptive goal (MacInnis et al. 2020). This approach allows us to capture the complexity of a real-world phenomenon using an appropriate theoretical lens and then generate implications for stakeholders engaged with the bodily markets. We draw from the Moral Foundations Theory (Haidt 2007) to posit that liberals *and* conservatives find bodily markets to be morally wrong. However, they will object to bodily markets for different reasons.

Specifically, we propose that liberals' moral objections towards bodily markets are driven by their adherence to the individualizing (harm and fairness) moral foundations. As per the Moral Foundations Theory, liberals (vs. conservatives) are especially cognizant of situations where individuals are harmed or denied their rights (Haidt and Graham 2007). In the context of the bodily markets, we would expect this to manifest as concern about exploitation in these markets. That is, liberals are attuned to the notion that the commercialization of these markets can cause harm to vulnerable people and magnify the entrenched inequality in society. In other words, liberals' adherence to the individualizing moral foundations makes them more likely to believe that bodily markets can become another means for rich buyers to exploit poor sellers, causing the latter systematic physical, psychological, and economic harm. Thus, liberals should be particularly sensitive to exploitation concerns in bodily markets.

Contrastingly, we propose that conservatives' moral objections towards the bodily markets are driven by their adherence to the purity moral foundations. This is because, conservatives (vs. liberals) are especially sensitive to preserving social, psychological, spiritual, physical, and physiological purity (Haidt and Graham 2007). In the context of the bodily markets, we would expect this to manifest as concern about the violation of the sanctity of the human body in these markets. That is, conservatives believe that the commercialization of these markets places a monetary value on the human body and reduces it to become like any other commodity. In other words, conservatives' adherence to the purity foundation makes them more likely to believe that the inherent sanctity of the divinely created human body is diminished or corrupted when it is bought or sold. Thus, conservatives should be particularly sensitive to violation of sanctity concerns in the bodily markets.

Five studies examined liberals' and conservatives' moral attitudes towards bodily markets. Study 1 assessed how socio-political leaders use different moral objections (exploitation vs. violation of sanctity) in real-world discourse to persuade their target audience. Study 2 demonstrated how the different moral concerns can be utilized to design more persuasive targeted advocacy campaigns. Study 3 demonstrated how the different moral concerns can be utilized to design more persuasive targeted donation appeals. Study 4 demonstrated causality by showing that inducing liberal versus conservative political identity changed sensitivity to the different moral concerns. Further, this study also demonstrated that liberals are more likely to punish the buyers over the sellers, but conservatives prefer to punish both the buyers and the sellers in the bodily markets. Finally, study 5 showed that the political differences in moral concerns manifest for bodily markets with live bodily products but attenuate for bodily markets with dead bodily products.

This research is the first, to the best of our knowledge, to demonstrate the heterogeneity in moral objections to bodily markets across the political spectrum. Importantly, this research generates novel implications for policymakers and advocacy groups. First, our findings show how socio-political leaders utilize the different moral objections to persuade their respective audiences. Second, we show how the different moral concerns can be utilized to design more persuasive targeted marketing campaigns. We demonstrate this in the context of deploying marketing campaigns to encouraging consumer advocacy and in the context of soliciting political donations. Third, the findings show how liberals and conservatives support different regulatory laws that punish buyers versus sellers.

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Are Conservatives Less Likely Than Liberals to Accept Welfare? The Psychology of Welfare Politics

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EXTENDED ABSTRACT

It is well known that conservative political leaders tend to be against federal welfare programs. This is not only true of the leaders; conservative voters, even those of low-income, tend to disfavor welfare distribution policies (Gilens 2009; Skitka and Tetlock 1992, 1993). However, as far as we know, this stream of prior research has only examined attitudes when a third party is the recipient of welfare (i.e., "should the government provide economic assistance to other people?"). Considering the well-documented discrepancy between personal behaviors and social attitudes, conservatives' aversion towards welfare programs might not apply when conservatives need to accept welfare assistance for themselves. In other words, prior research cannot speak to whether and how low-income conservatives eschew welfare programs for themselves (i.e., "should I accept economic assistance from the government?").

In this research, we examine whether the willingness to accept welfare depends on political orientation. Are conservatives less likely than liberals to accept welfare for themselves? If so, when and why does this difference occur? Moreover, what strategies can policymakers deploy to mitigate the discrepancy between liberals' and conservatives' welfare acceptance?

We propose that the difference in welfare enrollment between liberals and conservatives depends upon whether the welfare program has a work requirement. Specifically, if a welfare program has a work requirement, conservatives are just as likely as liberals to enroll in it. However, if the welfare program does not have a work requirement, conservatives are less likely than liberals to enroll in it. Thus, we propose that for conservatives, participating in welfare programs might not be a purely economic decision. Their moral intuitions can interfere with cost-benefit reasoning, thus rendering the participation decision a moral decision rather than an economic decision. Paradoxically, this prevents some conservatives from accepting the much-needed economic assistance designed to help them.

We develop our conceptual framework by drawing from the Moral Foundations Theory (Graham et al. 2013). This theory proposes that moral values are comprised of two broad foundations. yet sometimes so variable? The *individualizing* foundations (care and fairness) emphasize protecting individuals and provide for individual rights in society. Contrastingly, the *binding* foundations (authority, loyalty, and purity) emphasize the group's welfare. These foundations suppress individual autonomy and self-expression to bind people into social entities such as families, clans, and nations (Graham and Haidt 2010). Notably, a large volume of research has demonstrated that conservatives tend to endorse the binding values more than liberals (Kivikangas et al. 2021).

One critical consequence of the binding values is that they motivate people to sacrifice their self-interest in the service of their group's welfare (Haidt 2012). That is, the binding values nudge people to place group welfare above their own welfare. Consequently, these people are less likely to engage in behaviors that might hurt their community or hinder the long-term success of their group.

We build on this theorization to propose that the binding values, in the quest to promote group success, create an aversion to free welfare, and reduce the propensity to enroll in welfare programs without work requirements. This is because the binding values make people sensitive to accepting welfare that draws from their group's limited resources. In other words, because the binding values prompt people to place group welfare over their individual welfare, they come to believe that accepting free welfare can make a person a "burden" on society and hurt the success of the community. Thus, the binding values reduces conservatives' likelihood of enrolling in welfare programs that do not require some form of repayment to society (i.e., attached work requirements).

Now, if conservatives' participation in free welfare programs is indeed dampened by their adherence to the binding foundations, then the effects should be mitigated by framing the free welfare program to be in concordance with the binding moral intuitions. Thus, we propose that employing a similar strategy should counter the aversion and increase welfare enrollments.

We examine our propositions in the context of a policy change for a federal welfare program. In 2009, the work requirement policy was waived for the U.S. federal supplemental nutritional assistance program (SNAP; formerly Food Stamps). This policy change served as a natural experiment for us to test our hypothesis. We analyze participation data prior to 2009 to show that when SNAP had a work requirement, liberal and conservative households were equally likely to enroll in the program. After 2009, however, when SNAP waived the work requirement, conservative households were less likely than liberal households to enroll in this program. To corroborate these results, we conducted preregistered controlled experiments using samples of low-income participants. These experiments show that conservatives are less likely than liberals to enroll in welfare programs only when the program does not have a work requirement. Further, the studies also demonstrate that conservatives' adherence to the binding values drives this discrepancy. Finally, we show how policymakers can utilize marketing messaging strategies to mitigate this effect and boost conservatives' welfare participation in programs without work requirements.

The findings present a novel conceptualization of how lower-income individuals' economic decisions are influenced by a complex interplay of utilitarian considerations and moral evaluations. In other words, we show that conservatives' moral intuitions can interfere with cost-benefit analysis and influence their economic behaviors.

Importantly, this research presents several practical implications for policymakers and federal agencies. First, these results inform the ongoing debate surrounding the work requirement policy. Our results show that waiving the work requirement policy does not uniformly increase welfare participation for all sections of lower-income individuals. Second, we show how government agencies can redesign welfare marketing materials based on these moral insights to boost conservatives' welfare participation. Hence, this research can help policymakers better understand the impact of their policy decisions and facilitate the implementation of outreach strategies to boost societal welfare.

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The Bundle Halo Effect: Why Bundles Are More Attractive Than the Same Items Offered Separately

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EXTENDED ABSTRACT

Past work on bundling—offering multiple products for a single price—has largely focused on pricing, exploring implications for firms (Adams and Yellen 1976; Burstein 1960; Dansby and Conrad 1984; Schmalensee 1982; Telser 1979) or reactions from consumers (Chakravarti, Krish, Paul, and Srivastava 2002; Hamilton and Srivastava 2008; Janiszewski and Cunha 2004; Khan and Dhar 2010; Morwitz, Greenleaf, and Johnson 1998). Here, we ask whether the *very act* of bundling has a more basic effect on consumer perceptions. Specifically, we propose the *bundle halo effect*: Consumers not only view bundles as more attractive than the same items offered separately, but also view an item that is presented as part of a bundle as more attractive than the same item presented in isolation.

We draw from the "group attractiveness effect" in social cognition—the finding that people seem more attractive when evaluated as a group than when evaluated individually (Carragher et al. 2018, 2019; Walker and Vul 2013; van Osch et al. 2015)—to motivate our Hypothesis: Might it imply a parallel bundle halo effect in consumer behavior? Given that extant work examining the pricing of bundles has demonstrated they are viewed as greater than the sums of their parts (Shaddy and Fishbach 2017), we test the prediction that an item presented as part of a bundle is more attractive than the same item presented in isolation.

We provide evidence for this prediction across six studies (*N*=3,832; four preregistered).

In Studies 1-2, we employed a 3 (condition: bundle vs. bundle-member vs. separate; between-participants) × 5 (product type: cookware vs. knives vs. skincare vs. tools vs. electronics; within-participants), mixed design. We presented items as a bundle (bundle), a bundle with items labeled individually (bundle-member), or in isolation on different pages (separate). In Study 1 (MTurk; *N*=606), participants in the bundle condition rated the attractiveness of each bundle, and those in the bundle-member and separate conditions rated the attractiveness of each item: "How attractive do you find [this bundle/item]?" ("Not at all attractive"=1; "Very attractive"=7). In Study 2 (MTurk; *N*=600), we measured purchase intentions by averaging three items ($\alpha = .93$): "How likely is it that you would purchase [this bundle/item]?" ("Not at all"=1; "Very likely"=7); "Would you recommend purchasing [this bundle/item]?" ("Definitely would not recommend"=1; "Definitely would recommend"=7); and "How much would you like to have [this bundle/item]?" ("Not at all"=1; "Very much"=7). Across Studies 1–2, participants in the bundle condition rated items more attractive and expressed greater purchase intentions, relative to both the bundle-member and separate conditions (attractiveness: M_{bundle}=4.94, vs. $M_{bundle-member}$=4.41, p<.001, vs. $M_{separate}$=4.13, p<.001; purchase intentions: M_{bundle}=4.61, vs. $M_{bundle-member}$=4.37, p=.037, vs. $M_{separate}$=4.02, p<.001). They also indicated items were more attractive and expressed greater purchase intentions in the bundle-member condition (p=.005) than in the separate condition (p=.002).

We designed Study 3 (behavioral lab; *N*=198) to test whether consumers are more likely to *choose* bundles, relative to the same items offered separately. Study 3 employed a single-factor (condition: bundle vs. separate), between-participants design. Participants rated the attractiveness of and desire for various university-branded items (as a bundle or separately) and were offered a consequential choice between a $7.50 Amazon credit or all the items they evaluated. Participants indicated greater attractiveness and desire for items in the bundle condition than in the separate condition (attractiveness: M_{bundle}=4.59, vs. $M_{separate}$=4.29, p=.107; desire: M_{bundle}=4.32, vs. $M_{separate}$=3.78, p=.012) and were more likely to choose items in the bundle condition (62%) than in the separate condition (49%, $\chi^2(1)$=2.99, p=.084).

In Study 4 (MTurk; *N*=1,006), we manipulated the strength of the bundle's gestalt impression through brand (mis)matching (Rahinel and Redden 2013), predicting the bundle halo effect would attenuate for unmatched brands (due to the weaker resultant gestalt impression). Study 4 employed a 2 (condition: bundle vs. separate) × 2 (brand composition: matched vs. unmatched), between-participants design. Participants rated the attractiveness of three knives, presented as either a bundle or separately, which were either the same brand or different brands. Participants indicated brand-matched items were more attractive in the bundle condition (*M*=5.36) than in the separate condition (*M*=4.76; p<.001). But we did not observe a bundle halo effect for unmatched brands. Specifically, participants indicated brand-unmatched items were equally attractive in the bundle condition (*M*=4.85) and in the separate condition (*M*=4.69; p=.373).

In Study 5 (MTurk; *N*=401), we tested whether the extent to which the whole subjectively feels greater than the sum of its parts mediates the bundle halo effect by measuring the importance of replacing a missing item (Shaddy and Fishbach 2017). Study 5 employed a single-factor (condition: bundle vs. separate), between-participants design. After rating the attractiveness of cookware items, participants imagined that they actually owned the items, discovered one was missing, and indicated how important it would be to replace it. Participants rated items more attractive and believed it would be more important to replace a missing item in the bundle condition than in the separate condition (attractiveness: M_{bundle}=5.84, vs. $M_{separate}$=5.20, p<.001; desire to replace: M_{bundle}=5.69, vs. $M_{separate}$=5.21, p=.005). The desire to replace mediated the effect (95% CI=[.083,.326]).

Finally, we designed Study 6 (MTurk; *N*=1,021) to rule out a competing explanation—the possibility that selective attention to just the most attractive elements of a bundle positively biases overall evaluations. Study 6 employed a 2 (condition: bundle vs. separate; within-participants) × 2 (order: bundle-then-separate vs. separate-then-bundle; between-participants), mixed design. If selective attention explains the bundle halo effect, then asking participants to rate the items separately and *then* as a bundle would increase the salience of variation in attractiveness across items, attenuating the effect. Participants rated the attractiveness of knives as a bundle *and* separately, exhibiting the bundle halo effect in both separate-then-bundle condition (M_{bundle}=5.42 vs. $M_{separate}$=4.90; p<.001) and bundle-then-separate condition (M_{bundle}=5.39 vs. $M_{separate}$=5.21; p<.001). Regardless of evaluation order, the bundle was more attractive than the same items presented separately. In fact, the separate-then-bundle order produced the larger bundle halo effect, contravening a selective attention account.

The bundle halo effect makes an important contribution to the growing literature exploring the psychology of bundling (Hong and Bonezzi 2021; Karataş and Gürhan-Canli 2020; Shaddy and Fishbach 2017; Weaver et al. 2012). Linking two otherwise unrelated

literatures—social cognition and consumer behavior—this research possibly helps explain why bundles seem to have become so ubiquitous in recent years. Our findings suggest that firms would benefit from merely framing or presenting items as part of a bundle, due to the positive spillover from the resulting halo. In other words, products, like people, are simply better together.

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Evolving Choice Sets: The Effect of Dynamic (vs. Static) Choice Sets on Preferences

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EXTENDED ABSTRACT

Most decision-making research examines static choice sets, in which the decision-maker evaluates all the options at the same time. However, many real-world decisions are characterized by dynamic choice sets, in which initial options are evaluated first and establish a salient standard of comparison (Simonson et al., 2013), and then a dynamic option emerges and is evaluated against that salient standard. Consider a student searching for an internship. Once she receives two offers, assuming neither is strictly-dominating, she begins deliberating (e.g., does she prefer to be in her desired location or to maximize her salary?). While evaluating this initial set of options, a new offer emerges. The central argument in the current research is that her decision is likely to be different in this situation, when her choice set is dynamic, than if she initially evaluated the three offers all at the same time, as a static choice set. This effect occurs even though she chooses from an identical set of options at the time of her final decision. Moreover, dynamic presentation can have opposite effects on preferences based on the relative position of the dynamic option compared to the initial choice set. To explain these findings, we propose and provide evidence for a unified theory based on perceived variance of the underlying attribute distribution.

We posit that dynamic choice sets are processed differently than static sets, because people are more sensitive to changes from a salient reference point (i.e., the position of the dynamic option relative to the comparative set) than they are to the final outcome (i.e., the final three option choice set; Kahneman and Tversky 1979). Moreover, because people are sensitive to the direction of change from a reference point, dynamic presentation shifts preferences in opposing directions based on the position of the dynamic option relative to the standard established by the initial options. Previous research has shown that in many decisions involving tradeoffs among attributes, consumers focus relatively more on one of the attributes (i.e., the salient or prominent attribute, Evangelidis, Levav, & Simonson, 2018; attributes with all unique values, Dhar and Sherman 1996). We leverage these extant operationalizations of focal attributes to propose that consumers will primarily attune to relative changes in the focal attribute value when a dynamic option emerges. Specifically, when the focal attribute value of the dynamic (new) option falls *outside* the initial comparative set, it *increases* the perceived variance the underlying distribution of that attribute. In contrast, when the focal attribute value of the dynamic (new) option falls *within* the initial comparative set, it *reduces* perceived variance of the focal attribute. Finally, we build on the established positive correlation between perceived variance, attribute weighting, and preferences (Meyer & Eagle, 1982; Myers & Alpert, 1968; Sujan & Bettman, 1989), to further predict that when consumers perceive more variance in the focal attribute, they will weigh that attribute more heavily and preferences will shift towards the option that is best on the focal attribute. In contrast, when the dynamic option is within the initial comparative set and consumers perceive relatively less variance in the focal attribute, preferences will shift towards the option that is best on the other, non-focal, attribute.

For example, imagine if the student in the opening example initially received two internship offers in which salary was the focal attribute and location was the non-focal attribute: one for $800/week in her preferred location, and one for $900/week in a less preferred location. These offers establish the comparative standard. When she later receives a third offer for $1000/week (also in the less preferred location), this dynamic option is outside the initial comparative set on the focal attribute, and she will come to perceive more variance in the distribution of internship salaries than if she had evaluated the three job offers at the same time. As a result, she will be more likely to choose the higher salary option, compared to if she had evaluated all three offers as a static choice set. In contrast, if her initial options were the $800/week-preferred location and $1000/week-less preferred location internships, the dynamic addition of the $900/week-less preferred location offer within the initial comparative standard would reduce the perceived variance of internship salaries, and she would be more likely to choose the offer that is best on the non-focal attribute – that is, the internship in the best location.

In sum, we propose that when the dynamic option is outside the comparative standard for the focal attribute, perceived variance of the focal attribute will increase, and preferences will shift toward the option that is best on that focal attribute. By contrast, when the dynamic option is within the comparative standard for the focal attribute, perceived variance of the focal attribute will decrease, and preferences will shift toward the option that is best on the non-focal attribute. We provide evidence in support of these Hypothesis using two classic choice paradigms: an asymmetric dominance choice set and a compromise choice set (Dhar & Simonson, 2003; Huber, Payne, & Puto, 1982; Simonson, 1989). Moreover, two pre-registered experiments test the full conceptual framework and demonstrate the mediating role of relative perceived variance.

Study 1. Study 1 ($N = 406$), uses an asymmetric dominance choice paradigm with three apartments: Apartment A, Apartment B, and Apartment C, which varied on location and rent (see Table 1A). Pretesting revealed that rent was the focal attribute. Participants were assigned to one of three conditions: (1) They viewed all three apartments simultaneously (i.e., the *Static* condition), (2) They initially viewed Apartments A and B, and then Apartment C was dynamically presented (i.e., the *Dynamic AB-C* condition), or (3) They initially viewed Apartments A and C, and then Apartment B was dynamically presented (i.e., the *Dynamic AC-B* condition). As predicted, dynamic (vs. static) presentation of the choice set affected choice share, $X^2(4) = 18.25$, $p = .001$). Compared to the *Static* ABC condition, the dynamic presentation of Apartment C (i.e., the apartment for which the focal attribute was outside of the initial options) shifted preferences towards the apartment that was best on the focal attribute ($X^2(2) = 10.37$, $p = .006$; Table 1A). Compared to the *Static ABC* condition, the dynamic presentation of Apartment B (i.e., the apartment for which the focal attribute was inside the initial options) shifted preferences towards the option that was best on the non-focal attribute ($X^2(2) = 7.53$, $p = .023$; Table 1A).

Study 2. Study 2 ($N = 500$; https://aspredicted.org/blind.php?x=es22rv) conceptually replicates Study 1 with a different asymmetric dominance choice set (job options which varied in their location and weekly salary, see Table 1B), and tests the proposed process. As in Study 1, participants were randomly assigned to either the *Static* condition, the *Dynamic AB-C* condition, or the *Dynamic AC-B* condition. Conceptually replicating Study 1, analysis revealed that dynamic (vs. static) presentation of the choice set affected choice share, $X^2(4) = 38.67$, $p < .001$). Compared to the *Static ABC* condi-

tion, the dynamic presentation of Job C (i.e., the option for which the focal attribute was outside of the initial options) shifted preferences the option that was best on the focal attribute ($X^2(2) = 16.26$, $p < .001$; Table 1B). Compared to the *Static ABC* condition, the dynamic presentation of Job B (i.e., the option for which the focal attribute was inside the initial options) shifted preferences towards the option that was best on the non-focal attribute ($X^2(2) = 18.94$, $p < .001$; Table 1B).

Before participants chose an option they indicated their relative perceptions of variance (measure adapted from prior research; e.g., Brauer & Er-Rafiy, 2011; Phillips et al., 2018): "Is the biggest difference between these job offers their location or is it their weekly salary?" (1 = The biggest difference between these job offers is their location, 7 = The biggest difference between these job offers is their weekly salary). A one-way ANOVA revealed a significant effect of condition on perceived variance, $F(2, 497) = 10.15$, $p < .001$. As predicted, planned contrasts revealed that compared to the *Static ABC* condition ($M = 4.61$, $SD = 1.86$), presenting Job C dynamically led people to perceive relatively more variance in the focal attribute (i.e., weekly salary; $M = 5.04$, $SD = 1.74$; Fisher's LSD: $p = .032$), whereas presenting Job B dynamically led people to perceive relatively less variance in the focal attribute ($M = 4.16$, $SD = 1.74$; Fisher's LSD: $p = .019$).

To test whether change in relative perceived variance mediates the effect of dynamic presentation on choice share, we conducted two mediation analyses (Hayes 2013). Consistent with our theory, compared to the *Static ABC* condition, the dynamic presentation of Job C (i.e., the option for which the salary attribute was outside of the initial options) increased the perceived relative variance of the salary attribute (i.e., the focal attribute), which in turn shifted preference towards Job C (i.e., the higher salaried job; 95%CI for the indirect effect: [.0049, .1279]). Also as predicted, compared to the *Static ABC* condition, the dynamic presentation of Job B (i.e., the option for which the salary attribute was inside the initial options) decreased the perceived relative variance of the salary attribute, which in turn shifted preference towards Job A (i.e., the lower salaried job in the better location; 95%CI for the indirect effect: [.0111, .1280]).

Studies 3A-3B. Studies 3-4 replicated this phenomenon in the context of three different compromise choice sets. First, in Study 3 ($N = 489$), participants made a choice between three cars that varied on ride quality and fuel efficiency (Table 1C). Pre-testing revealed that fuel efficiency was the focal attribute. As in Studies 1-2, participants were randomly assigned to either the *Static* condition, the *Dynamic AB-C* condition, or the *Dynamic AC-B* condition. Condition affected choice share, $X^2(4) = 107.59$, $p < .001$ (Table 1C). Compared to the *Static ABC* condition, the dynamic presentation of Car C (i.e., the car for which the focal attribute was outside of the initial options) shifted towards the option that was best on the focal attribute ($X^2(2)$ $X^2(2) = 13.22$, $p = .001$; Table 1C). Compared to the *Static ABC* condition, the dynamic presentation of Car B (i.e., the car for which the focal attribute was inside the initial options) shifted towards the option that was best on the non-focal attribute ($X^2(2) = 73.95$, $p < .001$; Table 1C). We replicated this same pattern among a different compromise choice set (in which participants chose between three different television options) in Study 3B ($N = 481$; Table 1D).

Study 4. Study 4 ($N = 800$; https://aspredicted.org/blind.php?x=6ey3tk) conceptually replicates this finding in a third compromise choice set (apartments that varied on distance from work and general condition, Table 1E), and tests the proposed process. Pre-testing revealed that distance from work was the focal attribute. As in the prior studies, condition affected choice share ($X^2 = 129.21$, $p < .001$; Table 1E). Compared to the *Static ABC* condition, the dy-

namic presentation of Apartment C (i.e., the apartment for which the focal attribute was outside of the initial options) shifted preferences towards the option that was best on the focal attribute ($X^2(2) = 8.69$, $p = .013$; Table 1E). Compared to the *Static ABC* condition, the dynamic presentation of Apartment B (i.e., the apartment for which the focal attribute was inside the initial options), preferences shifted towards the option that was best on the non-focal attribute ($X^2(2) = 20.37$, $p < .001$; Table 1E).

Participants indicated relative perceived variance using the same procedure and measure described in Study 2. A one-way ANOVA revealed a significant effect of condition on perceived variance, $F(3, 796) = 8.70$, $p < .001$. As predicted, planned contrasts revealed that compared to the *Static ABC* condition ($M = 5.30$, $SD = 1.44$), presenting Apartment C dynamically led people to perceive relatively more variance in the focal attribute ($M = 5.61$, $SD = 1.26$, Fisher's LSD: $p = .031$), whereas presenting Apartment B dynamically led people to perceive relatively less variance in the focal attribute ($M = 4.97$, $SD = 1.52$; Fisher's LSD: $p = .021$).

We conducted the same mediation analyses described in Study 2. Consistent with our theory (and conceptually replicating Study 2), compared to the *Static ABC* condition, the dynamic presentation of Apartment C (i.e., the apartment for which the focal attribute was outside of the initial options) led people to perceive relatively more variance in the focal attribute, which in turn shifted preference towards Apartment A (i.e., the apartment best on the focal attribute; 95%CI for the indirect effect: [.0045, .0631]). Also as predicted, compared to the *Static ABC* condition, the dynamic presentation of Apartment B (i.e., the apartment for which the focal attribute was inside the initial options) led people to perceive relatively less variance in the focal attribute, which in turn shifted preference towards Apartment C (i.e., the apartment best on the non-focal attribute; 95%CI for the indirect effect: [.0037, .0389]).

Discussion. Most choice research examines static choices, but many real-life choices are dynamic: People often initially evaluate a set of options, and additional alternatives are added during the decision process. The central contribution of this work is to present and provide evidence for a unified theory based on the perceived variance of the attribute distribution to explain the opposing effects of dynamic presentation on choice share. We find that a dynamic option that falls outside of the comparative choice set can increase perceived variance, regardless of whether the direction of the comparison is positive or negative. Said differently, a dynamic option increases perceived variance when it is outside the established standard, either by being better than the initial options (Studies 1-2) or by being worse than the initial options (Studies 3A-4). This indicates that the pattern cannot be explained by either an "improving" or "declining" sequence (Loewenstein & Prelec, 1993), or by alternative explanations related to primacy and recency (Miller & Campbell, 1959), as those mechanisms do no explain our findings.

Our findings also contribute to a nascent body of work on dynamic choice sets, which has focused on how dynamic presentation affects the decision strategies people use, and decision-makers' ability to identify a normatively optimal alternative (Mintz et al., 1997). By contrast, we examine a domain in which there is no normatively correct option. Instead we show how dynamic choice sets affect preference construction, when choosing among alternatives that require a preference-based tradeoff, suggesting that dynamic choice sets may affect choice among a wider array of decisions than previously understood. We also extend prior work on perceived variance (e.g., Sujan & Bettman, 1989) by suggesting that perceived variance of an attribute can be affected by the position of the dynamic option, relative to the initial choice set—which in turn drives choice.

Our findings also have potentially important substantive implications. For example, politicians contemplating when to announce their candidacy or managers debating the timing of a new product announcement could benefit from a more nuanced understanding of how the timing of their announcement could impact consumers' preferences for their product. The current research expands the discussion of choice architecture by uncovering how the dynamic evolution of a choice set can alter decision making.

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Transforming Rituals and Rites of Passage During the COVID-19 Pandemic

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EXTENDED ABSTRACT

The COVID-19 crisis has forced consumers worldwide to stay at home and avoid social contact, either following nationally imposed lockdowns or because of self-imposed restrictions due to own health concerns. Physical distancing restrictions differ between periods, countries and regions, but the overall disruption of social life has been tremendous. In this paper we focus on the consequences on consumers who cannot engage in the rituals surrounding childbirth, entering adulthood, weddings, and funerals. These events represent rites of passage (Rook 1985) that have important identity and relational value. We explore how consumers deal with the disruption of these collective rituals and how they utilize technology to reinvent ritual elements. We find that consumers extend and reduce rituals to mitigate the negative effects of physical distancing measures on consumer well-being.

Literature Review

Rituals are a "*type of expressive, symbolic activity constructed of multiple behaviors that occur in a fixed, episodic sequence, and that tend to be repeated over time*" (Rook 1985). Rituals are considered a crucial mechanism for the (re)creation of society (Bell 1997; Durkheim 1912) in which individuals respect norms and traditions (Bell 1997; Weinberger 2015) and share experiences that maintain the emotional bonds within a community (Durkheim 1912; Etzioni 2000). There are four ritual elements: *artifacts*, the objects that hold specific meanings; *scripts*, the sequence of actions performed during the ritual; *performance role(s)* across actors involved in the ritual; and *audience* (Rook 1985). These ritual elements have been examined in consumer research (Sherry, McGrath, and Levy 1993; Wallendorf and Arnould 1991; Weinberger 2015).

We explore the impact of the COVID-19 pandemic and the associated physical distancing measures on a particular type of rituals, i.e. rites of passage (Schouten 1991; Turner 1969). One of the primary objectives of rites of passage is to delineate the transition of an individual to a different status in the community (Van Gennep 1908/1960), such as to adulthood (Fasick 1988), married life (Otnes and Pleck 2003), parenthood (Fischer and Gainer 1993; Ozanne 1992), or death (Bonsu and Belk 2003). While some research exists around the non-celebration of rituals and rites (Sherry et al. 1993; Weinberger 2015), there is limited knowledge on how consumers adapt a ritual when it cannot be performed with the usual elements. Specifically, to salvage their rites of passage during lockdowns, many consumers utilize technology.

Under COVID-19 lockdowns, the use of social media and videoconferencing applications has increased significantly as consumers use them to stay in touch with others (wearesocial.com 2020). While prior research has explored how consumers mobilize technology to reassemble practices that compose the daily family life, such as co-viewing television (Epp, Schau, and Price 2014; Kozinets 2019), it is not yet clear what happens with rituals surrounding the once-in-a-lifetime rites of passage.

Methodology

We conducted semi-structured phenomenological interviews (Thompson, Locander, and Pollio 1989) over phone, Skype, or Zoom with 13 purposefully selected informants who ranged in age, sex, country (France, Italy, the Netherlands, U.S.) and experience with the COVID-19 pandemic. We collected nine hours of audio recordings, yielding 112 single-spaced pages of transcripts. To supplement our interview data, we included 29 pages of introspections (Wallendorf and Brucks 1993) from two informants and the authors. To analyze our data, we drew on the relevant literature and identified patterns across and within the transcripts (Wallendorf and Belk 1989) that subsequently informed our framework and uncovered the key characteristics of transformed rituals.

Findings

The COVID-19 pandemic has forced consumers to reimagine rites of passage and their accompanying rituals. In particular, restricted physical gatherings complicate the rites of passage in which people are accompanied in the transition to another status in their community. Our findings show that consumers and service providers alike turn to technology to recreate the social setting. Some rituals can be fully transferred online (e.g., baby shower, graduation, birthday party, funeral mass), but others still require the physical presence of some performers (circumcision, official wedding ceremony, burial / cremation). We bring to light that consumers accept tech-mediated rituals if their end-goals and key elements are sufficiently preserved (e.g., baby shower aims at helping parents acquire the things needed to welcome the baby in their household and, under lockdown, gifts are sent by mail; graduation ceremony includes a hooding ritual—enacted in front of the computer—that symbolizes the student's transition). We posit that it is more difficult for consumers to respect lockdown restrictions when some ritual performers meet physically, as the feeling of missing out is concrete for distanced audience members. This is further exacerbated when the ritual can be performed only once (such as circumcision and cremation).

During lockdown, rituals are cancelled or transformed. The transformation of rituals takes two forms: (1) the ones that have a physical component are reduced (to limit the number of participants and time spent together), and (2) the ones that have a tech-mediated component are often extended—over time (multiple instances of the same ritual with different audiences) or in terms of audience size (as geographical and financial constraints are lifted). The ritual reduction and expansion can happen simultaneously, such as when a real-life ritual is streamed. Furthermore, the transformation of rituals consists of the blurring of roles of its elements, where each element can take up the role of another (e.g., the audience is replaced by an artifact or becomes a performer). Because of this, transformed rituals are not perceived as the 'real thing' and most informants express their wish to organize a follow-up ritual once they can again gather physically. Still, these follow-up rituals may not be perceived as authentic, as the transition has already happened (e.g., graduation).

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The Effect of Quantity Cues on Product Perceptions and Preferences

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EXTENDED ABSTRACT

Consumers' judgments of how well a product performs (i.e., the product's outcome quality; Bharadwaj 2004; Mishra and Datta 2011) are a primary determinant of their purchase decisions. Because outcome quality is often difficult to evaluate, people frequently evaluate it with the help of other cues (e.g., Yeung and Soman 1997). One particularly influential cue that shapes perceptions of outcome quality is the amount of resources that generate that outcome. Prior literature reveals that people perceive outcomes to be of higher quality when more human input contributes to those outcomes' creation (e.g., Kruger et al. 2004; Morales 2005).

We predict that there are systematic conditions in which consumers perceive that outcomes are higher quality when fewer resources are devoted to them. In particular, we examine consumers' perceptions of the material resources in physical products (e.g., laundry detergents, pesticides, and vitamins). When consumers perceive that a smaller (rather than a larger) quantity of these resources produce a particular outcome, we predict that consumers judge that resource to be more powerful, and that it produces a higher quality outcome as a result.

We propose that the current phenomenon is important not only because it alters judgments of products' outcome quality, but also because it shapes an additional consequential inference: Consumer perceptions of products' environmental friendliness. Prior research has found that consumers judge products that are more powerful as less environmentally friendly (Luchs et al. 2010; Gal and Wilkie 2010; Doorn et al. 2020). We propose that consumers infer a positive relationship between environmental friendliness and products' power: when a smaller (vs. larger) quantity of a particular product produces a particular outcome, it is seen as more powerful, and also more environmentally-friendly.

Experiment 1 manipulated the subjective quantity of detergent that was marketed as being required to clean one load of laundry—specifically, we manipulated whether the objectively identical quantity of detergent required to clean one load of laundry was displayed in a larger (vs. smaller) container, which in turn led participants to perceive that objectively identical of detergent as smaller (vs. larger). When a smaller (vs. larger) perceived quantity of detergent cleaned one load of laundry, participants judged the detergent as more powerful ($t(201) = 5.68$, $p < .001$), perceived that it producesd a higher quality outcome ($t(201) = 3.52$, $p = .001$), and were more likely to use it as a result ($t(203) = 2.81$, $p = .005$). Perceptions of the product's power, and in turn expectations of the product's outcome quality, accounted for the effect of condition on behavioral intentions (*95% CI*: .0893 to .4012; Hayes, 2013).

Experiment 2 replicated these effects ($ts(510) > 3.36$, $ps < .001$). In addition, and in contrast to prior literature finding that people judge more powerful products as *less* environmentally friendly, Experiment 2 found that participants judged the more powerful product as *more* environmentally friendly ($t(510) = 5.29$, $p < .001$).

Experiment 3 examined the consequences of this phenomenon in the field by launching online advertisements. Participants were more likely to click on an advertisement urging them to purchase a detergent when that advertisement highlighted that a smaller (vs. larger) quantity of that detergent was required to clean one load of laundry ($\chi^2 = 4.81$, $p = .028$).

Experiment 4 employed a moderation approach by leveraging a naturalistic intervention drawn from real product packaging: Whether or not the product's formulation was labeled as maximum strength. We predicted that stamping a product with a maximum strength label would attenuate the extent to which consumers rely on quantity information when judging that product's power. In a 2 (Perceived input: Smaller vs. Larger) × 2 (Explicit power information: Present vs. Absent) between-participant design, participants in the *Smaller* (vs. *Larger*) *Perceived Input* condition read that one ounce (vs. 28,349 milligrams) of soap was required to clean a load of dishes, which was followed by either explicit information that the product was maximum strength or was not followed by any other information. As predicted, whereas participants in the *Explicit Power Information Absent* condition perceived the product to be more powerful in the *Smaller Input* condition than in the *Larger Input* condition ($F(1, 798) = 46.56$, $p < .001$), this effect attenuated in the *Explicit Power Information Present* condition ($F(1, 798) = 1.67$, $p = .281$). The same patterns were found on expected outcome quality and behavioral intentions.

Experiment 5 compared the effect we found with previous research which found that people perceive outcomes to be of higher quality when their human creators invest more input into those outcomes (e.g., Kruger et al. 2004; Morales 2005). We posit that our findings diverge from this prior literature because people primarily perceive the outcomes that products deliver as fueled by (and thus incorporating) those products' power, but perceive the outcomes that people produce as fueled by (and thus incorporating) people's care, attention, and thought. As predicted, participants judged a laundry detergent's outcome quality to be greater when the product required a smaller quantity of time to clean one load of laundry ($F(1, 396) = 20.93$, $p < .001$); by contrast, participants judged a person's outcome quality to be greater when the person required a larger quantity of time to clean one load of laundry ($F(1, 396) = 13.51$, $p < .001$). We also found that participants judged the product to be more powerful when it required a smaller (vs. larger) quantity of time to clean one load of laundry ($F(1, 396) = 69.26$, $p < .001$), but that the quantity manipulation did not impact perceptions of the person's power ($F(1, 396) = .01$, $p = .991$). A moderated mediation analysis with bootstrapping (Hayes 2013) showed a significant index of moderated mediation through power perceptions (95% CI: .8259 to 1.6235).

Product websites, advertising, and packaging frequently highlight the quantity of product that produces the promoted outcome. We find that this usage information influences consumers' product judgments and preferences, and we uncover how marketers can optimally present this information to boost sales.

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Branding Beyond Product: The Strange Case of Anti-Surveillance Camouflage

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EXTENDED ABSTRACT

Historically, governments and institutions have monitored tobacco marketing with a fragmented approach in which certain tobacco promotions on certain forms of media were prohibited, whereas other communication forms and touchpoints were allowed. This regulatory environment encouraged shifts in promotional spending, including substituting different forms of media and reinvesting in others (Saffer and Chaloupka 2000). Tobacco marketing did not cease. Instead, marketers adapted. In doing so, they found ways to elude institutional and societal surveillance.

In this study, we use an "anti-surveillance camouflage" (Monahan, 2015, 2018) lens to understand how tobacco companies successfully target consumers in a way that circumvents increasingly restrictive laws. Anti-surveillance camouflage ostensibly allows consumers to hide from cameras in plain sight. Similarly, Philip Morris uses parallel brand tactics to hide from regulators. Mission Winnow is partially detached from tobacco and tobacco brands, just enough to evade sanction. This detachment is discursively actualized through the careful crafting of a sophisticated parallel brand aesthetic. Despite being ostensibly decoupled from tobacco products and related symbols, Mission Winnow's brand aesthetic is resonant with both the parent tobacco brand, Marlboro, and the past's glorious epoch of tobacco sponsorship. Its purpose is to elicit favorable and subtle associations with the world of tobacco brands and smoking.

Social Media and the Shifting Logics of Tobacco Branding

Growing media restrictions compelled tobacco companies to innovate their branding strategies to fit within the spaces left open to them. In particular, tobacco companies shifted their promotional spending from television and event sponsorship towards other emerging media, such as social media. These proved to be extremely effective means to target young consumers with their evocative brand symbolism and imagery (Dunlop, Freeman and Jones, 2016; Cranwell et al., 2015; Elkin, Thomson and Wilson, 2010; Forsyth and Malone, 2010; Freeman and Chapman, 2009, 2010; Kim, Paek, and Lynn, 2010; Liang et al., 2015a, 2015b; Navarro et al., 2020; O'Brien et al., 2020; Hébert et al., 2017).

Beginning around 2015, Facebook, YouTube, and Instagram began announcing restrictive policies regarding direct and paid forms of advertising of tobacco products. However, these largely unenforced announcements have not eliminated tobacco related social media marketing. Rather, tobacco companies have leveraged the openness of social media to find ever more effective promotional alternatives that build upon seemingly organic social media influencers' content to achieve a deep level of cultural embeddedness in consumers' lives (Kozinets et al., 2019). This embeddedness reveals an operation of youth culture hacking whereby tobacco companies perform clear acts of surveillance resistance by cleverly deploying influencer and event marketing tactics (Kozinets et al. 2019, 2021).

Context and Method: a Netnography of Philip Morris's Mission Winnow

Mission Winnow is a digital communication platform launched in 2018 by Philip Morris International. In Mission Winnow, Philip Morris performs resistance to governmental and societal surveillance through various activities and resources. While recognizing the Mission Winnow project as anti-surveillance camouflage, our study aims to answer questions related to how a consumer form of aesthetic resistance applies to a brand project; which specific branding practices characterize Mission Winnow as aesthetic camouflage; and how such practices perform surveillance resistance. From a methodological standpoint, we engaged in a netnography, following the specific set of research practices identified by Kozinets (2020). We captured and analyzed the plethora of discursive and expressive practices and conversations flowing through the Mission Winnow's website hub, the Winnowers' community, the newsroom, the projects, and the profiles and groups variously related to Mission Winnow on the following social media platforms: Twitter, Instagram, YouTube, Facebook and Reddit.

Uncovering Anti-Surveillance Camouflage as Aesthetic Resistance in Mission Winnow

Like consumers who use anti-surveillance camouflage aesthetics to resist the discriminatory logics of surveillance societies, Philip Morris uses Mission Winnow's digital communication platform for anti-surveillance camouflage. It does this using a variety of different means, including: (1) using attractive visual brand design and symbolism, (2) deploying visionary themes of societal impact, (3) providing evocative vocabulary and imagery, (4) offering participatory communication devices, and (5) hosting exclusive events and networking with culturally-relevant brands and social media influencers. These techniques elude the evolving stringent governmental surveillance on tobacco companies and extend the game of regulatory cat and mouse. Our analysis also uncovers five forms of anti-surveillance camouflage – *visual, thematic, networking, avoidance, and participatory* – through which Philip Morris performs aesthetic regulatory resistance.

Although our study does not aim to generate nomothetic generalizations, the interface of marketing and consumer culture may provide some intriguing glimpses into the shadowlands where online meets offline, communication becomes culture, ethical boundaries blur, and brands merge with consumers' creative and participatory practices. These various crossovers have the potential to impact our understanding of contemporary branding. As brands continue their mergers and trespasses on interrelated cultural systems, new forms emerge in plain sight. Some brands may take forms that are similar to those we locate in Mission Winnow, becoming resistant to regulation and surveillance in a new neoliberal age of social media, civic engagement, and brand ambassadorship. Further research is needed to understand this interplay and the subtle, shifting branding logics depicted in this initial investigation.

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Consumer Deceleration Through Market-Mediated Cultural Reflection

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EXTENDED ABSTRACT

"I was late for work. Even though my studio was in the same borough as our apartment, there wasn't a direct way from here-to-there. So my commute took me across three different subway lines. On the platform, through the people, in through the set of doors that were whooshing close behind me. Movement. Out the doors. Again. Again. I stopped at a bodega for coffee; a nondescript cup filled with nondescript liquid. I didn't drink it for the taste; I never really enjoyed the act, if that makes sense. It was about the effect. Caffeine. Energy. Go, go, go.

Now, in the mornings, I wake up a little earlier before work and before my boys wake up. I shuffle to the kitchen. And I warm water on the stove for a French press of coffee. Our kitchen looks out into the backyard which is heavily wooded. I take a moment and observe: the plant that has grown since the morning before, the animals scurrying about, any new snowfall that occurred overnight. I pour a cup of coffee, and it is a pure, sweet little moment. A ritual that anchors my day." - Allyson, age 34

Allyson, quoted above, made a significant lifestyle shift by moving from Brooklyn, New York to Portland, Maine. While several factors influenced this intentional change, one factor stands out for its interestingness: The Danish concept of hygge, which Allyson read about in 2016 New York Times article and then later researched extensively on Pinterest. Consequently, learning about hygge played an instrumental role in Allyson's quest to design a new way of life for herself and her family. Hygge informed her philosophy on child-rearing, working, vacationing, nutrition, family traditions, and leisure activities. But the main interest of this research is how hygge ultimately invited a slower pace of events in each of these spheres of everyday life.

Hygge eludes direct English translation, but may be understood as "a quality of coziness that comes from doing simple things such as lighting candles, baking, or spending time at home with your family" (Cambridge Dictionary 2021). Hygge is quintessentially Danish and permeates several aspects of Danish culture, from home-life, to social interactions, marketplace behaviors, and even foreign policy (Bean 2011; Bille 2015; Jensen 2017; Linnet 2011; Wiking 2017). The hygge concept exploded onto the US marketplace in the winter of 2016-2017, heavily promoted by book publishers, business-to-consumer media, and marketing research agencies (Mintel 2016; NPD 2017). Danish hygge has continued to permeate US market channels through social media, consumer products, and advertisements, typically peaking in winter months thanks to the commonly used signifiers of fireplaces, cups of tea, and wooly socks (Google Trends 2020; McCartney 2016).

This research seeks to understand the phenomenon of consumer deceleration in the context of the marketization and consumer adoption of Danish hygge in the United States. The question guiding this exploration is: how do consumers in the US personalize the meaning of hygge? And more specifically, how does hygge help consumers critically reflect on social temporality and their consequential pace of everyday life?

LITERATURE

Drawing upon the theories of social acceleration (Rosa 2013) and global mélange (Pieterse 2004), this research shows how consumers, when introduced to new ideas through a globalized marketplace, critically reflect on their current way of life and challenge cultural myths. The findings contribute to literature in consumer temporal-ity, specifically the notions of consumer deceleration (Husemann and Eckhardt 2019) and timeflow (Woermann and Rokka 2015), showing how the cultural myth of "time is money" is challenged through a dismantling of social norms and an agentic consumption of time. This research also contributes to our understanding of globalization and consumer culture by presenting a process of 'market-mediated cultural reflection', which may be used in future research endeavors to understand how cultural myths are reflected upon in an increasingly globalized consumer culture.

Woermann and Rokka (2015) study time in consumer culture from a "microperspective", that is, "in action as it unfolds in consumers' experience of concrete, lived through moments" (1488). In other words, the authors intend to study the phenomenological experience of time, focusing on a theoretical explanation for how different consumption practices evoke unique temporal experiences ("timeflow"). However, the authors do not comment on the broader temporal logics of society or culture in which certain consumption practices take place.

Husemann and Eckhardt (2019) understand temporality as a feature of social structure, studying how individuals respond to dominant temporal logics by altering consumption behaviors. The authors identify how consumers achieve deceleration in a sped-up world. However, this notion of consumer deceleration is limited as the findings hinge on an "oasis of deceleration" where time is experienced as passing more slowly and as being a more abundant resource in the context of an oasis that exists apart from the everyday lifeworld. In an oasis of deceleration, the objective social conditions surrounding consumer subjectivity certainly change, though the lasting impact on consumer subjectivity is unknown once the consumer exits the oasis. The purpose of this research is to extend Husemann and Eckhardt's findings by exploring how consumers can more permanently reshape subjective experiences of temporality in a sped-up society.

METHODOLOGY AND FINDINGS

This project employs a netnographic approach (Kozinets 2019) to understand how a particular group of US consumers critically reflect on the social meanings surrounding temporality (i.e., the cultural myth of "time is money") and their pace of everyday life through the adoption of Danish hygge. Multiple interpretive methods including participant-observation, visual analysis, existential-phenomenological interviews (Thompson, Locander, and Pollio 1989), and hermeneutic analysis (Thompson 1997) are used to develop meaningful responses to the research questions. Data was collected and analyzed iteratively over four years of immersion in a special interest facebook group called Cultivating Hygge.

Findings reveal that in the fast-paced environment of US culture, the temporal aspect of Danish hygge is attenuated. A thorough interrogation of the visual data reveals that in the context of the United States, hygge means "unhurried moment". This finding is elaborated upon in the analysis of the interview data, which reveals a process for how consumers alter temporality, or desired timeflow, through a process of market-mediated cultural reflection.

The visual data show that once introduced to the Danish tradition of hygge, US consumers resourcefully tinker with available materials to create their own expressions of hygge. Everyday objects, which might have once carried other meanings, became symbols and conduits of "hygge". For example: a manual French press coffee maker was deemed more hygge than an automated Keurig single-serve coffee maker ('I'm trying to slow down a little. And coffee

out of a French press rather than a Keurig helps that happen ... and makes it taste so much better!"); bread became hygge when it was homemade rather than store bought ("Sunday morning.....coffee and reading while bone broth is cooking for dinner tonight and bread dough is rising.....total peace"); and a home office felt hygge when it was adorned with string lights or a salt lamp ("If you've got to work on the weekend, make it hygge with dim lighting, soft music, and a scented candle").

The existential-phenomenological text reveals four main themes: cultural reflection; inspiration to downshift; existential curation; and desired timeflow. Importantly, these four themes reveal how the adoption of hygge helps to reshape consumer subjectivity through a process of dismantling layers of structural, cultural meanings surrounding temporality. US consumers use the borrowed philosophy of Danish hygge to experience a new, desired timeflow in everyday life.

Cultural reflection

Learning about another culture and its traditions gives individuals something to which individuals can compare their own culture. Learning about Scandinavian cultures through hygge prompts individuals to reflect, both critically and appreciatively, on their own culture of origin. In the words of Holly, "Hygge lends itself to being more self-aware, you know, you're supposed to sort of stop and think and be quiet and reflect a little bit." Such reflection prompts individuals to consider: "How should I live?" in the US cultural context, while simultaneously drawing upon influences from another culture. In this way, the structures of US culture are illuminated as individuals consider what these structures mean to them in their everyday lives.

Inspiration to downshift

Individuals become more familiar with hygge through various products, promotions, and stories diffused throughout the marketing system. Through community engagement in the Cultivating Hygge facebook group, individuals see how other individuals live differently from, or even in opposition to, generally accepted cultural norms. One of the cultural norms that is highlighted in the context of hygge is that of temporality. Through repeated engagement with this community, a certain social permission is granted to alter one's lifestyle. Individuals see evidence of others living differently and are inspired to also make decisions to live differently. In this, the individual becomes uncoupled from the dominant cultural structure and moves toward a greater ability to practice agency.

Existential curation

In the process of adopting hygge, individuals ask themselves, "How do I design the life that I want to live?". In the context of temporality this translates to, "How do I decide what remains and what changes in my life so that I can achieve a certain desired experience of time?" Individuals begin to experiment with hygge, playing with the tempo of everyday life. In this, individuals assign new meanings to temporality, replacing and redefining structural meanings of time with individual meanings of time.

Desired timeflow

Individuals incorporate elements of hygge into their everyday lives through consumption rhythms and rituals. These new practices help individuals achieve a certain desired timeflow. Woermann and Rokka (2015) define the timeflow of a practice as "its ability to evoke an experienced temporality". The phenomenological text reveals how hygge prompts individuals to emphasize a certain temporality in everyday life.

DISCUSSION

This research uncovers a case in which a market-mediated process helps challenge social norms surrounding temporality, which originate from a market-sanctioned understanding of social time in the first place. So, what does it mean that US consumers confront and question the "time is money" myth through their adoption of the cross-culturally marketed concept of hygge? This research raises important theoretical implications both for the phenomenon of temporality in consumer culture and for the notion of market-mediated cultural reflection.

First, the findings suggest that consumers may decelerate by consuming aspects of other cultures. For these consumers, deceleration is not merely a temporary change, but an enduring state resulting from a process of cultural reflection. Such reflection fundamentally alters the individual's mindset, or ideological orientation, toward temporality. While Husemann and Eckhardt's (2019) emphasis on "oases" of deceleration addresses Rosa's (2013) second type of inertia to social acceleration, the findings presented here harken to Rosa's fifth type of inertia: intentional deceleration as ideology. This essay also echoes Woermann and Rokka (2015) in that consumers achieve a certain feeling of timeflow by engaging in certain consumption activities. For many consumers in the US, a desired timeflow is a decelerated state from the normalized acceleration promoted throughout consumer culture.

Second, this research presents another way of conceptualizing how consumers might utilize borrowed (and marketed) cultural meanings to critically reflect upon the myths of their own culture. This conceptualization has important implications for an increasingly globalized consumer culture. Mixing between cultures results in an ongoing hybridization process (Neverdeen-Pieterse 2019). Cross-cultural diffusion often occurs as an act of bricolage, mixing, matching, and borrowing select signs from a culture of origin to a receiving culture. Such cultural mixing allows people to "acquire objects across social divisions to create new cultural identities" (Phillmore, Klass, and Knecht 2016, 8). These cultural identities may then become subcultures that stand in direct opposition to mainstream cultural ideologies. As a result, cultural mixing can ultimately create new accepted norms and structures in society while challenging existing dominant meanings.

Interestingly, the cultural myth of hygge enables individuals to question the myths of their own culture. Eckhardt and Mahi emphasize the importance of such consumer agency in an increasingly globalized environment, defining it as "the ability to transform and play with meaning" (2004, 137). So even though cultural myths typically act as binding structures in society, borrowed cultural myths (as is the case of Danish hygge in the United States) can be liberating, providing "the means by which we can seek new meanings" (Danesi 2018, 45).

Two limitations are worth noting. First, the marketization and adoption of Danish hygge in the United States reveals a specific consumer response in the context of a West-to-West cultural diffusion. A question to considers is: how might the findings change in the context of an East-to-West, West-to-West, or East-to-East cultural diffusion? And second, the data in this research were collected during the northern hemisphere winter months (primarily January-February) over the course of multiple years. This seasonality provides an extreme context, as interest in hygge certainly surges during the winter months (Google Trends 2020). While it is possible that seasonality might affect the nuance of the findings, the author suspects that the

main finding of cultural reflection would remain the same in other seasons of the year.

In sum, this research develops and empirically grounds a theoretical process that explains how cultural reflection can reshape consumer subjectivity in regard to temporality. This naturally invites the question: To what other contexts and what other phenomena may a similar process also apply? Can market-mediated mixing of cultural ideologies impact other domains pertinent to consumer and social wellbeing such as health, education, and sustainability? Further, how might an enhanced knowledge of market-mediated global mélange and cultural reflection help marketers constructively engage in such domains?

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Alleviating Risk Aversion to Uncertain Impact Donations

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EXTENDED ABSTRACT

Organizations raising funds for sustainable solutions to today's development issues often strive to meet ambitious goals, such as researching global disease eradication or lobbying for international policies that make strides toward ending climate change. However, when consumers want to use philanthropy to tackle major global issues such as climate change or animal welfare, the most effective solutions will be inherently risky (e.g., Samuel, 2019, 2020). While there is a non-zero probability that a donation to these organizations will change many lives, there is also a high chance that a donation will yield zero impact.

In this paper, we investigate how to reduce individuals' aversion to uncertainty about their prosocial impact. We explore a broad-bracketing intervention in which donors can invest in uncertain impact charities alongside other, certain impact charities, rather than in isolation. This intervention encourages consumers to consider the total impact of their donations rather than the impact of each donation separately (Benartzi & Thaler, 1999; Read et al., 1999). However, while the current literature suggests that broad bracketing works via mitigating loss aversion, this cannot predict an effect in the context we examine as all impacts are framed as gains. Instead, across four preregistered studies (N=1,870), we show that broad bracketing can also work via the peanuts effect (Prelec & Loewenstein, 1991) – that is, interventions which pair an uncertain impact with other, certain impacts cause donors to perceive the uncertain option as lower stakes and thus a tolerable risk.

In Study 1 (N=908), participants indicated whether they would prefer to donate to a charity fund with a certain & lower impact (e.g., mosquito nets), or a charity fund with an uncertain but potentially much higher impact (e.g., research for a malaria preventive). We manipulated broad bracketing by varying the number of prior donation decisions between certain impacts that each participant made (0 in the single-decision condition or 2 in the portfolio decision condition). Participants donated to uncertain impacts more often in the portfolio condition versus the single-decision condition, p=.003.

To rule out alternate explanations such as variety seeking or fatigue due to participants making a different number of choices in each condition, we ran a second study establishing our main effect (N=280), which asked each participant to make donation decisions concurrently, rather than over time. Decisions were presented as a set of four charities: three of which had a certain impact and one of which had an uncertain impact. In the "split" decision context, designed to broad-bracket participants' choices, each participant was asked to select two charities between which their donation would be split. In the "rank" condition, participants were told their donation would go to a single charity and asked to rank all four charities in order of preference. We evaluated participants' likelihood of placing the uncertain charity in their top two selections. Participants were more likely to include the uncertain charity when they split their donations between two charities versus when they only donated to one charity, p<.001.

Another alternative explanation would be that individuals want to have "just some impact;" that is, they care about risk more *when it presents the possibility of having zero impact*, which is impossible in the portfolio or split conditions. In Study 3 (N=141), we sought to test this possibility by seeing if the effect was moderated by whether the uncertain choice guaranteed at least a small impact. We used the same choice paradigm as study 2 while adding another factor to create a 2 (bracketing context: split versus rank) x 2 (uncertain impact: potentially zero versus potentially low) design. We again found a significant effect of bracketing, p=.003, including when the uncertain option guaranteed at least some impact (versus no impact), p=.005, and we found no interaction, p=.43.

In Study 4 (N=541), we examine why broad-bracketing is such an effective strategy for increasing donations to uncertain impact charities. We assigned participants to each of three bracketing conditions. The first two conditions were similar to those in Study 1, but we additionally included a third "aggregate" condition which was economically equivalent to the portfolio condition (that is, it represented the sum of all 3 choices in the portfolio condition, thus forcing participants to broad bracket). We also measured the perceived stakes of each uncertain-outcome option on scales from 1-7 (note that the actual risk remained the same across all conditions).

Results showed that the choice share of the uncertain impact option was significantly different in all three conditions; it was lowest in the single choice condition and highest in the aggregate condition, in which participants were essentially forced to broad bracket, p's<.001. We observed consistent results for the perceived stakes measure, indicating that as individuals evaluate an uncertain option in an increasingly bracketed choice context, they perceive the stakes as increasingly lower. A series of mediations provided further evidence of this process. These analyses demonstrate that increasingly bracketed choice contexts lower the perceived stakes of equally uncertain impact donations, which leads to an increase in preference for risky prosocial impacts.

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The Structure of a Product, Retail Environment, and Brand Logo Can Affect Judgments of Value

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EXTENDED ABSTRACT

Structure is a concept related to the arrangement and organization of elements in an object, system, or construct. In nature, structure is manifested in predictable regularities, such as the Fibonacci sequence on the leaves of a plant. In people's everyday lives, structure is present in marketing stimuli (e.g., brand logos, products, product packages, retail environments), music (e.g., forms, scales, and chords), and architecture (e.g., building structure, interior design). We investigate the consequences of structure-based inferences about brand logos, product packages, product arrangements, and retail environments. For instance, Microsoft logo is structured (i.e., symmetric), whereas Pepsi logo is unstructured (i.e., asymmetric).

Visual attributes are often used to make inferences, including judgments about functional benefits (Labrecque and Milne 2012) and hedonic benefits (Warren et al. 2019). We propose that structure (a lack of structure) can encourage inferences about the value of a means used to pursue any utilitarian (hedonic) goal. Utilitarian goals include functional, performance, or operational goals. Likewise, hedonic goals include aesthetic, entertainment, and pleasure goals.

Structure is related to perceptions of increased order (Ngo and Byrne 2001), expectations of enhanced performance (Veryzer and Hutchinson 1998), certainty of choice (Rahinel et al. 2016), and causality (Kay et al. 2014), all of which are associated with the delivery of utilitarian value. Hence, we contend that consumers infer utilitarian value from structure. Increased utilitarian value, in turn, should boost an array of marketing-relevant outcomes.

A lack of structure, the counterpart to structure, is related to many of the characteristics that are desirable when hedonic considerations are heavily weighted. Most germane to our inquiry, a lack of structure is associated with unpredictability (Crutchfield 2012), excitement (Bajaj and Bond 2018), arousal (Luffarelli et al. 2019), uniqueness (Schmitt and Simonson 1994), and fun (Tonietto and Malkoc 2016). These characteristics are related to hedonic dimensions of consumer attitudes toward product categories and brands (Voss et al. 2003). Hence, we contend that consumers infer hedonic value from lack of structure. Increased hedonic value, in turn, should boost an array of marketing-relevant outcomes.

This research contributes to the marketing literature by broadening the conceptualization used to understand the influence of structure on an array of marketing-relevant outcomes. This research also contributes to practice in several industries. Professionals who work with product design and packaging, brand logo design, merchandising, and retail design can better understand when and why imposing structure, or lack thereof, can create superior value for the customer and, ultimately, for the firm.

Experiment 1 provides initial evidence for our Hypothesis. We conducted a large-scale field experiment using Facebook's advertising platform. We created Facebook ads for perfumes. Structure (or a lack thereof) was operationalized through symmetry and regularity (asymmetry and irregularity) in product imagery across two product replicates. Utilitarian and hedonic goals were operationalized via product framing.

The dependent variable was advertising click-through rates (CTRs), a function of impressions and clicks. CTRs are associated with real product interest. The ads generated a total of 82,413 impressions, 2,503 of which were clicked on (2.23%). A 2 (product design) x 2 (framing) Poisson log-linear model, which revealed the predicted interaction (β=.56,χ^2(1)=34.73, p<.001). As predicted, structure increased CTR when the product was framed as utilitarian ($CTR_{structured}$=2.53%vs.$CTR_{unstructured}$=1.82%;$Clicks_{structured}$ =529 vs.$Clicks_{unstructured}$=380; χ^2(1)=24.82,p<.001), but decreased CTR when the product was framed as hedonic ($CTR_{structured}$=2.03%vs.$CTR_{unstructured}$=2.54%;$Clicks_{structured}$=403vs.$Clicks_{unstructured}$=525; χ^2(1) = 14.29, p < .001). These results were observed in a large-scale field experiment, providing support for and showing the external validity of our framework.

In experiment 2 (preregistration: https://aspredicted.org/blind.php?x=2r58tp), we test the underlying mechanism or utilitarian (hedonic) value by using a controlled setting where we manipulate structure and the goals associated with the consumption experience. Participants (N=600) read the description of a store framed either as utilitarian or hedonic, and viewed a picture of that store that was either perfectly symmetric (vs. asymmetric). We measured evaluations, perceived utilitarian value, and perceived hedonic value (see preregistration).

A two-way ANOVA on the evaluation index revealed the predicted interaction (F(1,596)=20.97,p<.001). As expected, structure increased evaluations when the store was framed as utilitarian ($M_{structured}$=7.77 vs. $M_{unstructured}$=7.15;F(1, 596)=10.83,p =.001), but decreased evaluations when the store was framed as hedonic ($M_{structured}$=7.20 vs. $M_{unstructured}$=7.79; F(1, 596)=10.13,p=.002). Supporting our reasoning, bootstrapped moderated mediation analyses revealed that increased utilitarian value mediated the effect on evaluations for the utilitarian store framing (β=.46,SE=.15,95%CI: [.19to.77]). In addition, hedonic value mediated the effect on evaluations for the hedonic store framing (β=.39,SE =.12,95%CI:[.15to.65]), providing supporting for our mechanism.

In study 3, we demonstrate our effects in the marketplace for real brands. The data used in this study were collected from three sources. BrandZ, a leading marketing consultancy firm, publish annual rankings of the top 100 most valuable brands in billions of U.S. dollars. We used all the 100 brands from the BrandZ report. VMLY&R, a global full-service marketing agency, developed a customer-based brand equity measure, and they also provided control measures (e.g., usage behaviors) for all these brands. They granted access to this proprietary data. Finally, we recruited 1301 U.S. consumers and measured brand-related properties associated with structure (based on logos) and degree of how utilitarian or hedonic these brands were. Thus, our dataset had BrandZ top 100 brands financial valuations, customer-based brand equity measures for these brands, control measures, structure perceptions, and utilitarian-hedonic perceptions.

Using this data, we performed a Johnson-Neyman analysis that revealed a significant interaction (β=-23.70,t(85)=-3.11,p=.004). The results showed that brands associated with utilitarian (hedonic) products and services have greater brand value when brand logo structure (lack of structure) is higher, supporting our framework. These effects were observed for real brands in the marketplace. We replicated these effects using the customer-based brand equity measure. Our results support the notion that structure has an important role in the marketplace and it can affect judgments of value across a variety of marketing contexts.

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Overcoming Self-Focus in the Presence of Contagious Diseases: Performance-Diagnostic Information Increases Donations to Causes with Benefits for Others

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EXTENDED ABSTRACT

Donations to charitable health organizations have become increasingly important. Our key goal is to understand how organizations can create effective donation appeals for causes related to contagious disease prevention and treatment. A relevant question when creating a donation appeal is whether to focus on the donor's personal benefits of donating or the benefits for others (White and Peloza 2009). We propose that the effectiveness of highlighting personal benefits or benefits for others depends on people's perceived likelihood that they will get the disease or class of diseases mentioned in the appeal.

When the likelihood of getting the disease is low, people do not feel threatened by the possibility of getting it (Weinstein and Klein 1996). If a person believes it is unlikely that they will get a disease, they should infer that others will benefit more from the work of the health organization (Batson and Shaw 1991). In this case, appeals that focus on the benefits to other people are more effective because the donor will perceive that others are the right target for the benefits a donation could bring (H1). As the likelihood of getting the disease increases, people feel threatened by the prospect of getting sick (Sheeran, Harris, and Epton 2014). The perception of a threat should make them more focused on their personal interests, which will make donation appeals with self-benefits more effective. In this case, appeals that focus on personal benefits are more effective because the donor will perceive that him or herself is the right target for the benefits a donation could bring (H2).

These Hypothesis reveal a potential issue. As the spread of a disease in a community increases, people may derive real benefit from donating to a cause focused on benefitting others, as the fewer people in a donor's community get the disease, the less likely it is that a donor will get the disease themselves. The fewer people get infected in a community, the less the disease circulates, which ultimately benefits everyone (Fauci et al. 2020). We investigate a solution to this issue. We propose that the increase in donations resulting from self-benefit appeals is associated with the belief that a health organization's work is not enough to stop a disease from spreading around a community and ultimately benefit the donor. Therefore, providing information that is diagnostic of the successful performance of the organization should attenuate this belief. When such information is provided, appeals with benefits for others will be more effective than those with personal benefits (H3).

In addition to its contribution to the area of prosocial behavior, this research will help health organizations by demonstrating strategies these organizations can use to design donation appeals with the correct combination of information types (likelihood of getting a disease, benefit target) to maximize donations.

In study 1 (preregistration: https://aspredicted.org/blind.php?x=uu7fq8;N=800), we manipulate the benefit target of a donation appeal by presenting personal benefits versus benefits for others, and measure people's perception that they will get sick with the disease mentioned in the appeal. The main analyses were restricted to participants who donated at least one dollar. We apply this to all studies. A 2 (benefit target) × (perceived likelihood) regression on donation amount revealed an interaction (β=-1.02,t(610)=-5.09,p<.001). The effect of other-benefit (vs. self-benefit) appeals was positive below the 3.93 J-N point of perceived likelihood, suggesting that these appeals are more effective when the perceived likelihood of getting a disease is low. By contrast, the effect was negative above the 5.18 J-N point, suggesting that self-benefit (vs. other-benefit) appeals are more effective when the perceived likelihood of getting a disease is high.

In study 2 (preregistration: https://aspredicted.org/blind.php?x=uv7py8;N=400), we focus on COVID-19. We use information about the disease to manipulate perceptions of likelihood. In addition, we have hypothesized that donations are driven by the extent to which the benefits focus on the target the potential donor believes is right (self or other). To test this, we measured the extent to which participants perceived that the target was correct and predicted that this measure would positively predict donation amount. In the low likelihood condition, donation amount was lower in the self-benefit (M=6.00) than in the other-benefit appeal condition (M=8.63;F(1,279)=7.59,p=.006). The pathway to donation amount through on-target perception was positive (β=1.85,SE=.46,95% CI:[1.05;2.84]). When the likelihood was high, donation amount was greater in the self-benefit (M=9.61) than in the other-benefit appeal condition (M=6.10;F(1, 279)=15.94,p<.001). The pathway to donation amount through on-target perception was negative (β=-1.07, SE=.42,95%CI:[-1.95;-.33]).

In study 3 (preregistration: https://aspredicted.org/blind.php?x=kg736g;N=600), we investigate whether providing performance-diagnostic information increases donations for other-benefit appeals. Here and in study 4, we only examined donation behavior under a high likelihood perception. In the baseline performance information condition, donation amount was higher in the self-benefit (M=5.83) than in the other-benefit condition (M=4.64;F(1,519)=9.32, p=.002). In the performance-nondiagnostic information condition, donation amount was also higher in the self-benefit (M=5.85) than in the other-benefit condition (M=4.59; F(1,519)=11.18, p =.001). In the performance-diagnostic information condition, however, donation amount was lower in the self-benefit (M=5.08) than in the other-benefit condition (M=6.03; F(1,519)=6.32, p=.012). All effects were mediated by on-target benefits perception consistent with our Hypothesis.

In study 4 (https://aspredicted.org/blind.php?x=wf3339;N=800), we replicate study 3 by highlighting information about people the organization has helped in a community. In addition, we contrasted performance-diagnostic information with other types of information that are effective in increasing donations, such as providing specific information about a person the organization has helped or plans to help with the donated money (Jenni and Loewenstein 1997). We also use a "no target" condition to show the effect of other-benefit appeals relative to a more neutral group. In the performance-diagnostic condition, donation amount was higher in the other-benefit (M=8.89, SD=5.62) than in the no target condition (M=6.03; F(1,579) = 16.21, p<.001). In all other information conditions, donation amount was higher in the no target than in the other-benefit conditions. Taken together, our results contribute to the prosocial behavior literature and to health organizations focused on contagious diseases.

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The Inescapable Quest for Happiness: Exploring How the Ideology of Happiness Shapes Contemporary Consumer Marketplace

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EXTENDED ABSTRACT

The quest for happiness has an extensive presence in contemporary Western culture, in which politicians, organizations and individuals all engage in different actions to increase happiness (Burnett 2012). Given the central place that happiness occupies in our society, researchers across disciplines have been interested in exploring the causes and consequences of happiness (Jugureanu 2016; Veenhoven 2015). Marketing researchers have contributed to this work, specifically exploring happiness correlates that pertain to consumption, such as materialism (Belk 1985), types of purchases (Bhattacharjee and Mogilner 2014; Nicolao, Irwin, and Goodman 2009), and consumption choices (Mogilner, Aaker, and Kamvar 2012). In addition, consumer culture theorists have emphasized the role of consumption settings in contributing to consumers' well-being (Higgins and Hamilton 2019). Several studies have pointed out that individuals experience different tensions in their everyday life, ranging from boredom to stress in a consumer culture. This research suggests that consumers compensate for these tensions by engaging in sensorial and spiritual experiences that allow them to feel good (see Higgins and Hamilton 2019 for a review). Overall, this recent work aligns with a psychological perspective, where happiness is understood as an individual feeling that is achieved when particular stimuli are in place (Layard 2005; Thin 2014; Veenhoven 2015).

However, in recent years, sociologists have put forward the idea that happiness can be understood as a complex social construction (Burnett 2012; Cabanas and Illouz 2019; Davies 2015; Hyman 2014). Researchers have highlighted that happiness has been interpreted differently over the years and across cultures, corresponding to multiple cultural discourses, including virtue, religion, public policies, productivity, and individual success and responsibility (Burnett 2012; Cabanas and Illouz 2019; Davies 2015). Rather than understanding happiness as an individual psychological state, this stream of research draws attention to the ideological nature of happiness. It suggests that happiness is associated with culture-bound values, norms and meanings that come to motivate different societal structures and ways of living in society. In this regard, all actors and institutions engage in cultural work to align with a certain belief system of happiness.

Still, there has been little discussion around how the cultural imperative of happiness influences a marketplace and marketplace actors. This research explores how the ideology of happiness structures the marketplace by addressing the following question: How does the ideology of happiness in contemporary consumer society inform the actions of consumers and producers? To answer this question, we draw on Foucault's concept of heterotopia, which refers to sites that juxtapose heterogeneous elements, such as spaces, social orderings, and discourses that are normally incompatible with each other (Chatzidakis, Maclaran, and Bradshaw 2012; Foucault and Miskowiec 1986). This theoretical framework enables us to better understand how different happiness discourses coexist in the marketplace.

We situate our study in the context of Disney's theme parks. Since the opening of the first park in 1955, the narrative of happiness has always been at the core of Disney theme parks (Chytry 2012; Dholakia and Schroeder 2001), which makes them an ideal context to explore the ideology of happiness within a mainstream capitalist marketplace. A qualitative methodology was adopted for this study.

First, we collected archival data from different media (newspapers' articles, television interviews, Disney Institute blog's posts) to develop an etic comprehension of the Disney brand. Second, we performed a content analysis of an online forum dedicated to Disney, analyzing the pre-trip and completed trip reports of three participants to deepen our understanding of consumers' trip. Third, we conducted depth interviews with 11 Disney theme park customers to directly access their own emic experiences with Disney.

Our analysis reveals four happiness discourses that are articulated in the Disney theme park marketplace. We introduce the idea of happiness heterotopia as a space where different, and contradictory, cultural discourses of happiness harmoniously coexist. This happiness heterotopia oscillates between a closed controlled space and an open space of possibilities, between present time and accumulation of time. The findings highlight that producers construct a closed space that is physically and symbolically distinct from the real world. Aligning with the ideology of utilitarianism, Disney employs theming and orderliness to develop a society of betterment and progressiveness that maximizes happiness of visitors and employees. Aligning with the happiness as a tool discourse, Disney also engages in backstage processes to ensure that the performance of the park at a fixed point in time is efficient and profitable. Overall, producers immerse customers in a happiness bubble that they fully orchestrate. Paradoxically, within the confines of this closed space, customers are able to access an open space where everything is possible. Following the individual responsibility discourse, customers take their trip to Disney in their own hands, proving to themselves and their families what they can do with their will and work. Following the eudaimonic discourse, customers connect their past, present and future at Disney, which enables them to reflect on their life as a whole and fulfill their true purpose. In the closed space of Disney, customers are free from their ordinary constraints and can openly develop their identity.

This study contributes to the marketplace literature by investigating the ideological nature of happiness. First, it shifts the focus away from the individual experience of happiness to a cultural level of understanding, highlighting that happiness is associated with various meanings in the marketplace. Second, the analysis reveals how these different happiness discourses interact in the marketplace by introducing the idea of happiness heterotopia. Third, the findings highlight how consumers and producers enact this ideology and analyze their roles in co-constructing this happiness heterotopia. Finally, these findings are of great interest for marketers and organizations, as they identify marketplace structures that producers can put in place to create spaces of happiness in a variety of contexts.

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No Time to Enjoy the Extra! Aging and Consumer Reaction Toward Volume-Based Promotion

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EXTENDED ABSTRACT

Population aging is a worldwide phenomenon, mainly because of a longer life expectancy and a lower fertility rate. In the United States, one in every five residents will be at age 65 and older by 2030 (U.S. Census Bureau 2018). The number of the older person (aged 60 or more) is expected to increase globally from 962 million in 2017 to 2.1 billion in 2050 and 3.1 billion in 2100 (United Nations 2017). Given its pervasiveness, aging has attracted research attention across different disciplines, such as sociology (e.g., Linn and Hunter 1979), medical science (e.g., Levy and Myers 2004), psychology (e.g., Drolet et al. 2019), and marketing (e.g., Williams and Drolet 2005). However, our understanding of how aging shapes consumer behaviors remains limited. The current research explores a novel marketing consequence of aging, namely, consumers' attitudes toward sales promotion.

Sales promotion is defined as temporary and tangible monetary or nonmonetary incentives whose purpose is to have a direct impact on consumer behavior (Blattberg and Neslin 1990). Price-based promotion (e.g., price reduction) and volume-based promotion (e.g., free extra product volume) are the two most commonly used promotion practices. Prior research has identified several antecedents that influence consumers' attitudes toward different types of promotions. For example, consumers opt for direct price discounts when they choose vice products whereas bonus packs are more preferred for virtue products (Mishra and Mishra 2011). From the marketers' perspectives, volume-based promotions should be preferred since they encourage greater stockpiling and consumption (Chandon and Wansink 2002), which can accelerate inventory sales more than price-based promotion does.

The current research proposes aging could serve as an important antecedent that influences consumers' reactions toward sales promotion. Specifically, we predict that consumers of chronological or psychological older age, they will exhibit less favorable attitudes toward volume-based promotion (e.g., free extra product volume) than their younger counterparts. We argue that this effect occurs because aging will trigger a limited-time horizon perspective among older consumers. In line with this proposed mechanism and given that time is an intrapersonal resource (Gino and Mogilner 2014), we should expect the effect to disappear when product judgments are detached from the consideration of consumption time. Thus, we further demonstrate that the proposed effect will be weakened or dismissed when the product is to be consumed by others (i.e., not by self).

Study 1 was a correlation study testing whether chronological aging influences consumers' reactions toward volume-based promotion, but not price-based promotion. After participants (N=195) completed demographic measures (including actual age), they evaluated a toothpaste after reading an ad featuring either a volume-based promotion (i.e., 25% more product) or a price-based promotion (i.e., 20% price discount), of equal economic value. As expected, participants' age negatively predicted their attitudes toward the product in the volume-based promotion condition, but not correlated with their reaction toward the price-based promotion.

Study 2 intended to replicate the observed effect with manipulation of psychological age. To minimize the influence of real age (e.g., Eibach, Mock, and Courtney 2010), we only invited adults in their thirties (i.e., aged 30 to 39). Participants (N = 203) were randomly assigned to conditions of a 2 (psychological age: older vs. younger) × 2 (promotion type: volume-based vs. price-based) between-subject design. First, participants were randomly assigned to recall a circumstance either making themselves feel older or younger than their actual ages (Guido, Amatulli, and Peluso 2014). Next, they evaluated a shampoo after reading an ad featuring its sales promotion. Similar to Study 1, the promotion is either a volume-based promotion or a price-based promotion, of similar economic value. Replicating findings in Study 1, participants in the older condition reported less favorable attitudes toward volume-based promotion than those in the younger condition. No difference was found for price-based promotion.

Study 3 investigated the mediating role of the limited time horizon perspective among older consumers. Participants (N = 162) in their twenties (i.e., aged 20 to 29) were randomly assigned to one of two (psychological age: older vs. younger) conditions. First, participants completed the same recall task of psychological age manipulation used in Study 2. Next, we measured the time horizon perspective (Lang and Carstensen 2002). Participants then evaluated the toothpaste after reading an ad featuring its volume-based promotion used in Study 1. We found that the observed effect of aging on consumer reaction toward volume-based promotion is indeed mediated by the limited time horizon perspective.

Study 4 tested whether the observed effect would be mitigated when the product is to be consumed by others (vs. by self). Participants (N = 359) in their twenties (i.e., aged 20 to 29) were randomly assigned to conditions of a 2 (psychological age: older vs. younger) × 2 (consumption context: self-purchasing vs. other-purchasing) between-subjects design. Participants first completed the psychological age manipulation used in previous studies. In the consumption task, participants imagined making a purchasing decision of almonds either for themselves (the self-purchasing condition) or for a friend (the other-purchasing condition). Then participants evaluated the bag of almonds after reading an ad featuring its volume-based promotion. Replicating our previous findings in the self-purchasing condition, participants in the older condition reported less favorable attitudes toward products with a volume-based promotion than those in the younger condition. However, in the other-purchasing condition, consumers' reactions to volume-based promotion did not differ across the older and younger conditions.

Putting together, the current research addresses this important theoretical gap by examining the downstream results of aging in the consumption domain. As the first to investigate the relationship between aging and consumers' attitudes toward volume-based promotion – and time horizon perceptions (expanded vs. limited) – a limited time horizon perspective mechanism driving it – this research extends the aging literature by revealing a novel consequence of aging, and contributes to the emerging literature in the consumption domain. It also gives insight into the antecedents and consequences of a limited time horizon perspective. Finally, the current research offers rich practical implications for marketers in terms of how to cope with today's aging consumer population that grow dramatically.

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Strikes Against Emerging Competition: Respecting Consumers' Needs and Gaining Their Hearts

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EXTENDED ABSTRACT

The current research examines how different types of labor strikes change consumers' perception of the company as well as their subsequent consumption decisions. Employees engage in strikes and protests for various legitimate reasons, including maltreatment of employees and breach of conduct of competing firms. While attracting the attention of the public regarding such issues can fuel necessary changes, the way such strikes are carried out can instead fuel stronger misperceptions and oppositions. We show that certain types of strikes, such as strikes protesting against a competing company, can drive consumers away from the company where employees initiated the strike and actually prefer the competing firm. Importantly, we demonstrate how such strikes can be framed to earn consumers' understanding, empathy, and business.

Reflecting the exponential rise in on-demand economy as well as strikes fiercely resisting such change, we aim to gain insight regarding consumers' reaction towards such anti-on-demand business strikes. Specifically, we focus on mobility-related on-demand businesses that use digital platforms to directly connect consumers with providers of product delivery or transportations. While on-demand businesses have been welcomed by many consumers for their transparency and convenience (The Economist Intelligence Unit 2016), they also have been subjected to widely active anti-on demand strikes from traditional businesses.

Drawing on theories of psychological reactance (Brehm & Brehm 1981), perceived fairness (Thompson & Loewenstein 1992), and empathy (Batson 1990), we posit that consumers will perceive anti-on demand business strikes by traditional businesses as going against their wishes, thus unfair, resulting in a lack of empathy towards the strikers, and ultimately shifting consumers' preference away from traditional businesses and toward on-demand businesses. Yet, when the method of strike reflects respect for consumers' needs and strike slogan communicates concrete ethical reasons for the strike, we expect consumers to show greater empathy and favor the strikers and the striking traditional business, as research has shown that concrete rather than abstract information enables greater perspective-taking and thus induces greater feelings of empathy (Batson et al. 2007; Batson, Early & Salvarani 1997; Galinsky et al. 2008).

Study 1 had three manipulated conditions of *strike type* (N=206). Participants read a news article that described a strike of food delivery employees traditionally hired directly by a restaurant. In the control condition, no information was given regarding the reason for the strike. In the 'up-salary strike' condition, the strike was described as an attempt to increase the restaurant delivery employees' salaries. In the 'anti-on-demand business strike' condition, the strike was described as a protest against on-demand food delivery apps. To be consistent across conditions, all news articles mentioned an increasing number of food delivery persons working for on-demand apps were reducing the amount of work for delivery employees hired by restaurants. Then, participants indicated their preference of on-demand versus traditional businesses, perceptions of the strike in terms of respecting consumers' needs and fairness, and feelings of empathy toward the strikers. The result showed that consumers perceived anti-on-demand business strikes as being ignorant of consumers' needs, less fair, and felt less empathy towards the strikers than with other types of strikes. Importantly, we found that these psychological

mechanisms ultimately led to a lower consumer preference for traditional over on-demand businesses, suggesting that anti-on-demand business strikes may backfire rather than help traditional businesses.

Study 2 investigated whether a certain form of anti-on-demand business strike could actually aid traditional businesses by increasing fairness perceptions and empathy toward the strikers. As such, we manipulated the framing of anti-on-demand business strikes in two ways (2x2 between-subjects design, N=326): First, the degree of respect for consumers' needs was manipulated by the strikers not delivering food (*low respect*) versus the strikers delivering food for free (*high respect*) for a certain period of time. Second, the *concrete slogan* read "We do not want to be exploited like the app delivery workers," while the *abstract slogan* read "The food delivery app industry is the enemy of society." Both slogans were selected from real-world anti-on-demand business strike slogans reported in the news. Participants responded to the same measures as in Study 1. Results demonstrated that a strike-slogan that emphasizes concrete unethical behavior of the opposing business won consumers' hearts while such a slogan in more abstract terms drove consumers away from the company which employees initiated the strike. Importantly, we found that strike-slogan framing matters only when the strike was carried out in a manner that respects consumers' needs. When the strike method was perceived as disrespecting consumers' needs by causing harm to consumers, consumers turned away from the striking firm regardless of the slogan framing.

Our research makes three key contributions. First, we demonstrate that consumers' perception of a strike is not simply a matter of supporting or not supporting the striking employees (Kelloway, Francis, Catano, & Dupre 2008), but can spur brand switching behaviors away from the striking company to the competing firm when turned off by the strike. Second, we show that gaining the essential understanding and empathy from consumers for strikes against competing businesses can be challenging, especially when going against on-demand businesses that often fulfill the needs of consumers that have not been met with traditional businesses. Third, we provide marketing implications regarding the specific framing of strikes that can gain consumers' empathy, even when striking against competing on-demand businesses.

By making these key contributions, the current research breaks new ground on the management of consumers' perceptions of labor strikes as a promising new research avenue in marketing. Moreover, we extend prior research on fairness-as-a-motivated-cognition (Barclay, Bashshur, & Fortin 2017) by showing that consumers' fairness perception of the strike hinges on whether the strike method communicates respect for consumers' needs. As demonstrated in the current research, strikers must first gain understanding and empathy from consumers to successfully communicate their objectives and drive positive corporate changes without turning them away from their business. For this reason, investigating consumers' perspectives of strikes is a noteworthy topic in marketing and crucial in developing strategies to voice employees' needs in ways that constructively build sustainable business environments.

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Understanding Family Responses to Resource Scarcity

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EXTENDED ABSTRACT

Many consumers experience resource scarcity in the form of limited finances (Sharma and Alter 2012), time (Fernbach, Kan, and Lynch 2015), or space (Levav and Zhu 2009). Resource scarcity has predominantly been studied at the individual consumer level (Fan, Li, and Jiang 2019), ignoring how important consumption collectives, like the family (Epp and Price 2008), respond to constraints.

This paper's investigation of family responses to resource scarcity makes three key contributions. First, we provide one of the first empirical attempts to investigate resource scarcity at the interpersonal level. Second, we identify how collective goals, negotiations, domains of control and flexibilities within the family differentiate family responses from individual responses to resource scarcity. Third, we discern that scarcity-inducing life events tend to prompt short-term adjustments in consumption and longer-term shifts in resource investment by family members.

Theoretical Background

Although prior research examines lack of time for child care (Epp and Velagaleti 2014), or long-distance relationships (Epp, Schau, and Price 2014), such work has not developed more general theorizing on family responses to resource scarcity. In contrast to individuals, families have multiple members, giving them flexibility to adjust consumption and resource investment across members in response to scarcity. However, in responding to resource constraints, families must also negotiate multiple goals (Epp and Price 2011) and navigate domains of control (Spiro 1983; Qualls 1988).

Family decision making has been examined using both unitary and bargaining models. Becker's (1965) Household Production Theory contemplates the family as a unitary body, making decisions to maximise resource utility, with a focus on a single decision maker. Bargaining models (The Resource Theory of Family Power; Blood and Wolfe 1960 and Social Power Theory; French and Raven 1959) describe how household members seek to meet personal desires through negotiation and influence. Relative Investment Theory (Davis 1976) suggests that individuals with higher outcome motivations influence decision outcomes relatively more. We posit that the flexibility inherent in having multiple family members is tempered by family dynamics.

Method

Adopting McCracken (1988) funnel approach, and similar to Epp and Velagaleti (2014), we conducted semi-structured interviews with parents in two, and single-parent families. We focused on parents, who typically hold responsibility for resource generation and allocation. Using purposive sampling, we restricted our participants to families with children under 19 years old (Moore, Wilkie, and Desrochers 2017). We first approached families using personal contacts, followed by snowballing, with the goal of achieving variability (Huberman and Miles 1994), on key criteria such as income level and family type.

We conducted interviews with 22 families via Zoom, lasting an average of 66 minutes, between December 2020 and January 2021. We asked a few questions specific to Covid-19-induced scarcity, but guided participants to share more general narratives unless prompted to focus on the pandemic. Like Braun and Clarke (2006), we followed an iterative process, moving between data and theory to uncover, refine and triangulate themes across resource types, and families.

Findings

Our analysis reveals that life events have short- and long-term effects on resource scarcity. For example, Kate and Gabriel, both employed, explain the daily struggles they face due to limited time to handle their household, four children and work. Kate's return to full-time employment eased financial scarcity but generated time scarcity. Another family, Eloise and Matt, experienced financial scarcity and could not pay for all their family members to attend their wedding abroad. The significant monetary cost of their wedding necessitated changes in their consumption behaviour.

Family dynamics influenced consumption, reflecting bargaining models of family decision making. Mum Ritika explains how her children compromised by sharing a bedroom to create space for a home office for their dad. Reduced consumption by some family members, allowing for more consumption by others, demonstrates flexibility within the family.

Families also respond to resource scarcity by adjusting resource investment across members and resource substitution. When Nick is busy with work (time scarcity), Marla helps by collecting his online orders of materials for the family run business; Rose and Charlie, both employed full-time, negotiate task allocation in caring for their two sons. For these families, the investment of time as a constrained resource is shared between the parents. Mum Vicky, explains how her extended family stays in hotels when they visit, due to a lack of space, illustrating substitution between space and money.

We find that in the short term, families tend to adjust consumption of market bought goods and services in response to scarcity. If their own space does not allow children enough room to play, parents compensate by paying admission to play areas. Longer term, parents are more likely to cope through resource investment across family members, such as when a parent chooses to work outside the home and purchase child-care.

Discussions & Conclusion

Both one-off and recurring life events can create resource scarcity within families. Multiple family members negotiate responses to resource scarcity, which may involve changes in both consumption and resource investment. Consistent with previous research on family decision making, family goals and domains of control and expertise influence responses to the use of resources within families.

Notably family responses to scarcity follow a temporal pattern, extending Hamilton et al.'s (2018) discussion of consumer responses to financial constraints, in which consumers react by adjusting in the immediate or short term, but adapt the way they respond in the longer term. Our findings highlight the temporal nature of responses to scarcity of money, time and space and substitution among these three types of resources.

Practically, our research offers insight into marketing strategies. Affordable and trustworthy outsourcing for household tasks may help parents cope with competing resource claims. Suggesting viable resource substitutions and normalizing them may help families accomplish their goals while inducing less guilt. One limitation of our work is that we examine responses to resource scarcity in an environment where intensive parenting is the norm; another is that

we have studied only a limited number of families who have children at home. Future research assessing family responses to resource scarcity in alternative contexts may reveal additional mechanisms.

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What Drives Consumer Adoption of Electric Vehicles? A Country-Level Analysis and an Implicit Association Test of Gender Perceptions with Electric Vehicles

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EXTENDED ABSTRACT

Electric vehicles (EVs) represent the most promising option to decarbonize the transport sector (Bauer and Cox 2019; Miotti et al. 2016). While the sales of EVs have been recently growing, the global EV market share was only 2.6% in 2019 (IEA 2020). The literature analyzing the factors that influence consumer adoption of EVs has mainly focused on socio-demographic characteristics of potential adopters and techno-economic aspects of EVs (Li et al. 2017; Rezvani, Jansson, and Bodin 2015; Singh, Singh, and Vaibhav 2020). Cars are however culturally and symbolically loaded products; their purchases reflect a broad range of emotions and meanings such as status and identity (Bardhi and Eckhardt 2012; Steg 2005; Urry 2004). The analysis of cultural and symbolic meanings as determinants of EV adoption has only recently started emerging (Ashmore et al. 2018; Barbarossa et al. 2015). One of the distinct symbolic meanings of cars is their association with gender. Contributions illustrate how the internal combustion engine (ICE) centered car culture has been co-constructed together with male identities (Bardhi and Eckhardt 2012; Belk 2004; Ivory and Genus 2010; Morgan 2009). By contrast, EVs have been perceived as related to femininity (Brough et al. 2016; Scharff 1992; Wachs 1987).

Considering the need to accelerate EV adoption, it is important to understand what the relationship between EV-gender perceptions and consumers' purchase intentions is. Consequently, the present research aims to answer two research questions: (RQ1) how femininity of national culture affects EV market share at the country level, and (RQ2) how the strength of the EV-feminine association relates to consumers' EV purchase intentions.

To answer the first research question, we conduct a country-level analysis on a sample of 40 countries from five continents. It consists of a regression analysis that applies linear regression models to identify the effect of Hofstede's cultural dimensions on EV market share. We also control for other, non-cultural, factors commonly associated with EV ownership, namely GDP and car ownership per capita (Barbarossa et al. 2015; Dargay, Gately, and Sommer 2007; McKinsey 2014). The results show that the masculinity–femininity Hofstede's cultural dimension is the most important cultural predictor of EV market share, being significant in a simple ($R^2 = 0.17$, F $(1,38) = 7.854$, $b = -0.155$, SE = 0.055, $p = 0.008$) and in a multiple linear regression model ($R^2 = 0.249$, F $(6,33) = 1.828$, $b = -0.143$, SE = 0.062, $p = 0.028$) including all six Hofstede's cultural dimensions. The correlation between country's score on the masculinity–femininity dimension and its EV market share is negative; countries whose national culture is relatively more feminine have higher EV market shares. Hofstede's masculinity–femininity cultural dimension remains a significant predictor of EV market share even if we control for GDP per capita and car ownership per capita ($R^2 = 0.415$, F $(3,36) = 8.519$, $b = -0.127$, SE = 0.048, $p = 0.012$).

To answer the second research question, we conduct a consumer-level analysis. It includes an online survey with German consumers (N = 429) that combines an implicit association test (IAT) and explicit measures of stated preferences. The aim of the IAT is to identify if and to what extent participants associate EVs with femininity (Nosek, Banaji, and Greenwald 2002; Pogacar et al. 2019). The IAT is followed by a dependent variable question ("How likely would you buy an EV?", measured by a seven-point Likert scale type of question) and a number of questions related to the topic of the study. The IAT reveals that respondents associate EVs with femininity (N = 429, M = 0.29, SD = 0.44, t $(428) = 12.69$, $p < 0.001$, Cohen's d = 0.66, 95% CI [0.25, 0.34]). We find significant differences between men and women (ANOVA, F $(1,427) = 26.371$, $p < 0.001$). Male respondents (N = 204, M 0.41, SD = 0.45; t $(203) = 12.92$, $p < 0.001$, Cohen's d = 0.90, 95% CI [0.34, 0.47]) perceive EVs as significantly more feminine than female respondents (N = 225, M = 0.19, SD = 0.42; t $(224) = 6.90$, $p < 0.001$, Cohen's d = 0.46, 95% CI [0.14, 0.25]). Second, participants who consider purchasing an EV hold a slight EV-feminine association, that is very similar to each other and to the total sample (Men: N = 74, M = 0.33, SD = 0.45; t $(73) = 6.21$, $p < 0.001$, Cohen's d = 0.72, 95% CI [0.22, 0.43]; Women: N = 68, M = 0.29, SD = 0.41; t $(67) = 5.78$, $p < 0.001$, Cohen's d = 0.70, 95% CI [0.19, 0.38]). However, male respondents who do not consider purchasing an EV perceive EVs to be the most feminine of all measured groups (N = 100, M = 0.29, SD = 0.41; t $(99) = 12.06$, $p < 0.001$, Cohen's d = 1.20, 95% CI [0.42, 0.58]).

Our research brings relevant insights to consumer research. We are the first study to show a positive relationship between femininity of national culture and EV market share. Second, using implicit measures of inquiry (IAT), we identify that consumers associate EVs with femininity. We also show differences in the strength of this association between men and women and in view of EV adoption intentions. Our findings are also relevant to practice. We recommend policymakers to gear EV support measures to the characteristics of individual national cultures, especially their femininity. We also suggest targeting promotional messages towards individual consumer segments, such as considering the latter's differentiated strength of EV-feminine association and its implications for EV purchase intentions.

The research encountered some limitations that invite for further research. First, the reasons for the identified EV-feminine association and the differences in its magnitude between men and women would merit further analysis. Second, considering the cultural embeddedness of our work, it would be desirable to investigate consumers' EV-gender associations in differentiated cultural contexts. Finally, further research could survey consumers for their preferred EV model to investigate whether implicit gender associations differ from one brand and type of EVs to another.

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Distance and Alternative Signals of Status: A Unifying Framework

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EXTENDED ABSTRACT

The specific goods, brands, and preferences that convey status at any given moment are not static but rather change and evolve depending on the social identity of the individuals associated with them (Simmel 1957). Typically, status signals tend to trickle down through society, from the upper classes to the lower ones (Robinson 1961; Sproles 1981). Elites adopt new signals, and subordinate groups soon catch on, imitating their high-status peers in the hope of enhancing their social standing and communicating desired identities (Frank 1985). However, as once exclusive status markers diffuse downward and become mainstream, the top strata abandon these consumption habits and move on to different signals, reestablishing distinction from others (Bourdieu 1984). Thus, the processes of status signaling and distinction in consumption are perpetually characterized by the adoption of new and alternative signals that reinstate, at least temporarily, symbolic boundaries between groups (Berger and Ward 2010).

When high-status individuals abandon their previous status symbols, what do they adopt next? While the abandonment of products and the dissociation from previously held tastes in the face of imitation are conceptually well-established (Lieberson 2000; Simmel 1957) and empirically documented (Berger and Heath 2008; Han, Nunes, and Dreze 2010; White and Dahl 2006), the understanding of new and alternative signals of status is rather fragmented and unorganized. Some research emphasizes that elites often move on to even higher-end signals, such as more expensive cars, watches, or jewelry pieces and exclusive vacations (Leibenstein 1950; Wang and John 2019). Although upgrading to higher-end status signals is the default strategy maintained by the well-known trickle-down theories and, indeed, many high-status consumers still opt for it to this day, several market dynamics and cultural shifts have progressively diluted the signaling power of these traditional status markers.

Aggressive growth targets, often imposed by the pressure of financial markets; evolving manufacturing methods with a transition toward mass-production instead of craftsmanship; a proliferation of distribution touchpoints, including discount outlets and online channels; and an increase in the quality and reach of counterfeits have all led to the widespread possibility to shop for luxury at all price points and the so-called democratization of luxury goods (Dion and Arnould 2011; Hudders, Pandelaere, and Vyncke 2013; Keller 2009; Thomas 2009; Tungate 2009). Accordingly, in the past decades, many scholars have argued that conventional conspicuous consumption has lost its luster and has become too mainstream to grant distinction to the top strata (Bellezza and Berger 2020; Blumberg 1974; Currid-Halkett 2017; Holt 1998; Trigg 2001). Moreover, traditional luxury goods are increasingly stigmatized and associated with some dark sides. An appreciation for conventional luxury and conspicuous consumption is progressively becoming a signal of inauthenticity (Goor et al. 2020), selfishness (Van Boven, Campbell, and Gilovich 2010), coldness (Cannon and Rucker 2019; Garcia, Weaver, and Chen 2019), undesirable ulterior motives (Ferraro, Kirmani, and Matherly 2013), and even immorality (Goenka and Thomas 2019)

In parallel with these dynamics, a growing body of work has brought to light many new, alternative status-signaling strategies. For example, rather than trickling down from the top, some new status signals seem to arise from marginalized groups or subcultures (e.g., hippies, bikers, punks) (Cova, Kozinets, and Shankar 2012; Field 1970). Rather than opting for the newest and forward-looking luxuries, vintage and retro-style accessories have gained momentum among luxury brands and celebrities (Amatulli et al. 2018; Cervellon, Carey, and Harms 2012). Instead of ostentatiously displaying their material possessions, some high-status consumers are opting for inconspicuous consumption and concealing their wealth (Currid-Halkett 2017; Eckhardt, Belk, and Wilson 2015). Furthermore, ugly luxury (Cesareo, Townsend, and Zijun 2019), voluntary simplicity (Currid-Halkett 2017), and busyness at work (Bellezza, Paharia, and Keinan 2017) are all gaining popularity among the top strata. These emerging status signals are *alternative* in the sense that they depart on at least one dimension from traditional forms of luxury consumption that emphasize upscale, vertically differentiated, and resource-intensive products (Dubois et al. 2021). So far, the literature has dealt with these nontraditional signals in isolation. By contrast, this article aims to establish a unifying framework based on the overarching theme of distance from the mainstream.

Given that the overarching motive driving status signaling is distinction (Bourdieu 1984; Leibenstein 1950; Simmel 1957), it follows that signals that are distant from products, brands, and preferences that have become mainstream will deliver on the objective of dissociating oneself from others. Thus, directly building on the distance literature and the multiple dimensions of the construct (e.g., spatial, social, temporal), the proposed framework suggests that alternative signals of status are distant from mainstream signals along the following six focal dimensions:

(1) Distance in terms of *time*, or how much time separates alternative signals from mainstream signals along the new/old continuum (e.g., vintage, retro-branding);

(2) Distance in terms of *conspicuousness*, or how different alternative signals are from mainstream signals in terms of visibility on the conspicuous/inconspicuous continuum (e.g., inconspicuous consumption, stealth wealth);

(3) Distance in terms of *aesthetics*, or how different alternative signals look from mainstream signals on the beautiful/ugly continuum (e.g., ugly luxury, ugly chic);

(4) Distance in terms of *quantity*, or how much alternative signals differ from mainstream signals along the many/few possessions continuum (e.g., consumer minimalism, decluttering, sustainable luxury);

(5) Distance in terms of *culture*, or how distinct alternative signals are from mainstream signals along the highbrow/lowbrow cultural continuum (e.g., mixing-and-matching high and low status, omnivorousness);

(6) Distance in terms of *pace of life*, or how different the rhythm of alternative signals is from mainstream signals on the slow/fast continuum (e.g., busyness at work, harried leisure class, active leisure).

In conclusion, this high-level and parsimonious framework based on the notion of distance from mainstream signals along six focal dimensions (i.e., time, conspicuousness, aesthetics, quantity, culture, and pace of life) reconciles existing theories, captures various consumption phenomena related to status signaling, and generates a fruitful agenda for future research.

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Expressing Passion for Luxury Restores Warmth and Enhances Liking

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EXTENDED ABSTRACT

Luxury consumption yields many social and interpersonal benefits. For example, luxury consumers receive higher status conferral and preferential treatment from others (Nelissen and Meijers 2011). However, these benefits come at a price. Research proposes that luxury consumers incur a warmth penalty—they are judged as having low warmth and likability—as observers associate luxury consumption with an attempt to enhance one's impressions (Cannon and Rucker 2019; Ferraro, Kirmani, and Matherly 2013; McFerran, Aquino, and Tracy 2014).

How can luxury consumers mitigate this warmth penalty? We propose that displaying passion for luxury restores perceived warmth among luxury consumers. Passion refers to intense positive feelings toward a valued preference (Jachimowicz et al. 2019). For instance, consumers may be passionate about brands (Albert, Merunka, and Valette-Florence 2013) and thus experience strong desires to use products from these brands and invest resources into them (Batra, Ahuvia, and Bagozzi 2012). Although luxury consumers tend to be passionate about luxury products and brands, many refrain from revealing such passion to others. Out of 200 luxury consumers surveyed in a **pilot study**, 61% indicated being passionate about a luxury product or brand they use. However, 47.5% indicated that they would not share their passion for luxury with others, even if they were passionate. This reluctance likely stems from their concern that displaying such passion makes them appear boastful and materialistic (Ferraro et al. 2013).

Contrary to these concerns, we show that expressing passion for luxury actually increases the perceived warmth of luxury consumers, making them more likable and appealing as interaction partners. Passion expression restores warmth by enhancing authenticity perceptions. We theorize that consumers who display passion for luxury would be viewed as consuming luxury products because they truly appreciate the intrinsic attributes of these products (e.g., craftsmanship; Kapferer and Valette-Florence 2019; Merk and Michel 2019), instead of consuming to manage others' impressions and gain social approval. Thus, observers would perceive them as being authentic (i.e., acting in accordance with their true selves; Gershon and Smith 2020) for consuming out of genuine interest. Greater authenticity would consequently increase warmth perceptions. Research has shown that authentic service providers are rated as friendlier (Grandey et al. 2005) and induce greater feelings of comfort (Hennig-Thurau et al. 2006).

Experiment 1a (*N*=199 luxury consumers) examined whether, despite potential interpersonal benefits of displaying passion, luxury consumers avoid revealing their passion for luxury to others. Participants imagined that they were passionate collectors of either luxury or non-luxury sneakers, and that a co-worker noticed and complimented their sneakers from either Gucci or Converse. Participants were less likely to reveal their passion to the co-worker when the passion was for luxury (vs. non-luxury) sneakers (*M*=5.29 vs. 5.70; *p*=.020).

Using a three-cell between-subjects design (non-luxury vs. luxury vs. luxury-plus-passion), **experiment 1b** (*N*=299) tested whether expressing passion for luxury actually makes luxury consumers appear warmer by elevating their perceived authenticity. Participants read a vignette where they complimented a co-worker's sneakers from either Gucci or Converse. They also read that the co-worker owned several sneakers from either luxury or non-luxury brands. The luxury-plus-passion condition used the same vignette as the luxury condition but contained additional information about the co-worker's passion for luxury sneakers (e.g., "He reveals that he is passionate about luxury sneakers). The co-worker was perceived as less warm (*M*=4.46 vs. 5.06; *p*<.001) and less authentic (*M*=4.02 vs. 4.75; *p*<.001) in the luxury condition than the non-luxury condition. Crucially, passion expression attenuated these differences: the co-worker was seen as warmer (*M*=4.97; *p*<.001) and more authentic (*M*=4.62; *p*<.001) in the luxury-plus-passion (vs. luxury) condition. The luxury-plus-passion and non-luxury conditions did not differ on warmth (*p*=.45) and authenticity (*p*=.36). Authenticity mediated the effect of the luxury-plus-passion versus luxury condition on warmth (95% CI=[.15, .48]). Although expressing passion eliminated the warmth penalty of consuming luxury sneakers, it did not alter perceived status and competence (*p*s>.15).

If expressing passion makes luxury consumers appear warmer, it should also enhance their appeal as potential interaction partners. **Experiment 2** (*N*=200) used a two-cell between-subjects design (luxury vs. luxury-plus-passion) where participants chose a partner with whom they would collaborate in a follow-up study. Participants first completed a questionnaire ostensibly as part of a partner-matching process. One of the questions asked them to choose which shoe brand they usually wear. The next question asked them to explain why they wear the shoe brand they chose. Next, participants saw profiles of Participants A and B who purportedly completed the same questionnaire. Participant A chose Converse and wrote a positive reason (e.g., "I think they're a good pair of shoes."). We manipulated passion by varying Participant B's profile: in the luxury (vs. luxury-plus-passion) condition, Participant B chose Gucci and wrote a positive reason (vs. wrote being passionate about luxury sneakers). Participants were more likely to choose Participant B (i.e., the luxury consumer) when they read (vs. did not) about his passion for luxury sneakers (13% vs. 3%; *p*=.017).

Using a three-cell between-subjects design (non-luxury vs. luxury vs. luxury-plus-passion), **experiment 3** (*N*=237) studied the downstream effect of luxury passion expression on interpersonal liking. Participants read a vignette where they noticed a co-worker's watch from either Rolex or Swatch. The luxury-plus-passion condition used the same vignette as the luxury condition but contained additional information about the co-worker's passion for luxury watches. The co-worker was less likable (*M*=4.00 vs. 4.61; *p*=.002), less warm (*M*=3.87 vs. 4.61; *p*<.001), and less authentic (*M*=3.79 vs. 4.40; *p*<.001) in the luxury condition than the non-luxury condition. Importantly, passion expression reduced these differences: the co-worker was marginally more likable (*M*=4.33; *p*=.090), warmer (*M*=4.34; *p*=.009), and more authentic (*M*=4.49; *p*<.001) in the luxury-plus-passion (vs. luxury) condition. The luxury-plus-passion and non-luxury conditions did not differ on likability (*p*=.14), warmth (*p*=.12), and authenticity (*p*=.59). Finally, authenticity and warmth serially mediated the effect of the luxury-plus-passion versus luxury condition on liking (95% CI=[.11, .39]), even when controlling for competence (95% CI=[.040, .25]).

Although many luxury consumers avoid sharing their passion for luxury with others, such passion expression restores their per-

ceived warmth (and thus enhances likability) by increasing perceptions of authenticity.

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Some Numbers Are More Equal Than Others: How and Why Orderly Numbers Appeal to Consumers

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EXTENDED ABSTRACT

Imagine standing in your local wine shop and trying to choose a bottle for a special dinner. There are two bottles available of a special edition from your favorite winery, one with the serial number 6262 and the other with the number 6281 on the label. Which bottle would you prefer, and why? In this paper, we propose and demonstrate that numbers such as 6262 are more appealing to consumers, and that they will be more likely to choose such products and to be satisfied should they obtain them.

Consumers can encounter numerical information at various stages of their decision journeys. Numerical information such as prices, attribute values, rankings and ratings, version numbers, and loyalty points can all convey information about products to consumers (Santana, Thomas and Morwitz 2020). However, this research has focused on numbers as a signal about specific product attributes (e.g., Pena-Marin and Bhargave 2016; Shoham, Moldovan and Steinhart 2018) or quality (e.g., Gunasti and Ross 2010). Our paper diverges from the substantial literature on numbers that convey concrete information to explore how product numbers can be appealing in their own right.

Consumers favor certain numbers over others (Jiang, Cho and Adawal 2009; Smith, Newman and Dhar 2016), often because the number signifies something to the consumer: feelings of luck, a personal meaning, or a sense of connection to someone else. We offer a novel perspective on why consumers may prefer products with certain numbers, focusing on whether the number is orderly or noisy.

Taking an information theoretic approach, orderly numbers can be encoded using a smaller-than-expected representation (Shannon 1948; Swait and Adamowicz 2001). A number with repetition, such as 6262, is orderly because it can be represented as the number 62, repeated, rather than having to be conveyed using four separate digits. Research on other types of repetition indicates that it can have positive implications for consumer evaluations (Pogacar, Shrum and Lowrey 2018). We propose that the repetition of digits will also appeal to consumers, and that this happens because numbers with repetition satisfy the need for structure.

Consumers in general seek structure in consumption (Cutright 2012). A sense of structure can counterbalance beliefs that consumers prefer to avoid, such as the belief that outcomes in their lives are randomly determined, or that the world is governed by nothing more than chaos (Antonovsky 1979; Kruglanski 1989). We suggest that the orderly nature of numbers with repetition can provide a sense of structure, and that this is a key driver of their appeal.

Four studies demonstrate that consumers prefer numbers with repetition and that a sense of structure plays a role in this preference. In study 1, participants ($N = 201$) were asked to imagine that they were about to participate in a race and there were two available bib numbers for their shirt: 6262 or 6281. In the repetition condition, participants were told that they had received bib number 6262; in the no-repetition condition, they were told they had received bib number 6281. As expected, the bib number was seen as more appealing in the repetition condition ($M = 4.42$, $SD = 1.48$) compared to the no-repetition condition ($M = 3.38$, $SD = 1.54$; $t(199) = 4.88$, $p < .001$; Cohen's $D = 0.689$). Participants in the repetition condition were also

more satisfied with their shirt ($M = 4.42$, $SD = 1.44$) compared to those in the no-repetition condition ($M = 3.81$, $SD = 1.35$; $t(196) = 3.12$, $p = .002$; Cohen's $D = 0.440$).

In study 2, participants ($N = 98$) were presented with five scenarios, each involving a choice between two versions of the same product that had a number with or without repetition. We used a variety of number combinations and several different products and services. A logistic regression revealed that regardless of product type, participants preferred the option that had a number with repetition compared to those with no repetition ($b = 0.715$, $SE = 0.096$, $p < 0.001$).

Study 3 ($N = 198$) used the same paradigm as Study 1, and replicated the effect of repetition on product satisfaction. Importantly, it also showed that an enhanced personal sense of structure mediated the effect ($b = -0.36$, $SE = 0.11$; 95% CI: -0.59 to -0.18). A post-test ruled out a number of alternative accounts, including that orderly numbers make consumers feel more valued, enhance their good mood, or are desirable because they are an interesting conversation piece to share with others.

Study 4 tested whether numbers with repetition might compensate for less desirable product attributes. Participants ($N = 302$) were significantly more likely to choose a watch with a longer delivery time (and a serial number with repetition) compared to the baseline likelihood of choosing a watch with a longer delivery time without information about the number (21.0% vs. 6.0% respectively; Wald(1) = 8.566, $p = .003$). The likelihood of choosing the watch with the longer delivery time and a serial number without repetition did not differ from the baseline preference (5.9% vs. 6.0%; Wald(1) = .001, $p = .972$). We obtained a similar pattern of results for a second product (a shirt with a bib number).

In sum, consumers have a clear preference for products that have numbers with repetition. This occurs because such numbers enhance consumers' sense that their world is more structured. Our research thus contributes to the knowledge on numerical information in consumer behavior by highlighting the effects of orderly vs. noisy numbers, as conveyed by repetition or the lack thereof, on product preferences. It further demonstrates that a product's number can be appealing as a focal feature. From a practical perspective, our research suggests new ways for marketers to use numbers to appeal to consumers, which may be especially fruitful when consumers desire structure. Future research can explore how other types of orderly, low-complexity numbers might affect consumer preferences.

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To Earmark or Not to Earmark: Givers' and Recipients' Diverging Preferences for Earmarked Cash Gifts

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EXTENDED ABSTRACT

Consumer researchers have recently shed light on multiple instances in which gift-givers' decisions do not align with gift-recipients' preferences (Galak, Givi, and Williams 2016), with much of this research focusing on givers' and recipients' preferences concerning types of products. In other words, the decision regarding *what to give* has received plenty of attention from gift-giving scholars. However, an important aspect of gift-giving that has not received much attention is the decision concerning *how to give*. In the present work, we shed light on this important facet of gift-giving by exploring givers' and recipients' preferences concerning the messaging aspect of *how to give*. Specifically, we study the two parties' preferences regarding the practice of *earmarking* cash gifts.

We define "earmarking" as *a giver accompanying a cash gift with a suggestion that the money be used to purchase a particular product*. The practice of earmarking cash gifts seems to be rather prevalent: When we asked 50 MTurk participants whether they had ever given or received an earmarked cash gift, we found that 70% of them had. Moreover, the vast literature on mental accounting (e.g., Heath and Soll 1996) suggests that earmarking money, more generally, is quite common among consumers. Despite the pervasiveness of earmarking, the gift-giving literature has not yet explored whether givers' and recipients' preferences for earmarking cash gifts align or diverge, nor has it explored the psychology underlying how the two parties construe earmarked cash gifts. In the present work, we explore both facets, thereby addressing these important voids.

We posit that givers are less likely to earmark cash gifts than recipients prefer because the two parties hold different views concerning the thoughtfulness of earmarking cash gifts: When a giver earmarks a cash gift, this could be seen by both parties as somewhat thoughtful. By including a suggested use for the money, the giver is attempting to personalize the gift. However, by suggesting that the cash be used to purchase a particular product, the giver is highlighting that they did not actually purchase it, or in other words, that their inputs (i.e., time, effort) towards the gift were lacking. This could lead givers to view earmarking as less thoughtful compared to recipients, as givers are more sensitive to their inputs towards a gift compared to recipients. For example, givers (vs. recipients) are more responsive to the amount of brainstorming (Gino and Flynn 2011) and effort (Zhang and Epley 2012) that the giver devotes toward the gift. If givers view earmarking as less thoughtful compared to recipients, this should lead them to be less likely to earmark than recipients prefer, as perceptions of thoughtfulness often inform givers' actions and recipients' preferences (Givi 2020).

Below, we report three studies that tested the aforementioned predictions.

Study 1 tested whether givers are less likely to earmark cash gifts than recipients prefer. Participants were randomly assigned to one of two conditions (*Giver* vs. *Recipient*). They first listed their name and a close friend's name. Next, [givers/recipients] listed an item ≤ $50 that [they/their friend] would consider buying [their friend/them]. Givers then read a vignette in which their friend's birthday was approaching. They decided to give their friend $50 as a gift but were contemplating which of two messages to write in their friend's card: i) A message that included a suggestion that their friend use the $50 to purchase the item listed earlier, or ii) A message that did not include a suggested use for the $50. They indicated their preference on a nine-point scale (1 = Strongly prefer non-earmarked message, 9 = Strongly prefer earmarked message). Recipients read the same vignette from the recipient's perspective and indicated their preference. Consistent with our theorizing, givers (vs. recipients) were less open to earmarking (M_{giver} = 3.24 vs. $M_{recipient}$ = 4.52, p = .005).

Study 2 again tested whether givers are less open to earmarked cash gifts compared to recipients and explored the psychological processes that could explain this asymmetry. It was like Study 1, except that participants also indicated the extent to which the earmarking message would be thoughtful, offensive, and make the recipient feel constrained, and the extent to which the recipient would like the item (*1 = Not at all, 7 = To a great extent*). Consistent with our theorizing, givers (vs. recipients) were less open to earmarking (M_{giver} = 2.71 vs. $M_{recipient}$ = 4.10, p < .001) and considered earmarking to be less thoughtful (M_{giver} = 3.31 vs. $M_{recipient}$ = 4.72, p < .001). Givers (vs. recipients) also differed in their responses concerning offensiveness (M_{giver} = 3.56 vs. $M_{recipient}$ = 2.01, p < .001) and constraint (M_{giver} = 4.38 vs. $M_{recipient}$ = 3.57, p = .002), but not item-liking (M_{giver} = 5.86 vs. $M_{recipient}$ = 5.99, p = .38). We tested for parallel mediation using Hayes (2013) model 4. Thoughtfulness mediated the preference asymmetry and had an indirect effect that was significantly stronger than the other indirect effects.

Study 3 again tested whether givers are less open to earmarked cash gifts compared to recipients and explored potential underlying mechanisms. It was like Study 2, except for two differences. First, participants did not initially list an item. Second, in the vignette, the giver decided to give $20 as their gift and was contemplating whether to suggest (in their card's message) that the money be used to buy a $20 YETI tumbler that the recipient had been considering purchasing. Consistent with our theorizing, givers (vs. recipients) were less open to earmarking (M_{giver} = 3.53 vs. $M_{recipient}$ = 4.58, p = .009) and considered earmarking to be less thoughtful (M_{giver} = 4.18 vs. $M_{recipient}$ = 5.17, p < .001). Givers (vs. recipients) also differed in their responses concerning offensiveness (M_{giver} = 2.75 vs. $M_{recipient}$ = 1.83, p < .001), but not constraint (M_{giver} = 4.35 vs. $M_{recipient}$ = 4.06, p = .34) nor item-liking (M_{giver} = 5.71 vs. $M_{recipient}$ = 5.44, p = .14). Thoughtfulness mediated the preference asymmetry and had an indirect effect that was significantly stronger than the other indirect effects.

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Women's Attitudes Toward Sexual Objectification in Brands: A Political Ideology Perspective

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EXTENDED ABSTRACT

One of the key forces reshaping the consumer market in the United States is women's rising economic power (Brennan 2020). Beyond their rising economic power, women drive 70-80% of all consumer purchasing decisions (Davis 2019). Although women in the United States have made significant strides toward closing the gaps that have kept them from achieving equality with men, sexism and gender bias remains the major issue facing women today (Morris 2020). However, the country is sharply divided along party lines about the importance and ways to deal with these issues.

In this polarized context, marketers have found it challenging to devise branding strategies to successfully connect with female customers. Specifically, increasing concerns about the negative effects of sexism is causing disarray among established feminine icons that have built their brands based on the objectification of women as symbols of men's sexual desires (e.g., Victoria's Secret, Vembar 2019). Should brands unilaterally refrain from promoting the sexual objectification of women in their communications? Are there segments of female consumers more or less likely to respond favorably to depictions of women as symbols of male desire? Given the long tradition by marketers of using sex in advertising (Reichert and Lambiase 2014), are there sexual appeals better positioned to gain widespread acceptance by today's female consumers? This research provides nuanced answers to these questions by integrating research in political ideology and consumer behavior to better explain women's responses to sexual objectification in brands.

By integrating research in political ideology and branding, we develop a conceptual framework for identifying key branding strategies likely to resonate with female consumers who endorse a conservative ideology. We propose that conservative women, despite their relatively lower status in society (relative to men), would respond more favorably to brand communications that reflect sexual objectification (i.e., depiction of women as objects of male desire) compared to their liberal counterparts. That is, conservative women's support for sexism, characterized by viewing women stereotypically and in restricted roles (Glick and Fiske 1996), would make them more likely to favor feminine brands with an identity built around the sexual objectification of women than liberal women would. However, this effect is specific to sexual appeals that are objectifying in nature, and dissipates for appeals to sexual independence (i.e., an expression of the sexual self that is relatively free from the third person's perspective, and less attached to traditional standards of sexual attractiveness, Wilkins 2004).

Four studies, including three experimental studies and one secondary study, were conducted to test our framework and Hypothesis. With a 2 (brand condition: sexually objectified vs. neutral feminine) × 2 (political ideology: conservative vs. liberal, continuous measure) between-subjects design, study 1 showed that conservative (vs. liberal) women favored more a sexually objectified brand, while this effect was absent for a feminine brand that was not positioned on sexual objectification. This latter finding rules out the possibility that the effects of political ideology on women's brand favorability are simply driven by a general tendency by conservative (vs. liberal) women to favor feminine brands in general. Study 2 replicated the findings in study 1 and assessed the attenuating effect of promoting

sexuality as independence (vs. objectification). Furthermore, study 2 also found statistical support for the mediating role of the endorsement of benevolent sexism. To further investigate the underlying process by adopting a moderation-of-process experimental design, we conducted study 3 to manipulate people's anti-sexism belief (vs. control) and found that the salience of anti-sexism belief significantly mitigated the effect of political ideology on women's preference toward feminine brands with a sexually objectified image. Finally, study 4 utilized the secondary data about women's collective support for *Victoria's Secret*, the intimate apparel retailer considered an icon of women's sexual objectification (Smith 2002). We collected county-level data about percentage of votes for Democrat/Republican Presidential candidates competing in the 2016 election and used the greater support for the Republican (vs. Democrat) candidate as the measure of pervasiveness of a conservative ideology. Results showed that the greater the support for Republicans (vs. Democrats) in a county, the higher the number of *Victoria's Secret* stores in the county. This effect distinctively emerged for *Victoria's Secret*, but not for *Aerie* (a brand of intimate apparel well known for its body positivity and inclusivity image), suggesting that the support of conservative women is specific for a brand of intimate apparel associated with a sexually objectified image of women.

These findings make important theoretical contribution to the emerging consumer literature on political ideology, and research on sexism in the brand communication. Moreover, the current research has important managerial implications for segmentation and branding decisions. Our framework based on political ideology can help managers to segment the female market according to behavior in response to social trends toward greater gender equality. Marketers of feminine brands promoted with a sexually objectified image can selectively target conservative women with their products and expect a favorable response. These brands may not need to adapt their brands to the current social trends (e.g., by toning down sexual objectification themes in ads) and still win conservative women.

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Upgrade when COVID-19 is in Town: Product Upgrading as a Response to Disease Concerns

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EXTENDED ABSTRACT

Apple launched its second-generation iPhone SE in April, 2020, when COVID-19 was wreaking havoc around the world. Imagine that you have been using the first-generation iPhone SE for a few years, will your concerns about COVID-19 exert any impact on your likelihood of upgrading to a second-generation iPhone SE? Will how much you identify with the brand Apple also play a role in your decision?

Questions like these have become particularly relevant as CO-VID-19 rages across the world, making it ever-more important to understand how disease-related cues shape consumer decisions. Our thesis derives from recent research on Behavioral Immune System (BIS; Murray & Schaller, 2016), a psychological disease-avoidance system that has evolved in response to the threat of infectious pathogens. Merging the evolutionary perspective on disease-induced motives with research on product upgrading, this research postulates that concerns with infectious diseases evoke people-avoidance motives (Mortensen, Becker, Ackerman, Neuberg, & Kenrick, 2010; Sacco, Young, & Hugenberg, 2014), because other people are prime sources of contagion. This people-avoidance motive in turn heightens strong-(vs. weak-) SBC consumers' interest in upgrading to more exclusive products, which are by definition associated with fewer consumers (Wang & John, 2019). This occurs because for consumers with strong (vs. weak) SBCs, who presumably identify with the brand and see the brand as part of who they are (Escalas, 2004), gravitating toward more exclusive products offered by the same brand enables them to symbolically distance from the brand's majority of users (thus fulfilling their people-avoidance motive) while also preserving their relationship with the brand.

Study 1 was designed to provide preliminary evidence for our basic hypothesis that consumers with strong (vs. weak) SBCs will be more interested in upgrading within the brand's product line when they feel particularly concerned about disease threats. Participants were asked to report their strength of SBCs with Nike and interest in upgrading within the brand. They also reported their concern with the COVID-19 pandemic. Consistent with our prediction, concern with COVID-19 positively predicted likelihood of upgrading for participants with strong SBCs (mean + 1SD) with Nike ($b = .26$, $t(402) = 2.70$, $p = .007$), but not for those with weak SBCs (mean - 1SD; $b = -.002$, $t(402) = -.028$, $p = .978$).

Study 2 aimed to demonstrate the underlying process. Participants were asked to name a brand of apparel they frequently purchased. Next, they indicated likelihood of upgrading to a new or exclusive version of the brand they had named and the strength of SBCs with this brand. We then measured participants' intention to symbolically distance from other consumers of the same brand and their dispositional concerns with disease susceptibility using the Perceived Infectability (PI) subscale of the Perceived Vulnerability to Disease scale (PVD; Duncan, Schaller, & Park, 2009). The regression analysis revealed a significant main effect for both SBC strength ($b = 1.01$, $t(544) = 19.60$, $p < .001$) and perceived infectability ($b = .10$, $t(544) = 2.00$, $p = .046$). Importantly, the interaction between SBC strength and perceived infectability was also significant ($F(1, 544) = 4.79$, $p = .029$). Replicating results from study 1, higher perceived infectability was associated with greater intention to upgrade within the brand ($b = .21$, $t(544) = 2.95$, $p = .003$) for participants

who reported strong SBCs with the brand (mean + 1SD), but not for those with weak SBCs (mean - 1SD; $b = -.003$, $t(544) = -.05$, $p = .961$). A 5000-sample bootstrapped analysis showed that the interaction effect of perceived infectability and SBC strength on upgrading intention was mediated by symbolic distancing, indirect effect = .07, SE = .02; 95% CI = [.039, .115]. Specifically, symbolic distancing mediated the effect of perceived infectability on upgrading intention for strong-SBC brand users (mean + 1SD; indirect effect = .18, SE = .04; 95% CI = [.111, .259]), but not for weak-SBC users (mean - 1SD; indirect effect = .03, SE = .02; 95% CI = [−.005, .078]).

Study 3 examined a potential moderator—perceived popularity of the brand. If a consumer perceives a brand to be highly popular, he/she is likely to think that even the newest upgrades will attract a large number of consumers and consequently fail to serve as an instrument for symbolic distancing. Therefore, the hypothesized interaction should be attenuated for products that are perceived to be highly popular. Participants were asked to read a news article either about COVID-19 (disease condition) or about climate change (control condition). Next, all participants reported the brand of mobile phone they were currently using and indicated likelihood of updating from their current phone to the newest model from this brand. Finally, participants reported how popular they perceived their mobile phone brand to be. A significant three-way interaction was revealed by the analysis ($F(1, 335) = 9.90$, $p = .002$). Consistent with our hypothesis, there was a significant two-way interaction between disease manipulation and SBC strength only when participants perceived the mobile phone brand to be unpopular (mean - 1SD: $b = .58$; $t(335) = 3.11$, $p = .002$; mean + 1SD: $b = -.11$; $t(335) = -.62$, $p = .539$). Replicating our basic effect, exposure to information about COVID-19 pandemic led to greater interest in upgrading for strong-SBC participants (6.94 vs. 5.80; $t(335) = 3.05$, $p = .003$), but not for weak-SBC participants (4.86 vs. 4.88; $t(335) = -.11$, $p = .911$).

Taken together, these findings extend previous work on the effects of disease concerns on product decisions and contribute to our understanding of product upgrading by demonstrating that such decisions could be shaped by incidental environmental factors (i.e., disease cues). From a more managerial perspective, our findings emphasize the importance of creating strong SBCs, especially for less popular brands. Whereas a highly threatening disease cue might deter low-SBC consumers from making any purchases, for consumers who have strong SBCs with a brand, such cues could potentially increase the sales of exclusive, new, or limited products, which presumably have higher profit margin.

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"It is Still Someone Else's!" The Effect of Implicit Theories on the Consumption of Pre-Owned Goods

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EXTENDED ABSTRACT

With the advent of new technology and increased awareness about environmental conservation, consumption of pre-owned goods has grown rapidly. Yet, despite this increased interest, research on the consumption of pre-owned goods is still limited. A key finding in this area shows that some consumers are reluctant to buy pre-owned products due to a fear of contamination (Xu et al. 2014). However, anecdotal evidence suggests that consumers' reluctance persists even if the pre-owned products are in clean condition (e.g., Roux 2006). This indicates that other factors may be concurrently driving consumers' acceptance of pre-owned products. In this research, we propose that consumers' implicit theories may influence their attitudes toward pre-owned goods as their beliefs affect the extent to which they feel a sense of psychological ownership over the products.

Research on implicit theories shows that entity theorists believe that people's traits are fixed, whereas incremental theorists believe that traits can be developed by way of personal effort (Dweck et al. 1995). Previous research found that entity theorists are more likely to use products and brands for a self-signalling purpose and regard their possessions as part of their extended selves (Park and John 2010). Drawing from this research, we propose that entity (versus incremental) theorists are more likely to believe that a pre-owned product cannot be incorporated into their self-identity as it carries remnants of the previous owner. This leads to a lower sense of ownership and lower purchasing intention toward such a product. In contrast, incremental theorists, who believe that things are malleable, are likely to believe that a used product can be detached from its previous owner and become their own.

Hypothesis 1: *Entity theorists will exhibit less favorable attitudes toward and willingness to purchase pre-owned products relative to incremental theorists.*

Hypothesis 2: *Psychological ownership mediates the effect of implicit theories on consumers' attitudes toward and willingness to purchase pre-owned products.*

We propose a reversal of the predicted effect in H1 in situations where remnants of the previous owner are seen as positive (e.g., coolness). Since people typically assume that users of a brand exude the same characteristics of the brand they use (Park and John 2010, 2012), entity (versus incremental) theorists who hope that such remnants may be "transferred" to them would view the lingering traits from the previous owner positively and exhibit greater willingness to purchase such products.

H3: Compared to incremental theorists, entity theorists are more likely to purchase pre-owned products that possess a desirable brand image.

We conducted five studies to test the Hypothesis. Study 1 (N=121) tests whether consumers' implicit theories influence their attitudes toward pre-owned goods. Participants were presented with pre-owned sunglasses and asked to indicate how much they would bid for them. Implicit theories were measured by using the 8 items adapted from Levy et al. (1998). We found that participants with stronger entity (vs. incremental) beliefs indicated a significantly lower bid price for the pre-owned sunglasses (B=-3.004, t=-2.17, p<.05).

Study 2 (N=607) replicated the results of Study 1 by using a different product-bicycle. We adopted a 2 (product type: pre-owned vs. new) between-subjects design with implicit theories measured as a continuous variable. Participants were randomly allocated to one of two product conditions. In both conditions, participants were presented with the same information about the bicycle, other than the fact that one was new whereas the other was pre-owned. After reading information about the bicycle, they were asked to indicate their attitudes toward the bicycle. Implicit theories were measured. Results showed a significant two-way interaction (B=-.18, SE=.07, p=.01). As expected, in the pre-owned product condition, entity theorists showed more negative attitudes toward the bicycle, compared to incremental theorists (M_{entity}=4.91 vs. $M_{incremental}$=5.37, B=-.13, SE=.05, p<.01), whereas entity and incremental theorists indicated similar attitude ratings in the new product condition (M_{entity}=5.77 vs. $M_{incremental}$=5.64, B=.04, SE=.05, p>.4).

Study 3 (N=355) aims to provide stronger evidence of causality by manipulating participants' implicit theories. Participants were randomly assigned to one of the three conditions (entity vs. incremental vs. control). Implicit theories were manipulated using news articles adapted from Chiu et al. (1997). After the manipulation, participants imagined that they found a pre-owned laptop online that suited their needs. Participants were asked to indicate how much they would bid for the pre-owned laptop. One-way ANOVA showed a significant main effect of implicit theories (F(2, 352)=3.12, p<.05). Specifically, participants in the entity condition (M_{entity}=$251.95) indicated a lower bid than those in the incremental condition ($M_{incremental}$=$284.47, p=.05) and control condition ($M_{control}$=$291.32, p<.05).

Study 4 (N=534) tests the mediating role of perceived ownership (H2). Design of Study 4 was similar to that of Study 2 except that perceived ownership was measured, and the focal product was a backpack. Analysis showed that the interaction between implicit theories and products type was significant (B=-.20, SE=.09, p<.05). Specifically, entity theories were less likely than incremental theorists to purchase the second-hand backpack ($M_{entity/secondhand}$=3.95 vs. $M_{incremental/secondhand}$=4.32, B=-.12, SE=.06, p<.05), whereas no difference was found in the new backpack condition ($M_{entity/new}$=5.22 vs. $M_{incremental/new}$=4.98, B=.08, SE=.06, p>.19). More importantly, perceived ownership mediated the effect of implicit theories on purchase intention (Indirect effect=-.04, SE=.02, 95% CI=[-.08, -.00]).

Study 5 (N=374) tests the moderating role of brand image (H3). This study employed a 2 (entity vs. incremental) by 2 (cool vs. normal brand) between-subjects design. Based on a pre-test, we selected Beats (vs. Sony) to represent a cool (vs. normal) brand. After reading a similar scenario used in previous studies, participants indicated their willingness to purchase. Analysis showed a significant two-way interaction (F(1, 369)=10.9, p <.01). More specifically, entity (vs. incremental) theorists were more likely to purchase the pre-owned Beats headphones ($M_{entity/cool\ brand}$=3.95 vs. $M_{incremental/cool\ brand}$=3.29, F(1, 369)=5.87, p<.05), whereas they were less likely than incremental theories to purchase the pre-owned Sony headphones ($M_{entity/normal\ brand}$=3.11 vs. $M_{incremental/normal\ brand}$=3.73, F(1, 369)=5.05, p<.05).

Collectively, findings from the 5 studies support our propositions that entity (versus incremental) theorists will evaluate pre-owned products less favorably as they feel a lower sense of psychological ownership over the pre-owned products.

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Opportunity Neglect

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EXTENDED ABSTRACT

People often decide whether to accept or reject opportunities with high payoffs but a low probability of success. For example, a PhD student must decide whether to submit a paper for a prestigious award, or a job-seeker must choose whether to apply for a dream job. In some cases, people can be reluctant to take these opportunities due to objective costs. Many decisions, however, are relatively costless objectively, such as when a paper has already been written or the application process is fully anonymous.

We show that many people exhibit opportunity neglect, failing to pursue costless opportunities with only upside. We introduce a paradigm that controls for the objective costs of taking opportunities. Participants choose to accept or reject real incentive-compatible gambles that yield either a $0 payoff ("winning nothing"), or a positive dollar amount (e.g., $99) with a very low (1%) probability (e.g., "*There is a 1% chance that you will win $99, and a 99% chance that you will win nothing*"), and no cost to enter. Across 9 preregistered studies, we find that a non-trivial percentage of participants (between 23.0% and 56.4%) reject such gambles. We demonstrate that opportunity neglect is driven by a (erroneous) feeling of having "nothing to gain" from pursuing such opportunities; consistent with fuzzy trace theory (Reyna & Brainerd, 1995), it is as if people encode a 1% chance at winning as "I won't win anything."

Study 1a explored whether opportunity neglect occurs at high stakes. We employed a five-condition (payoff: $0.01, $0.1, $1, $10, $100) between-subjects design. Participants were offered a low-probability gamble with varying stakes: "You have a 1% chance of winning $[payoff] and a 99% chance of winning nothing." Participants were asked, "Would you like to take this gamble?"(*Yes/No*), and whether they could have lost any money by taking the gamble (83.6% correctly chose "*No*"). Opportunity neglect manifested even at the highest payoff: 40.7% of participants rejected the gamble at $100 (40.7% vs. 0%: z=3,774.36, p<.001). In fact (and surprisingly), the rejection rate in the highest payoff condition was statistically equivalent to that of the other payoff amounts, χ^2(4,N=500)=5.91, p=.21,Φ=0.11.

Study 1b explored whether opportunity neglect occurs when the low- and high-probability gambles have an equal expected value. We employed a two-condition (success probability: low, high) between-subjects design. The low [high] probability condition read: "You have a 1%[99%] chance of winning $99[$1], and a 99% chance of winning nothing." Thus, for both conditions, the expected value was $0.99. As in Study 1a, participants chose whether to take the gamble (*Yes/No*). Then, they completed the comprehension check from Study 1a (78.1% passed). In the low probability condition, 41.4% of participants rejected the gamble—a non-zero percentage (41.4% vs. 0%:z=4120.24, p<.001). This rejection rate was significantly higher than the 2.9% rejection rate in the high probability condition, χ^2(1,N=201)=43.49, p<.001,Φ=0.47.

To demonstrate the robustness of opportunity neglect, we conducted additional studies. In one study, we included three response options: *Yes, No* and *I'm indifferent*. We continued to observe opportunity neglect for a low-probability opportunity: 31.7% of participants actively rejected the gamble, and only 5.0% indicated that they were indifferent. In another study, participants neglected low-probability opportunities whether framed as a gamble (44.0%), opportunity (32.4%), lottery (38.8%) or draw (43.1%). In another study, we observed opportunity neglect in the field with goods. In the low (1%) probability condition, 27.2% (27.2% vs. 0%, z=2758.46, p<.001) rejected a chance at winning a University-branded pen. In another study, when defaulted into taking a low-probability gamble, participants even exerted effort to switch away from taking the gamble. Thus, transaction costs are unlikely to explain our effect.

In Study 2, we documented opportunity neglect in an everyday scenario. Participants supposed that they had the opportunity to be considered for a prestigious award "simply by uploading a statement" that they had "already written for a different application." Participants in the low [high] probability condition read, "You estimate that you have a 1%[99%] chance of receiving the award, and a 99%[1%] chance of not receiving it." Participants were asked, on a 7-point scale, "How likely would you be to apply to the award?" Participants were less likely to apply in the low probability condition (M=4.00, SD=2.28,mean rank=138.78) than the high probability condition (M=6.28,SD=1.32,mean rank=249.23;U=7894.50,p<.001). In the low probability condition, 22% selected the lowest possible value, displaying a strong aversion to taking the opportunity. Of course, everyday decisions can introduce other risks, such as reputational concerns; we do not suggest that these factors cannot play a role in people rejecting opportunities. Rather, we suggest that opportunity neglect plays a distinct role.

In Studies 3a&b, we tested our mechanism and designed interventions by re-orienting participants' attention toward the feeling of having "nothing to lose."

Study 3a intervened by explicitly labeling the "No" response as reflecting a "0% chance of winning." All participants were offered a low-probability gamble: "There is a 1% chance that you will win $10, and a 99% chance that you will win nothing." Between-subjects, response options were either unlabeled (*Yes/No*) or labeled with explicit probabilities: "Yes (You have a 1% chance of winning)" and "No (You have a 0% chance of winning)." On a new page, participants were asked: "How did this gamble feel to you?"(from "It felt like I had nothing to gain" to "It felt like I had nothing to lose"). Participants also rated their anticipated disappointment and regret. Merely reframing the "No" option as a "0% chance of winning" significantly reduced the rejection rate of the low-probability gamble (13.3% vs. 34.0%;χ^2(1, N=300)=17.73,p<.001,Φ=0.24. The feeling of having "nothing to lose" emerged as the primary significant mediator, b=-0.69,SE=0.26,95%CI=[-1.31,-0.28]. The indirect effect for anticipated disappointment was significantly smaller; anticipated regret did not emerge as a mediator.

Study 4B reframed the *Yes/No* decision to a (functionally equivalent but psychologically distinct) choice between gambles. Significantly fewer participants rejected the low-probability gamble under a choice frame (5.9%) than the single gamble frame (36.1%;χ^2(1,N=199)=27.72,p<.001,Φ=0.37). In contrast, rejection rates of the high-probability gamble did not differ significantly between the choice (2.0%) and single gamble condition (4.0%;χ^2(1,N=201)=0.67,p=.41,Φ=0.06).

The Effects of Loan Application Formats on Consumer Loan Decisions

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EXTENDED ABSTRACT

When consumers request to borrow funds from financial institutions, applications may elicit either a desired loan amount or monthly payment. Drawing from research on preference construction (Bettman, Luce, and Payne 1998), scale compatibility (Slovic, Griffin, and Tversky 1990), and selective accessibility (Mussweiler and Strack 1999), we hypothesize that the monthly payment versus loan amount format will bias principal requests because of the selective recruitment of different task-relevant numerical information. When loan amounts are elicited, consumers think of and request the cost of the expenditure they seek to finance. When monthly payments are elicited, consumers think of their monthly budget slack to construct and then request monthly payments they perceive to be affordable. Thus, we expect principal requests to be more strongly related to the purchase cost with a loan amount versus monthly payment format.

Study 1: Effect of Loan Application Formats

In Study 1, we show the effect on principal requests using a two cell between-subjects design. Participants (N=151) imagined that they wanted to go on a trip that cost $3,150, for which they would need to take out a personal loan. Participants were randomly assigned to provide either a desired monthly payment (MP) or loan amount (LA). Responses in the LA condition were the principal requests, and responses in the MP condition were converted to principal requests using the specified term (36 months) and interest rate (10.22%).

Participant responses were open-ended and resulted in some outliers. To address these outliers, in all studies, a standardized data cleaning process was followed. In all the studies, including these responses does not change the overall pattern of results but does inflate standard errors. We included income as a covariate in all regression analyses and used heteroskedasticity-consistent standard errors (HC3; Hayes and Cai 2007).

Principal Requests. As expected, participants requested significantly higher amounts in the MP versus LA condition (d=1.20, p<.001; all statistics are available in Table 1).

Study 2: Loan Application Formats Affect Elaborations

In Study 2, we sought to replicate the main effect with a different loan purpose, and to probe the hypothesized selective accessibility process. We used a 2 (Personal Loan Description: present vs. absent) x 2 (Loan application format: MP vs. LA) between-subjects design. Participants (N=301 CloudResearch-approved Mturkers) imagined financing a new washer and dryer ($5,150). Participants in the description present (absent) condition saw (did not see) the personal loan description, which we included to test whether the results were robust to having detailed information about personal loans or not. After providing their request, participants described what information they considered to determine their request amount. Then participants self-coded these elaborations by selecting from one of six possible responses.

Principal Requests. Participants requested significantly higher principal amounts in the MP versus LA condition (d=.44, p<.001). Of note, the effects of the personal loan description and interaction were non-significant (ps>.38).

Elaborations. The pattern of elaborations differed between the loan application formats (χ^2(5)=139.17, p<.001). Participants in the

MP condition were more likely to focus on affordability than those in the LA condition (60.3% vs. 9.3%, z=9.17, p<.001) while those in the LA condition were more likely to focus on the purchase price than those in the MP condition (75.3% vs. 9.9%, z=11.24, p<.001).

Study 3: Loan Application Format by Cost Level Moderation

In Study 3, we test the hypothesized reversal across cost levels. We manipulate the estimated cost of the purchase without changing the target expense. Participants who currently had a mortgage or owned their primary residence (N=268) were assigned to our 2 (cost: high vs. low) x 2 (loan application format: MP vs. LA) between-subjects design. Participants imagined that their roof needed replacing. In the high (low) cost condition, the estimated cost was $13,150 ($5,150). Participants proceeded as in previous studies.

Principal Requests. The focal interaction was significant (t(254)=-7.27, p<.001). In the low cost condition, requests were higher in the MP versus LA format (d=.87, p<.001). However, in the high cost condition, this effect was reversed, as expected (d=-.89, p=.001).

Study 3 provides moderation evidence of the hypothesized selective accessibility process. Specifically, the results indicate consumers request amounts that assimilate the cost of an expenditure when asked to provide a loan amount during the application process yet depart from cost when asked to provide a monthly payment (see Table 1), in line with differential accessibility of cost across the formats.

Study 4: Budget Slack as an Anchor

In this study, we use a higher cost purchase, which should result in MPs biased lower than what would be implied if individuals instead used the estimated cost. We manipulate individuals' budget slack upwards, which should reduce, and possibly reverse, this discrepancy. We also include a salient budget slack condition where we do not manipulate the amount, but the salience of slack, to address the possibility that our slack manipulation could artificially increase the salience of one's budget slack. Participants (N=454) were randomly assigned to our 3 cell (Budget Slack: control, high, salient) between-subjects design. Participants imagined that they needed to finance a wedding that cost $13,150 and proceeded as in previous studies.

MP Requests. Participants requested significantly larger MPs in the high versus control budget slack condition (t(393)=10.40, p<.001, d=1.26). Participants also requested significantly larger MPs in the high versus salient budget slack condition, and the effect was even larger (t(393)=11.54, p<.001, d=1.41).

Budget Slack Anchoring. Well above the majority of participants in each condition provided MP requests that were less than their budget slack amount (87%). Moreover, the correlation between budget slack and MPs was significant in the salient (r=.493, p<.001) and control (r=.195, p=.026) conditions.

Conclusion

Across four studies we find evidence that loan application formats affect consumer loan requests. While a loan amount (vs. monthly payment) format yields principal requests more in line with

expected costs, the consumer welfare conclusions of these findings are complex. A loan amount format might reduce over-borrowing for lower cost expenditures, but with given loan parameters, it leads to required monthly payments that are higher than those desired by consumers for higher cost expenditures.

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Group Gift Giving: Why More Givers Tend to Buy a "Bigger" Gift?

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EXTENDED ABSTRACT

From festivals and holidays to birthdays and graduations, friends and families often come and buy a gift together to a loved one. This kind of group gifting is also prevalent in practice. For example, eBay in 2015 has launched Group Gifts team, providing an online way for group gift giving. How would the collective form of gifting influence people's spending and gift preference? Intuitively, one may predict that group gifting would make people give less because everyone chips in the gift. Yet, in this research, we find a *bigger-gift effect*, such that people tend to spend more *per person* in a group gifting compared to that in an individual gifting because of a heightened desire to make an impact.

Extant research on gift giving has predominantly focused on gifting contexts with only one giver and one receipt (e.g., Ward & Broniarczyk, 2016; Paolacci, Straeter, & de Hooge, 2015). To fill this gap, we examine how and why group gifting versus individual gifting influences people's spending. We show that group gifting triggers a greater desire to make an impact than individual gifting. This desire may occur because people always hold a "strength in numbers" belief. In turn, consumers would be motivated to buy a bigger gift fit with the name of group, which further loosens their budget and engenders more spend per person.

Study 1 was a two-cell (gift giving mode: dyadic vs. individual) between-subjects design. 219 university students (31.25% males, M_{age} = 20.78) participated in this study were either randomly paired with another participant from the session whom they did not know (to create dyads; n = 62 dyads) or asked to work individually (n = 107 individuals). Participants in the individual (group) condition were told to imagine that their (co)friend A's 20-years-old birthday is approaching and they are planning to give a gift for A (together). Participants reported what kind of gift they want to give, how much the gift is (unit: ¥), and the range of cost they can afford (unit: ¥). Finally, they reported their demographics. Results indicated that compared to those in the individual gifting, participants in the group gifting would like to give an averagely more expensive gift (175.44¥ vs. 155.39¥; Z = 2.19, p = .028) and a greater range of gift price (93.75 vs. 65.78; $t(31)$ = 1.89, p = .069, d = 2.45).

Study 2 was a two-cell (gift giving mode: group vs. individual) between-subjects design. Participants were first told to imagine that they had a very close roommate A whose birthday was approaching and they had decided to give A a gift card named "One in Hundred." In the individual gift-giving condition, participants were instructed that they would buy the gift card alone. In the group gift-giving condition, participants were instructed to imagine that other two friends of A, B and C, would like to join with them and three of them will buy one gift card together for A. Then they wrote down the amount of money they want to chip in the gift card (unit: ¥). Participants then rated their desire to make an impact in the gift giving, face consciousness, and other controls. Results showed that participants in the group gifting condition indicated greater spending per person than those in the individual gifting condition (149.08 vs. 93.33; $F(1, 54)$ = 13.10, p = .001, η_p^2 = .20). And there is a significant indirect effect of desire to make an impact from group gifting on spending per person (β = .27, SE = .12, 95% CI: [.0717, .5249]).

Study 3 replicates the bigger-gift effect in a real-life setting. We collected the field data in a flower store located in a large public university in Southern China. In collaboration with the owner of the flower store, we launched a promotion activity for one week before the Teacher's Day in fall 2016, from 5th Sep (Monday) to 10th Sep (Saturday). Consumers shopping in the store would be invited to answer a short questionnaire and then receive a ¥5 cash voucher (approximately U.S. $.80 dollars). The voucher can be used to purchase all flowers in the store. The questionnaire included the purchase time, whether they buy flowers for the Teacher's Day, and if not, what is the purpose of buying flowers. After that, participants reported the number of givers, whether they have discussed about the gift, whether he/she is the decide-maker, whether there are other products, and how much the price of other products is. Results of the regression model showed that the square term was significantly negative (β = -.59, t = -1.90, p = .060), but the main effect of the number of givers was not significant (β = .02, t = .07, p = .943). These results confirmed an inverted U-shape relationship between the number of givers and spending per person. This suggests that as the number of givers increase, the spending per person tend to increase (when the number of givers is relatively smaller) and then decrease as the number of givers increases.

In the present research, we compared the group gifting to individual gifting. Two experiments and one field study demonstrate that compared to individual gifting, group gifting leads to higher spending per person and a more loosing budget, which we called the bigger-gift effect. This effect occurs because group gifting elicits a heightened desire to make an impact. At the conceptual level, this research extends previous work from the individual gifting to group gifting. This research also contributes to literature in group decision by proposing a new finding that is opposite to social loafing and free riding effect.

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When Lifestyle Advertising Hurts Luxury Brands

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EXTENDED ABSTRACT

In 2019, consumer spending on luxury products amounted to $1.58 trillion globally (D'Arpizio et al. 2020). Advertising plays an important role in inducing luxury purchases and is usually a sizable investment by luxury companies. For example, in 2018, the total advertising spending for luxury products exceeded $12 billion and was growing at an annual rate of 2.4% (Mika et al. 2018). Therefore, understanding the effectiveness of luxury advertising is critical to the success of luxury brands.

Most luxury advertisements, whether online or in stores, tend to express a certain lifestyle, personality, taste, or identity. Elements such as functionality, quality, material, and craftmanship are less common. For example, Emporio Armani uses the slogan "Doesn't like to be called an influencer. Likes to have influence" in one of its advertisements to suggest an independent and elegant lifestyle. In our research, we define advertisements emphasizing intangible or abstract features (e.g., lifestyle, personality, taste, identity) as *lifestyle* advertisements; those centering on tangible or concrete features (e.g., functionality, quality, material, craftsmanship), *functional* advertisements (e.g., Chernev, Hamilton, and Gal 2011; Cosmas 1982). Irrespective of the marketplace or in the existing literature, seemingly luxury brands predominantly opt for abstract and lifestyle advertisements instead of concrete, functional advertisements (Gurzki, Schlatter, and Woisetschlager 2019; Kim, Lloyd, and Cervellon 2016). Is this because lifestyle advertisements are more effective in inducing luxury purchases than functional advertisements?

Intuitively, the answer should be yes. In fact, existing literature on luxury advertising has documented the advantages of using abstract and lifestyle advertisements, such as conveying symbolic or identity value of the luxury brand and promoting engagement of advertisements (e.g., Freire 2014; Gurzki et al. 2019; Kim et al. 2016).

However, in the present research, we argue that, depending on the situation, functional advertisements can be more effective for luxury products than lifestyle advertisements. Specifically, we apply a two-stage model of decision making (Dhar, Huber, and Khan 2007; Wood 2001; Xu and Wyer 2007) to the luxury purchase context: Stage 1 is the *motivation formation stage*; consumers do not yet intend to buy a luxury product and are still forming purchase interest and motivation. Stage 2 is the *purchase decision-making stage*; consumers desire to buy a luxury product, and their focus is on deciding which product to buy. According to the construal level theory, when consumers are in stage 2, they are in closer proximal distance (both temporally and hypothetically) with purchasing a luxury product than when they are in stage 1. This leads to their focusing more in stage 2 on low-level, concrete, and pragmatic information than in stage 1. Because functional (vs. lifestyle) luxury advertisements are more likely to emphasize such low-level information, we hypothesize that in stage 2 (vs. stage 1), functional advertisements can be more effective for luxury products than lifestyle advertisements.

We tested our propositions in four studies. Study 1 (1a - 1b) tested our proposition that at stage 2, functional (vs. lifestyle) advertisements can lead to higher purchase likelihood for luxury products.

Study 1a assessed the proposition in a choice setting where a "new" watch brand (i.e., Imet; a fictitious luxury brand we created) was competing with the market leader (i.e., Rolex; Statista 2019). Luxury consumers were recruited and were asked to make a purchase decision between the Imet watch and the Rolex watch which having the same price. Respondents either saw a lifestyle slogan or saw a functional slogan of the Imet watch. Result showed that respondents were more likely to choose the new brand (Imet, rather than Rolex) when the watch was accompanied by a functional (vs. lifestyle) slogan (75.1% vs. 59.7%; (1, N = 399) = 10.86, $p < .001$, = .33).

Study 1b involved realistic choices of real luxury products. Student consumers who were about to purchase luxury lipstick (i.e., stage 2) were recruited. Respondents were told that, as an extra reward for their participation, they had a 1 in 25 chance of receiving a luxury lipstick voucher worth 330 RMB (about $50). They would be able to use this voucher for a Givenchy lipstick or a Dior lipstick. We randomly assigned one lifestyle and one functional slogan to the two lipsticks. Results showed that respondents were more likely to choose the lipstick accompanied by a functional advertisement rather than by a lifestyle advertisement ((1, N = 111) = 5.06, $p < .05$, = .44).

Study 2 tested our proposition with both stages. Through a Pre-study, we found that consumers tended to associate some luxury advertisement channels (e.g., social media) with stage 1 (vs. stage 2), and some channels (e.g., e-commerce stores) with stage 2 (vs. stage 1). According to this Pre-study, we applied social media and e-commerce stores to stage 1 and stage 2, respectively. Besides, we included four product categories (shoes vs. wristwatches vs. tops vs. sunglasses) in this study to improve the generalizability of our findings. Respondents were asked to rate on two seven-point scales in terms of the extent to which they were attracted by the displayed products vis-à-vis exposure to a lifestyle or functional advertisement. Results showed that, for all four product categories, the relative attractiveness of functional advertisements (vs. lifestyle advertisements) was greater in stage 2 (vs. stage 1) (= .48 vs.= .31; $F(1, 2007) = 7.82$, $p < .01$, = .13).

Study 3 explored the underlying mechanism for the proposed effect. We assessed consumers' construal level when they were processing functional or lifestyle advertisements, and when they were in stage 2 or stage 1 by asking them to report their thoughts in each condition. Results suggested that functional (vs. lifestyle) advertisements were more compatible with consumers' construal level in stage 2 (vs. stage 1).

In sum, the results supported our proposition that in stage 2 (vs. stage 1), functional advertisements can be more effective for luxury products than lifestyle advertisements. This research contributes to literature on luxury branding, lifestyle and functional advertising. In addition, this research offers practical implications to luxury brand managers in terms of advertising strategy.

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Enhancing Sensitivity to Probability Through Experiential Sampling of Outcomes

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EXTENDED ABSTRACT

A keystone of Prospect Theory is that people over-weight low probabilities, under-weight high probabilities, and are under-sensitive to differences in intermediate probabilities. Research on decisions from experience, in which people sample from probability distributions over outcomes, reveals greater sensitivity to intermediate probabilities. This suggests a novel technique for debiasing probability distortions in practice: present probabilistic information in an experiential manner.

To illustrate, suppose a doctor tells you that you have a 1 in 10 chance that a recent scan indicates cancer, and you expect to get the final diagnosis at the end of the week. Most people would substantially overweight this emotional event, perhaps preparing for aggressive treatment and getting affairs in order. Now suppose instead that you simulate 9 people with scans like yours getting a happy phone call (no cancer, no, no...no) and getting one unhappy call from the doctor (yes cancer). In this experiential presentation, most people weight this probability in a more appropriate way and are somewhat less concerned.

In this project, we show that when the odds of an event occurring are represented experientially (rather than descriptively), people better discriminate probabilities in a manner more consistent with linear probability weighting. We surmise this is because experiential presentation, unlike descriptive presentation, forces attention to outcomes in proportion to their probability of occurrence.

In Study 1, we test the effect of presenting the proportion of experts believing that some negative event would occur (either p=.1 or p=.9) either by explicitly describing the proportions (description-based decision making; "DBDM") or by sequentially flashing 20 outcomes proportional to the underlying distribution of expert opinions (experience-based decision making; "EBDM"). For instance, one scenario involved expert opinions of whether an American city would become submerged due to climate change. Participants were then asked to express their degree of support for reallocating public funds earmarked for that category (e.g. municipal projects) to the particular problem at hand. We find that, across four domains, people show considerably greater sensitivity to differences in the proportion of experts expressing concern when these proportions are presented as EBDM rather than DBDM (p<.001). This increased sensitivity is especially noteworthy since learning is a noisy process and any counting errors in the EBDM condition would be expected to have a regressive effect on probability judgments and hence diminish sensitivity to probability differences. Further, we find that in a "hybrid" condition wherein participants were given the explicit odds and then shown the EBDM simulation, they were significantly less sensitive to probability differences compared to EBDM but more sensitive than DBDM.

In Study 2, we replicate the design of Study 1 using an incentive-compatible design and find that prices are more sensitive to the proportion of favorable reviews when presented in an EBDM versus DBDM manner.

In Study 3, we replicate the effect using an auditory presentation of expert opinions in a simulated news story regarding policy legislation.

In Study 4, we test the robustness of this phenomenon by manipulating the EBDM depiction of the low-probability event (e.g., changing its color or presenting it for longer) to see if an attention-grabbing manipulation of the less-frequent outcome diminishes sensitivity to probability. We find that these salience-distorted EBDM representations still perform significantly better than DBDM but directionally, though not significantly, worse than EBDM.

In Study 5, we compare DBDM and EBDM to a natural alternative: a pictographic (frequentistic) representation of the odds. We find that, in the domain of medical decision making, people are more sensitive to differences in medical consensus with EBDM versus DBDM, and that the pictographic representation is only marginally better than DBDM.

As demonstrated in Study 4, we find that presenting probabilities experientially is robust to various presentations and manipulations. In Study 6, we test the robustness of pictographic representations. A worry we had about pictographic representations is that they do not necessarily hold attention to outcomes proportional to their likelihood. Instead, people may spend time dwelling on low-probability events depending on how visually salient these outcomes were compared to the high-probability events. Thus in Study 6, in addition to our typical EBDM and DBDM manipulations, we also included three different forms of pictographs: a 2-dimensional (4x5) pictograph, a 1-dimensional pictograph (1x20), and a 1-dimensional pictograph in which the low-probability outcomes were non-contiguously scattered throughout the 20 positions. We wanted to see whether seemingly inconsequential design decisions altered the efficacy of pictographs. We find, once again, that DE outperforms DD (p=.04). We find no advantage of pictographs compared to DD either when pooled (p=.20) or evaluated separately (p=.94). From this we conclude that pictographs are not as robust a presentation format as sequential simulation at facilitating probability discrimination.

In this paper, we show that when the odds of an event occurring are represented experientially rather than descriptively, people discriminate between probabilities more linearly. We surmise this is because experiential presentation forces attention to outcomes proportional to their probability of occurrence. It is hard to get an intuitive sense of what 15% is, we think, but an experience simulation can foster a gist impression of the odds. This suggests a novel method for promoting more rational decision making, and the possibility of a simple app-based intervention inspires hope.

Culture and the Containment of the COVID-19 Pandemic: How Collectivism Fosters Preventive Behaviors

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EXTENDED ABSTRACT

Apart from some personal-level and societal-level factors, we propose that culture should also play a role in the spread of COVID-19. Because controlling the spread of COVID-19 involves a collective effort in which each individual does his/her part (i.e., by engaging in preventive behaviors), ait stands to reason that cultural models that facilitate collective coordination built around others' beliefs and goals should positively contribute to control the spread of the disease. Accordingly, we propose that a collectivistic orientation should be particularly likely to provide the coordination needed to control the spread of COVID-19. Collectivists construe the self as primarily interdependent with others and are motivated to adjust to the demands of others (Markus and Kitayama 1991), and particularly so in public settings. In this context, they are likely to draw on their beliefs about the opinions of others to guide their behavior (i.e., others' beliefs, Torelli 2006). We propose that cultures high (vs. low) in collectivism would be more successful in controlling the spread of COVID-19, as people in these cultures would feel an obligation to engage in preventive behaviors they believe are shared by others.

In Study 1, we retrieved and calculated the COVID-19 cases per country and tested whether COVID-19 cases are associated with collectivism. As predicted, collectivism was associated with a lower spread of COVID-19 ($p<.05$). This effect was robust and emerged after controlling for a variety of other country-level factors associated with the spread of communicative diseases.

In Study 2, we recruited participants in a large University in Hong Kong (Study 2a), and students enrolled in a large University in the United States (Study 2b) for an online study in exchange for course credit. Participants indicated their endorsement of a collectivistic orientation by completing Triandis & Gelfand's (1998) cultural orientation scale. Participants were also presented with a survey about "Behavioral Guidelines for COVID-19", in which they rated the self-importance of engaging in six behaviors (Study 2a), or the likelihood to engage in the same six behaviors (Study 2b). As predicted, collectivism was positively associated with importance of engaging in six behaviors ($p< .01$)(Study 2a), and likelihood to engage in the same six behaviors ($p< .01$)(Study 2b).

In Study 3, students in a large University in the United States participated in an online study in exchange for course credit. Participants rated their intentions to get vaccinated against COVID-19. Af-ter the behavioral ratings, they completed the same cultural orientation scale as in Study 2a and 2b. We conducted a regression analysis with vaccine intention as the dependent variable, and participants' average endorsement of collectivistic and individualistic orientations as predictors. Supporting our hypothesis, results yielded a positive and significant coefficient for collectivism ($p=.05$).

In study 4, students enrolled in a large University in the United States participated in an online study in exchange for course credit. Participants followed the same procedure in Study 2a, except for the following change. After the behavioral ratings, they indicated their beliefs about the extent to which others considered the same behaviors as being important (i.e., others' beliefs, 2-items). A regression analysis with this index of behavioral expectation for preventing the spread of COVID-19 as the dependent variable, and participants' average endorsement of collectivistic and individualistic orientations as predictors, yielded a significant coefficient for collectivism ($p<.01$). Mediation analyses confirmed that beliefs that others consider important to engage in the preventive behaviors (i.e., others' beliefs) underlie the effect of collectivism on participants' expectation of engaging in these behaviors.

Results from five studies using both secondary datasets and laboratory experiments conducted in two different countries demonstrate that collectivism is: (a) negatively associated with the spread of COVID-19, (b) positively associated with the self-importance/expectation to engage in widely publicized behaviors to prevent the spread of the disease, and (c) positively associated with the likelihood to get vaccinated against COVID-19. Our research highlights the importance of incorporating cultural factors in social marketing research. In this COVID-19 pandemic, our findings suggest some public health strategies to control the spread of COVID-19, as well as to encourage people to get vaccinated against the disease. Public health campaigns to persuade individuals to engage in preventive behaviors or to vaccinate should then focus on both communicating the widespread belief about the importance of such behaviors, while activating a collectivistic orientation. Addressing some of the critical challenges of the 21st century (e.g., global warming) requires that societies exercise a collective effort to change individuals' behaviors. Our research shows that a collectivistic orientation can be helpful to the social coordination needed to mobilize such collective effort.

Voluntary Simplicity Consumption In Japan: Alternative Consumption And Backward Consumption Among Minimalists

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EXTENDED ABSTRACT

Minimalism can be understood through the concept of voluntary simplicity (VS) as defined by researchers (Lloyd and Pennington 2020). VS means that consumers gain happiness by choosing simple living as their lifestyle. While previous studies on VS have largely concentrated on lifestyle (Leonald-Barton 1981; Iwata 1997), consumption styles in VS have also been examined from the perspective of reduced consumption (Shaw and Newholm 2002) and anti-consumption (Iyer and Muncy 2009). However, Shaw and Moraes (2009) researched VS consumption in terms of market interaction, and as a result considered that voluntary simplifiers who live in a market economy find it difficult to avoid consumption. Thus, this study focuses on the consumption behavior of voluntary simplifiers.

Elgin (1981) pointed out that during the 1960s, VS roots were apparent in the United States and Western nations. However, the first VS in Japan was born in 721 (Ohira and Masuda 2020). The ancient Japanese believed that luxury living brought harm and natural disasters, which led the Japanese government to enforce VS through several policies. The most famous VS policy was the *Kenyaku-rei*, implemented by the Samurai government to reconstruct financial management systems during the Edo period (from 1603 to 1876). This study focuses on the original lifestyles created through this VS policy, as many modern Japanese lifestyles have been shaped by this era (Francks 2009).

This study finds that current minimalist lifestyles in Japan can be traced back to the Edo period. It seems that consumption styles are harking back to this ancient era and are producing a phenomenon called backward consumption—a kind of nostalgia consumption. Therefore, studies suggest that backward consumption is induced by the influence of residual institutional effects (Ohira and Masuda 2020) in minimalists' minds.

This study emphasizes that there are two types of consumption in VS. The first is alternative consumption. Beginner voluntary simplifiers first practice reduced consumption when they start leading VS lifestyles (McDonald et al. 2006). Ohira and Masuda (2020) stated that frugal simplifiers—those who start VS through not only saving money but also through reduced economic consumption—were the first to start VS lifestyles and form one type of beginner voluntary simplifier. Although frugal simplifiers initially reduced the total amount of consumption expenditure, they may have changed the use of money over time, while still maintaining VS lifestyles. For instance, while some voluntary simplifiers may save money by reducing consumption, others may choose to buy better quality products or services, hence incurring the same level of expenditure even as they reduce consumption. Thus, it is deliberated that the later simplifiers have created a new form of consumption known as "alternative consumption."

Second, backward consumption can be understood as nostalgia consumption. Modern society is a consumer society that provides easy access to various products and services. However, most people lived the lifestyle of voluntary simplifiers in the past (Brunk, Giesler, and Hartmann 2018). Stern (1992) stated that nostalgic thoughts may be generated by forming a history of time before one was born (historical/communal nostalgia). Holk, Havlena, and Matveev (2006) noted that there were four categories of nostalgia (personal nostalgia, interpersonal nostalgia, cultural nostalgia, and virtual nostalgia). The concept of backward consumption in this study is included as a part of virtual nostalgia, where modern consumers relate to an old type of lifestyle that they have never actually experienced.

This study selected 19 VS bloggers from a published minimalist lifestyle book by Shufunotomo (2019). We contacted all VS bloggers on their SNS through direct messages, and seven accepted our interview invitation. These semi-structured interviews, which lasted 1–1.5 hours, explored their simple living and minimalist lifestyles.

First, we considered how minimalists define themselves, and concluded that minimalists think of themselves as people who have free spaces in their minds and lives. However, the findings of this study indicate that it is necessary to distinguish between "minimum minimalists" and "maximum minimalists" in order to fully understand the various degrees of simple living.

Second, there are two types of consumption styles demonstrated by people leading a VS lifestyle. The first is alternative consumption, of which there are two types: focused and upgraded consumption, in which minimalists spend more money on high quality products that last longer instead of reducing their total amount of consumption; and the second is ethical consumption, where minimalists consider the environmental impact of the goods they purchase.

In terms of the common product preferences of the interviewees, this study found that they all favor MUJI (a famous Japanese retailer). A study published by Yamaguchi (2016) explored the relationship between minimalists and MUJI. These findings indicate that MUJI products fit with a VS lifestyle because they use natural materials and provide simple designs.

This study also illustrates backward consumption as a type of virtual nostalgia consumption. Minimalists' rooms are simple, like those of the Edo period, and they live in a manner similar to that of their predecessors (Please refer to the Edo-Tokyo Museum (https://www.edo-tokyo-museum.or.jp/en/)). This phenomenon is one of virtual nostalgia and backward consumption, in which consumers practice the lifestyle of their predecessors, even though they have never experienced it. This is considered to be a residual institutional effect, that is past institutions have influenced the behavior of present consumers (Ohira and Masuda 2020). Although it may be unintended, the lifestyles of minimalists reflect the past. Thus, in this context, backward consumption can be understood as virtual nostalgia consumption that is unintended by consumers.

This study makes three major contributions to the existing literature. First, it examines focused and upgraded consumption as alternative consumptions in VS. While voluntary simplifiers reduce their total amount of consumption, they focus on and upgrade some specific and favorable product categories and, as a result, incur higher expenditure. Second, it describes backward consumption as one form of nostalgia consumption. Finally, it examines the residual institutional effects that have influenced the minimalist lifestyle in Japan; that is, the choices of consumers are directly affected by past institutions, even though they have not lived during those periods in Japanese history.

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Online Shopping Cart Abandonment: Placing Self-Expressive Products in the Shopping Cart Reduces Purchase Intentions

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EXTENDED ABSTRACT

We propose that online shopping cart abandonment is more likely for high (than for low) self-expressive products because the mere act of cart placement diminishes the experiential shopping value typically derived from shopping for such products. Findings from field data and online studies support our hypothesis and identify its moderators.

Online cart abandonment, consumers' tendency to place items in shopping carts without purchasing them, has become a pressing issue among e-commerce organizations. Industry reports reveal that, on average, e-commerce shopping cart abandonment rate is almost 70% (Baymard Institute 2019). This research examines the effect of product self-expressiveness on online shopping cart abandonment. We propose that placing items in the shopping cart is a task-related action that attenuates shopping enjoyment -- an experiential value derived from shopping (Babin, Darden, and Griffin 1994). Building on the notion that shopping for high self-expressive products is more strongly driven by seeking experiential value than shopping for low self-expressive products (Franke and Schreier 2010), we offer that placing high self-expressive items in the shopping cart (compared with choosing such items without placing them in the cart) negatively influences shopping enjoyment and, consequently, is more likely to reduce purchase intentions. This effect is not expected to occur when shopping for low self-expressive products.

Study 1 participants (N =407) were randomly assigned to one condition in a 2 (task type: choose-only vs. choose-and-add-to-cart) × 2 (product type: low vs. high self-expressive product) factorial design. Participants were instructed to search for shoes they would like to buy for themselves at *nike.com*. Half only chose shoes whereas the other half chose shoes and placed them in the shopping cart. Based on the results of a pretest, product self-expressiveness was manipulated by asking participants to search for shoes that would satisfy their exercising needs and would also reflect their personal taste (high self-expressive condition) or shoes that would satisfy their exercising needs and would not necessarily reflect their personal taste (low self-expressive condition). Next, we measured participants' purchase intentions and shopping enjoyment (1 = very low, 7 = very high). As predicted, there was a significant interaction on purchase intentions ($F(1, 403) = 11.645$, $p = .001$, $\eta_p^2 = .028$): in the high self-expressive condition purchase intentions were higher in the choose-only condition than in the choose-and-add-to-cart condition (5.69 vs. 5.25; $F(1,403) = 5.79$, $p = .017$). In contrast, in the low self-expressive product condition the effect was reverse (5.16 vs. 5.60; $F(1,403) =5.85$, $p =.016$). A similar pattern was observed for *shopping enjoyment* ($F(1,403) =8.27$, $p = .004$, $\eta_p^2 =.020$). Finally, there was a significant moderated mediation (PROCESS model 7, Hayes 2013) ($b =-.534$, $SE=.196$; 95% CI=[-.936,-.174]), whereby shopping enjoyment mediated the effect of task type on purchase intentions in the high-self-expressive-product condition ($b=-.300$, $SE=.136$; 95% CI =[-.562,-.034]), but not in the low-self-expressive-product condition ($b=.233$, $SE=.137$; 95% CI =[-.015,.523]).

Study 2 (N =407) manipulated the process variable, shopping enjoyment, by interrupting the shopping process for half of the participants. We predicted that the findings of Study 1 would replicate in the absence of the interruption, but would diminish in its presence because participants would not enjoy choosing high self-expressive products nor would they be influenced by task type. As predicted, we found a significant 3-way interaction between task type, product type, and shopping interruption ($F(1,750) =11.98$, $p=.001$, $\eta_p^2 =.016$), where the results of Study 1 were replicated without shopping interruption ($F(1,750)=12.87$, $p < .001$), but not with it ($F(1,750)=2.08$, $p =.157$).

Study 3 (N=400) examined the hypothesis that the effect of product self-expressiveness on purchase intentions will be attenuated among consumers low on need-for-uniqueness because they are less motivated to express their personal preferences and are thus expected to derive lower enjoyment from shopping for high self-expressive products. The procedure was identical to that of Study 1, except that participants were asked to search for a shirt for exercising on *amazon.com* and to complete a Consumer Need for Uniqueness scale (α = .926; Tian et al. 2001). Regressing purchase intentions on task type (0=choose-only, 1=choose-and-add-to-cart), on product type (0=low self-expressive product, 1=high self-expressive product) and on consumer NFU (PROCESS Model 3; Hayes 2013), revealed the predicted three-way interaction (b =-.471; 95% CI =[-.850,-.092], SE =.193, $t(392)$ =-2.444, p =.015): The effect of task type on purchase intentions for the high (but not for low) self-expressive product condition was significant only for participants with high NFU (above 5.54; b_{JN}=-1.014, SE =.516, p =.05). A similar pattern was revealed for shopping enjoyment (b=-.611; 95% CI=[-1.034,-.189], SE=.215, $t(392)$=-2.847, p=.005). Finally, shopping enjoyment mediated the effect of task type, product type, and NFU on purchase intentions (b=-.338, SE=.129; 95% CI=[-.601,-.098]). This mediation was significant only in the high self-expressive-product condition and only among participants with high NFU (b=-.401, SE=.167; 95% CI=[-.736,-.090]).

Study 4 (N=690) examined the hypothesis that if the act of placing items in the shopping cart becomes exciting, such that it increases shopping enjoyment, it should no longer have a negative influence on purchase intentions for high self-expressive products, even when these products are placed in the shopping cart. We manipulated cart excitement by notifying participants they would receive an exciting surprise upon placing their chosen item in the shopping cart. A 3 (task type: choose-only vs. choose-and-add-to-cart vs. choose-and-add-to-exciting-cart) × 2 (product type: low vs. high self-expressive product) ANOVA revealed a significant interaction ($F(2,684) = 3.20$, $p = .041$, $\eta_p^2 =.009$). In the high-self-expressive-product conditions, purchase intentions were higher in the choose-only condition than in the choose-and-add-to-cart condition (5.306 vs.4.948, $F(1,684) = 4.29$, $p =.039$). However, purchase intentions were similar in the choose-and-add-to-exciting-cart condition (M=5.164) and in the other two task type conditions (p_s >.219). In the low self-expressive-product condition, however, purchase intentions were similar across conditions (all p_s >.135).

Finally, we analyzed field data on 9,365 items provided by a small e-commerce website. We classified the items to high vs. low self-expression conditions based on the results of a pretest. Consistent with the previous findings, the (log) purchase frequency was

lower for high self-expressive items (b = -.027), controlling for product price (b =.173) and (log) abandonment frequency (b = -.75).

This research contributes to the decision making literature by proposing cart placement as a driver of willingness to act (purchase), and by addressing whether and how elements of the purchase process influence the propensity to purchase self-expressive products.

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Leveraging User Data to Investigate the Effectiveness of Interstitial Ads in Mobile Game Applications: Evidence from a Field Experiment

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EXTENDED ABSTRACT

Mobile gaming was expected to generate $77.2 billion in global revenues in 2020, accounting for half video-game revenues ($159 billion) (Reuters, 2020). One of the most distinguishable aspects of mobile gaming compared to traditional gaming systems (i.e., consoles and computers) is the business model adopted by most mobile game applications. Unlike traditional gaming systems, a mobile game application can generate revenues above and beyond the initial purchase—if any—by monetizing user engagement (Rutz et al., 2019; Appel et al., 2020). One well-established monetization strategy consists in displaying advertisements.

While various advertising formats are available, interstitial ads have become a preferred choice in mobile game applications. Interstitial ads are full-screen ads that cover the interface of an app until closed by the user, typically after a forced 5-second delay. This ad format is well-suited for mobile game applications since it was designed to display ads at natural transition points in the flow of an app's execution such as between levels (Google, 2020a). Because of their sole relevance to mobile media, interstitial ads have been an under-researched topic compared to other formats of mobile display advertising such as banner ads.

Because interstitial ads cover the entire device screen, they are well-suited to generate ad clicks, which is the primary source of advertising revenues for developers (Google, 2020b). In contrast, mobile banner ads are characterized by their small display size that reduces the area available for advertising (Grewal et al., 2016). Supporting studies show that prominent brand placements in video games draw consumers' attention and positively influence attitudinal response to stimuli (Lee & Faber, 2007; Schneider & Cornwell, 2005). Unrelated to video games, other research suggests that media richness in mobile advertising drive consumers' behavioral intents because combinations of text, images, audio, and video convey more information than simpler formats (Tseng & Wei, 2020).

Hypothesis 1: *Interstitial ads (vs. banner ads) generate more ad clicks.*

Hypothesis 2: *Interstitial ads (vs. banner ads) generate more advertising revenues.*

Nevertheless, interstitials' key advantage may have damaging implications for user experience. The adverse effect of the intrusiveness of in-app advertising has been a growing concern in recent years (e.g., Appel et al., 2019). But only a handful of studies provides evidence of the implications for mobile application usage. For instance, Ghose and Han (2014) found that in-app advertisements adversely affect app-demand; their research however considered mobile display advertising as a whole and did not discriminate between ad formats.

Hypothesis 3: *Interstitial ads (vs. banner ads) lower user engagement.*

To test our Hypothesis, we employed a randomized field experiment. The research presented herein used several Google-owned software and platforms to create a mobile game application (Android Studio), to allocate users randomly across conditions (Firebase), to set up the ad formats (AdMob), to publish the app (Google Play Console), and to manage and download the data (BigQuery).

We developed a 2D arcade game specifically for this research (available at https://play.google.com/store/apps/details?id=com.jkhenfer.datw). Our experiment ran from late October 2020 to late November 2020 and relied on a sample of 1,065 Android smartphone users. To recruit participants, we advertised our mobile game application through Facebook Business in the fast-growing Indian market.

Both advertising formats were placed in a way that would not interfere with the gameplay. Interstitial ads appeared once users lost a game, before returning to the home screen. Banner ads appeared at the bottom of the home screen below the start button. While ad impressions were contingent on the quality of users' Internet connection, we found no difference between experimental conditions.

We analyzed our results using Bayesian inference. As such, the approach implemented herein tells us which of the two ad formats (interstitial or banner) is likely to be the best performing in terms of ad clicks, advertising revenues, and user engagement. Ad clicks and advertising revenues were measured using automatically recorded events. User engagement was measured as the number of games users played.

First, we found that in the version of the app where users were exposed to interstitial ads, 135 of them clicked at least once on an advertisement, that is, a conversion rate of 26%, whereas they were only 37 in the banner variant, that is, a conversion rate of 6.7% (Δ = 290%). The probability that the interstitial variant would perform better than the banner variant in ad clicks was higher than 99.9%. The credible intervals of the conversion rate for the two variants did not overlap (banner: CI_{95} [4.8%; 9.0%]; interstitial: CI_{95} [22.5%; 30.1%]).

Second, we found that in the version of the app where users were exposed to interstitial ads, the total advertising revenue amounted to USD 2.89, or USD 0.00560 per user, whereas it amounted to USD 0.43, or USD 0.00079 per user, in the banner variant (Δ = 1,000%). The credible intervals of revenue per user for the two variants did not overlap (banner: CI_{95} [0.00043; 0.00097]; interstitial: CI_{95} [0.00500; 0.00990]).

Third, we found that in the version of the app where users were exposed to interstitial ads, the average number of games played was 7.60 (Median: 5.0) whereas it was 9.60 (Median: 7.0) in the banner variant (Δ = -2.00). The credible intervals of user engagement for the two variants did not overlap (banner: CI_{95} [9.31; 9.83]; interstitial: CI_{95} [7.35; 7.83]).

The present research provides evidence of the effectiveness of interstitial ads. Despite the massive importance of this ad format in mobile gaming, very few papers have investigated their impact on user behavior. Leveraging user data, we demonstrate the superiority of the interstitial format over the banner format both in terms of ad clicks and advertising revenues despite a negative effect on user engagement.

The mobile game application developed for the purpose of this research was downloaded by 1,065 users who played a total of 9,187 games over the course of four weeks. Yet, it generated revenues that did not exceed four dollars. This illustrates how difficult it is for developers to monetize apps profitably. We showed here that using interstitial ads rather than banner ads is worth the adverse effect on user engagement given the former's ability to trigger more ad clicks and

generate more advertising revenues. Moreover, this research implemented an innovative method designed to conduct randomized field experiments using mobile applications based on tools freely available to researchers.

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Overcoming the Potential Conflict Between Eudaimonic Versus Hedonic Outcomes of Transformative Service

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EXTENDED ABSTRACT

Transformative service entails an eudaimonic approach to service design that aims to help consumers live well to realize valuable human potentials (Anderson et al. 2013; Blocker and Barrios 2015; Furrer et al. 2020; Ostrom et al. 2015). An issue that bears on the viability of transformative service is the potential conflict between its eudaimonic versus hedonic outcomes. Obtaining eudaimonic outcomes (e.g., becoming healthier or more knowledgeable) is often an effortful process, involving overcoming challenges and barriers; this process likely produces negative hedonic outcomes such as strain, stress, anxiety, perceived uncertainty, and lack of control (Ethan and David 2011; Ryan and Deci 2001; Ryan et al. 2008). This conflict may turn consumers away from a transformative service or hinder their willingness to fulfil their coproduction role that is required for the attainment of the intended eudaimonic outcomes of the service (Anderson et al. 2016).

Notwithstanding the implication of this conflict for the viability of transformative service, extant research has not explicitly examined whether and how a transformative service can be effectively designed to overcome the conflict.

This conceptual work addresses this question in the context of the higher educational service. As a critical service that plays a central role in the personal development of students who are the future of society (Hennig-Thurau et al. 2001; Ostrom et al. 2015), the higher educational service should be designed to maximize its eudaimonic benefits (e.g., learning) (Chonko et al. 2002; Ng and Forbes 2009). But consumers (students) tend to prefer an educational service that is high in hedonic benefits, that is, one that is entertaining and that requires the least effort (Chonko et al. 2002; Gruber et al. 2010 ; Ng and Forbes 2009). Accordingly, the college educational service provides a fertile ground for scholars to examine the issue of how to overcome the conflict between the eudaimonic versus hedonic outcomes of a transformative service because this conflict is profound.

The general proposition is that the potential conflict between the eudaimonic versus hedonic outcomes of a transformative service can be overcome by designing the service with a view to help consumers experience active pleasure in the process of exerting efforts to advance their eudaimonic well-being.

To develop this proposition, I first draw on the view of pleasure developed in the well-being literature (Ryan et al. 2008) to argue that it is possible to transform the relationship between hedonic and eudaimonic outcomes from conflicting to complementary goals by replacing *passive pleasure* that is irrelevant or in conflict with eudaimonic well-being with *active pleasure* that is complementary to eudaimonic well-being. While passive pleasure is associated with the feeling of being relaxed and free from problems, active pleasure is associated with active engagement in an activity (Borgmann 2000; Csikszentmihalyi 1990). Passive pleasure helps individuals restore the physical and intellectual resources needed to continue to function, but do not directly contribute to the development of these resources (Csikszentmihalyi 1990). Moreover, excessive pursuit of passive pleasure promotes disengagement and the weakening of our faculties (Borgmann 2000). In contrast, active pleasure directly contributes to eudaimonic well-being by broadening people's thought-action repertories, which in turn serves to build their enduring personal resources (Fredrickson 2001; Fredrickson et al. 2008).

Second, I draw on the theory of optimal experience (Csikszentmihalyi 1990) to identify the conditions that facilitate simultaneous attainment of active pleasure and eudaimonic well-being (the conditions of the optimal experience). According to this theory, a person's experience will be most positive when the person perceives that the environment contains challenges that are manageable (i.e., that match the person's ability). When that happens, the person is not only enjoying the moment, but is also stretching his or her capabilities with the likelihood of attaining new skills and personal complexity (Csikszentmihalyi and LeFevre 1989). The pleasure that this state of experience produces is active pleasure (Csikszentmihalyi 1990). A closely related condition is motivation. Given that the person has the needed ability; it takes psychic energy to utilize that ability to cope with the challenges. Thus the person has to be willing to put out the efforts in order to achieve the optimal experience (Csikszentmihalyi 1997).

Third, I draw on Lengnick-Hall's (1996) model of human service to specify how elements of an educational service (standards, tasks, collaboration, feedbacks, and care) can be structured to create the conditions for the optimal experience to occur. Specifically, it is proposed that the service provider employ the following principles: 1/set high but achievable academic standards; 2/provide participants with intrinsically rewarding and appropriately challenging tasks; 3/ organize peer collaborations to encourage participants to work together to overcome the challenges; 4/ support participants' progress through accurate yet encouraging feedbacks and caring but not pampering. To the extent that the service provider implements the above principles effectively, s/he creates the structural conditions for the optimal experience- manageable challenges coupled with sufficient motivation to cope with the challenges.

Although the proposed model is developed in the context of the college educational service, it is extendable to other human service contexts, for as Lengnick-Hall (1996) suggested, the relationship between the service provider and consumer of the educational service captures the essence of the relationship between the service provider and consumers of human service in general. Future research will verify, qualify, and adapt specific features of the model to other human service contexts.

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Silence in Consumer Research: Interdisciplinary Overview and Research Agenda

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EXTENDED ABSTRACT

Consumption is filled with forms of silence. It is an object of desire and luxury when consumers seek periods of quietness in their busy lifestyle through meditation, outdoor times or noise-cancelling products (Canniford and Shankar 2013; Husemann and Eckhardt 2017). In the same line, silence conveys a sense of social distinction and uniqueness in the sober and quiet market environments (Dion and Borraz, 2017; Pracejus, Olsen and O'Guinn 2006). It is also a practice that allows consumers to control their relationships with and within the market through technology-mediated consumption and communication (Lee and Lee 2020). Conversely, silence can be a source of frustration and dissatisfaction for consumers when it symbolizes the absence or ignorance of their interlocutors (Hogreve, Bilstein and Mandl 2017). Polymorphous, silence in consumers' experience can be chosen or imposed, complete or relative, sought or avoided.

In contrast with its pervasiveness in consumers' experiences and practices, consumer research has dedicated limited attention to the concept of silence. This lack of conceptualization may find an explanation in the difficulty of defining silence in an exhaustive and comprehensible manner. Originating from the verb "*silere*", the word silence has indeed been used interchangeably to describe quiet soundscapes and the absence of communication in social interactions. This article thus aims to propose a conceptualization of silence grounded in theoretical and empirical articles from various disciplines including psychology, sociology and anthropology and to offer a propositional agenda for future research.

Based on a review of existing conceptualizations (Bruneau 1973; Goffman 1981; Kurzon 2007; Jensen 1973; Tannen and Saville-Troike 1985), we define three main forms of silence: 1) an *environmental silence* defined by the relative quietness of a setting, 2) a *relational silence* as a social and cultural practice, and 3) an *inner silence* relating to a reflective and quiet state of mind. Interestingly, among the numerous typologies, there is a shared acceptance that developing a unified theory or definition of silence would not only be impossible but also counter-productive (Acheson 2007). Rather, existing literature invites researchers to think metaphorically about silence in specific social settings (Jaworski 1997), as it relates to both a physical perception (absence of sound or voice) and to a social and cultural construct (tacit communication, discretion or avoidance, silencing) (Scott, 2018; Winter 2010; Zerubavel 2006). Going beyond the traditional dichotomies opposing silence to speech or sound (Kurzon 2007), and in line with research on crossmodal correspondences (Spence, 2011), silence can also be experienced through visual stimuli where pictures of empty beaches evoke quietness (Thurlow and Jaworski, 2010) and blank spaces facilitate information processing and convey a sense of distinction (Pracejus et al. 2006).

Across multidisciplinary literature, silence in its various forms has been found to perform a wide range of functions at the individual and collective levels. While consumer research has evaluated the positive impact of silence on consumers' attention and preference (Ang and Yeo 1999; Olsen 1994, 1997), further research in medicine and biology have shown that both environmental and inner silences increase positive physiological and cognitive responses to environmental stimuli (Venditti et al. 2020; Ben-Soussan et al. 2020). In interactions, silences are interpreted through the lens of cultural and social norms to reveal both positive and negative valences: silence between two individuals can be voluntary or oppressive (Cast-

agno 2008), a form of dominance or connivance (Basso 1970; Luke 1994), and consequently a source of either serenity or stress. Based on existing literature across disciplines, silence appears as a multidimensional concept characterized by its performativity (a present absence), its relativity (social and cultural construct), its ambiguity (verbal, non-verbal, voluntary/involuntary, noticed/not noticed), and its ambivalence (positive or negative consequences).

Although the concept of organizational silence (Morrison and Milliken 2000) has opened new avenues in management literature, its social and cultural nature seems evicted when it comes to consumers, limiting our understanding of its potential functions. In contrast to the multiplicity of definitions in other domains, so far silence has been only indirectly addressed in consumer research. In sensorial marketing, the sonic atmosphere of servicescapes (Bitner 1992) has been an object of study since the 1960s (Smith and Curnow 1966) to understand the effects of sound and music on consumers' cognitive, emotional and behavioral reactions. But despite the numerous characteristics under analysis (source (Sayin and al 2015); tempo (Milliman 1982); complexity (North and Hargreaves, 1996); congruence (Areni and Kim, 1993); volume (Mehta, Zhu and Cheema 2012)), literature keeps relatively silent about silence. Even when cited in titles, its analysis is limited as a control variable to determine sound effects (North and Hargreaves 1999). Secondly, and in line with our typology, silence also appears in relations between consumers and firms where it defines the absence of communication. Mostly based on justice theories and focusing on the recovery process (Khamitov, Grégoire and Suri 2019), this research observes organizational responses' linear effects on consumers' justice perceptions and following satisfaction (Gelbrich and Roschk 2010). With less focus on interaction and micro-practices, silence, when addressed, is often assimilated to customer's waiting time and measured by its duration. Consequently, and similarly to research in sensorial marketing, silence seems to operate in a mechanical way affecting consumers' perceptions negatively.

In conclusion, the multidimensional conceptualization suggested by this multidisciplinary review implies that current approaches in marketing have limited conceptually and methodologically the potential usage of silence as a way to communicate and to organize social spaces and interactions. By examining the broader functions of silence, we also offer a non-exhaustive research agenda to interrogate its potential meaning and value in consumers' experience.

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The Principle of Discrete Sensitivity

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EXTENDED ABSTRACT

Understanding how people perceive and respond to magnitude differences is one of the most fundamental areas of research across various disciplines of psychology, such as psychophysics, cognitive psychology, and judgment and decision-making. Perhaps the most influential finding from this stream of research is the principle of diminishing sensitivity, which postulates that the impact of a difference in two amounts diminishes as a function of the distance from the reference point (typically set at zero). Historically, the principle of diminishing sensitivity can be traced to the pioneering experimental research of Ernst Heinrich Weber (1834). In his experiments, Weber observed that participants were less likely to notice the same difference in weight between two objects (e.g., a difference of 10 grams) when the objects were relatively heavier (e.g., when the weight of the objects was close to 100 vs. 1,000 grams). Weber's findings sparked a great amount of research in social sciences that invoked diminishing sensitivity to describe and predict how humans make judgments and decisions.

Importantly, diminishing sensitivity is a central tenet of dominant theories of decision-making, such as Prospect Theory (Kahneman and Tversky, 1979) and its advancement, Cumulative Prospect Theory (Tversky and Kahneman 1992). Diminishing sensitivity is incorporated in Prospect Theory's value function for both gains and losses. For example, for gains, the pleasure of moving from $0 to $100 is larger than the pleasure of moving from $100 to $200, whereas the pleasure associated with the latter is larger than the pleasure of moving from $200 to $300. Similarly, for losses, the pain of moving from 0 to –$100 is larger than the pain of moving from –$100 to –$200, whereas the pain associated with the latter is larger than the pain of moving from –$200 to –$300. The impact of these theories on psychological research has been profound. To date, Kahneman and Tversky (1979) and Tversky and Kahneman (1992) have collectively amassed close to 80,000 citations (according to Google Scholar).

Interestingly, research on product choices has offered evidence that may suggest the need to reconsider the principle of diminishing sensitivity and, by extension, Prospect Theory's value function. Specifically, Shampanier, Mazar, and Ariely (2007) studied people's choices between a cheaper chocolate and a more expensive alternative as a function of price. The authors observed that choice of the cheaper chocolate did not change significantly when its price decreased from 2¢ to 1¢ and the alternative's price decreased from 27¢ to 26¢. However, they observed that choice of the cheaper chocolate increased dramatically when its price decreased from 1¢ to 0 and the alternative's price decreased from 26¢ to 25¢. While these findings are to some extent consistent with diminishing sensitivity, Shampanier et al. (2007) offered an alternative account that could better explain their results. Specifically, they proposed the existence of a discontinuity around zero in Prospect Theory's value function. Similar discontinuities have been reported in other domains besides product choices, such as perceptions of probabilities (Tversky and Wakker 1995; see also Fox, Rogers, and Tversky 1996; Wu and Gonzalez 1999), valuations of goods or other amounts (Desvousges et al. 1993; Frederick and Fischhoff 1998; Kahneman and Ritov 1994), intertemporal decisions (Frederick, Loewenstein, and O'Donoghue 2002; Jackson and Yariv 2014; Laibson 1997), as well as moral decisions (Berman and Kupor 2020).

Building on this evidence, in this paper, I propose the existence of a general discontinuity around zero that spans multiple domains of decision-making. To accommodate this discontinuity, I advance a novel principle, which I coin discrete sensitivity. I argue that discrete sensitivity may often better reflect people's valuations of outcomes compared to diminishing sensitivity. According to the principle of discrete sensitivity, people are sensitive to the presence versus absence of an outcome, but are rather insensitive to the scope of the outcome when that outcome is present. Thus, discrete sensitivity implies that the impact of a change in outcomes on people's evaluations is characterized by a discontinuity around zero. For example, according to discrete sensitivity, the impact of a $100 increase in losses is felt dramatically more when moving from 0 to –$100 than when moving from –$100 to –$200. Further, according to discrete sensitivity, the impact of a $100 increase in losses is not experienced differently when moving from –$100 to –$200 compared to when moving from –$200 to –$300 or when moving from –$300 to –$400. Thus, discrete sensitivity may be conceptualized as a special type of diminishing sensitivity whereby people are sensitive to changes in outcomes solely when those changes involve the presence versus absence of an outcome.

I provide evidence for discrete sensitivity 8 well-powered pre-registered experiments that employ modified versions of prominent problems across a wide range of domains. Specifically, my experiments provide evidence for discrete sensitivity in valuations of outcomes that involve the loss of human life (Experiment 1), valuations of financial losses (Experiment 2) and gains (Experiments 3-4), in purchase decisions (Experiment 5), in evaluations of goal-related performance (Experiment 6), in evaluations of intertemporal outcomes (Experiment 7), and in evaluations of outcomes associated with moral harm (Experiment 8). By doing so, my experiments trace multiple empirical regularities that were uncovered by research in social sciences to a common fundamental principle—discrete sensitivity.

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The Impact of Pandemic Cues on Consumer Preference for Anthropomorphic Products

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EXTENDED ABSTRACT

Anthropomorphism refers to the attribution of human characteristics to non-human entities (Epley, Waytz, and Cacioppo 2007), which has been widely used in marketing. Prior research mainly demonstrates that anthropomorphism strategy could result in more favorable attitudes towards products (Aggarwal and McGill 2007). However, few studies have concentrated on the detrimental effect of anthropomorphism. Recently, studies focusing on this question found that when consumers in socially crowded contexts or under high distinctiveness motives, anthropomorphism strategies might backfire (Puzakova and Kwak 2017; Puzakova and Aggarwal 2018). Although these studies provide meaningful insights, the effects of macro-environmental factors such as pandemics on consumer preference for anthropomorphic products remain unclear. In this research, we defined pandemic cues as information related to the spread of contagious diseases that could evoke concerns about being infected (Galoni et al. 2020), for example, the news of COVID-19. Through a set of four studies, we aim to investigate when and why will pandemic cues affect consumer preference for anthropomorphic products.

When feeling vulnerable to contagious diseases, consumers would generate instinctive reacting behaviors to avoid being infected (Schaller and Park 2011), for example, a heightened behavioral avoidant tendency in response to others (Mortensen et al. 2010). Therefore, we propose that pandemic cues can facilitate social withdrawal, which leads to the avoidance of interpersonal contact. Since consumers can obtain quasi-social experiences with anthropomorphic products and apply social attitudes to the objects in anthropomorphic terms (Chen, Wan, and Levy 2017; Kim and McGill 2018), the social withdrawal evoked by pandemic cues would lead consumers to avoid interaction with anthropomorphic products, thus in turn reduce their preference for anthropomorphic products (Puzakova and Kwak 2017). Moreover, we examine two boundary conditions from both consumer and product dimensions: power state and product format.

Study 1 ($N = 229$) provided initial evidence of the proposed pandemic effect through a 3 (pandemic cue vs. accident cue vs. control) between-subjects design. The accident cue condition was employed to demonstrate that if the threat is not related to interpersonal interaction, this effect will be mitigated. First, participants were randomly assigned to read one of three news: Covid-19, air crashes, and a dental technique. Next, participants were asked to indicate their preferences between one high-anthropomorphic versus one low-anthropomorphic storage box. As expected, participants in the pandemic cue condition reported lower preferences for anthropomorphic products compared with the other two conditions.

Study 2 ($N = 218$) replicated the detrimental effect of pandemic cues by using a real choice and validated the mediating role of social withdrawal. We used a 2 (pandemic cues: salient vs. without) × 2 (anthropomorphic design: high vs. low) between-subjects design. The pandemic cues manipulation was similar to study 1. Next, participants were presented with a volunteer recruitment advertisement from an environmental NGO. In both conditions, the contents were the same, but we manipulated the degree of anthropomorphism by changing the association logo and slogan. Participants then indicated whether they would join the association and those who chose to join provided their phone numbers and email addresses for future arrangements. Finally, we measured social withdrawal. The results showed that participants in the high-anthropomorphic condition were less likely to join after being exposed to pandemic cues. However, the results were reversed in the low-anthropomorphic condition, which can be explained by the mortality salience induced by the pandemic cues (Fritsche et al. 2010). We then conducted a moderated mediation analysis (Model 8). The 95% confidence interval of the index of moderated mediation excluded zero (95% CI = -.84 to -.43), indicating social withdrawal as a mediator.

The social distance theory of power suggests that high-power consumers feel more subjective distance than low-power consumers (Magee and Smith 2013), which indicates that the former may feel more secure in social interactions. Therefore, we conducted study 3 ($N = 230$) to examine the moderating role of power state, by using a 2 (pandemic cues: salient vs. without) × 2 (power state: low vs. high) between-subjects design. We first manipulated power state with a writing task adapted from Galinsky et al. (2003). Then, we used infectious disease insurance advertisements or property insurance to manipulate pandemic cues. Finally, participants were instructed to choose their preferred advertisements between high-anthropomorphic versus low-anthropomorphic battery advertisements. The results showed that in the low-power state condition, a smaller proportion of the participants chose the high-anthropomorphic advertisements after exposure to pandemic cues. In contrast, there was no such difference in the high-power state condition.

Study 4 ($N = 192$) provided further support for the proposed process by examining the moderating role of product format. We argued that this pandemic effect is only likely to manifest when the product carries the potential risk of infection. Since physical contact does not exist in digital products, the activated behavioral immune system would not affect anthropomorphic products in digital formats as they are non-threatening objects (Atasoy and Morewedge 2018). Hence, we employed a 2 (pandemic cues: salient vs. without) × 2 (product format: digital vs. physical) between-subjects design in Study 4. We first manipulated pandemic cues by a popular science article. Next, participants were instructed to imagine they were about to receive a digital or a physical membership card. Then, participants indicated their preferences for two card designs with different degrees of anthropomorphism. We also measured social withdrawal. Our findings supported that the detrimental effect of pandemic cues would be mitigated for products in digital formats and validated social withdrawal tendency as the underlying process.

This research first contributes to the anthropomorphism literature by identifying pandemic cues as a macro-environmental factor that could significantly shift consumer preference for anthropomorphic products. Second, we introduced a new scenario where anthropomorphism could backfire. Third, our research advances the extant literature on pandemics by extending its effect to the product preference domain. Managerially, we inform marketers should be cautious about using anthropomorphism strategies during a pandemic or when designing pandemic-related products. More importantly, we suggest that marketers consider the target consumers' power state and product formats when adopting an anthropomorphism strategy.

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The Impact of Online Review Linguistic Features on Reviewers and Readers

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EXTENDED ABSTRACT

This project explores how the linguistic features (emotionality versus cognition) expressed in online review text predict reviewers' attitude toward their consumption experience and readers' reactions toward the review. We also offer review system design guidance for companies and online platforms with the aim to help benefit both review writers and readers.

A typical online review includes both a numerical rating score, usually ranging from 1 (Poor) to 5 (Excellent), and reviewers' open-ended comments. In this research, we extract from these comments emotion and cognition-related linguistic features. We use text-processing procedures to categorize reviews as being primarily emotion- or cognition-based depending on whether they primarily contain emotion or cognition related words. These procedures measure the degree to which an individual's attitude and reaction are based on emotions or on beliefs, causality, inference, and reason (Robinson et al. 2017; Rocklage, Rucker, and Nordgren 2018).

We use a variety of different natural language processing techniques to extract two linguistic features – emotion and cognition – in online reviews. We first calculate a linguistic feature called *emotionality*, using the Evaluative lexicon 2.0 (Rocklage et al. 2018). This method treats cognition and emotion as two ends of a spectrum, where a higher (lower) score means the reviewer wrote the review with more emotion (cognition). We also use Language Inquiry and Word Count (LIWC; Pennebaker, Booth, Boyd, and Francis 2015) to extract separate measures of emotion and cognition.

We test our Hypothesis in seven studies, using a mix of field and laboratory data. Study 1 measures the correlation between linguistic features in TripAdvisor museum reviews and numerical ratings. Study 2 analyzes data from Yelp where review readers can evaluate the review on three dimensions (i.e., useful, funny, and cool) to examine whether linguistic features predict readers' review evaluations, while controlling for review rating. Study 3 replicates the results of previous studies in an experimental setting with more control. In Study 4 we directly manipulate whether reviews are more emotion or cognition-related to test for causality. Study 4 also examines the mediating role of emotion/cognition linguistic features on reviewers' attitudes and readers' reactions. Finally in studies 5a and 5b we introduce a review system intervention – review text and rating order – and show how order affects both linguistic features and writer and reader reactions.

Through the analysis of over 100,000 online reviews and experimental data, this paper finds that the degree to which reviewers' review text reflect primarily emotions or cognitions not only correlates with their numerical ratings of the experience, post review-writing feelings, and revisit intentions, but also predicts readers' reactions to the review. Specifically, reviewers who recount their consumption experience primarily based on their emotions (cognitions) tend to give higher (lower) numerical ratings to the experience, feel better (worse) after writing the review, and exhibit higher (lower) revisit intentions. Readers are more (less) likely to give emotion-based (cognition-based) reviews reaction responses. The role these two linguistic features play in driving these effects are examined using mediation. Finally, two review system design interventions aimed to improve customer satisfaction as well as the average numerical rating of companies' products or services are tested: a) encouraging reviewers to express more emotions rather than cognitive processes in review writing and b) prompting reviewers to write open-ended comments before giving a numerical rating of their experience.

Theoretically, the current research contributes to the literature on online word-of-mouth by showing that emotionality positively predicts reviewers' attitude and reactions (e.g., numerical rating, post-review feelings, revisit intentions, etc.) and readers' reactions. We also show that text is a stronger predictor of reader-related consequences than are numerical ratings. Practically, our results suggest that companies and platforms can provide their consumers instructions or templates for how to write reviews (e.g., provide suggestive words to use in the reviewers to influence writers' tendency to use emotion or cognitive linguistic features, write about the experience first before providing a numerical rating) that will have a positive impact on both review writers and readers.

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Punish or Permit? Predictors of Consumers' Reactions to Purity Violations

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EXTENDED ABSTRACT

During the ongoing coronavirus pandemic, there has been a marked increase in preference for products and services that mitigate the threat of getting and spreading the highly contagious coronavirus (e.g., health and hygiene products; contactless payment systems), as well as products that are free of contaminants (e.g., organic produce). Similarly, recent research finds that pathogenic cues increase preferences for products that have not been handled or used by others (Huang, Ackerman and Sedlovskaya 2017; Huang and Sengupta 2020). Together, these findings suggest that when pathogen threat is salient, consumers become more concerned with keeping their environments and bodies free of contaminants, or, in a word, purity.

Importantly, purity is more than just a physical concern—it is a moral one. Rooted in the evolutionary need to avoid toxins, parasites, and other dangerous pathogens, moral purity is concerned with keeping the body and soul free from physical *and* moral contaminants (Haidt and Joseph 2007). To this end, purity-based norms govern behaviors with a high risk of pathogen transmission (e.g., food preparation, hygiene, and sexual contact), and violating these norms is met with moral condemnation.

Crucially, purity violations are not limited to the social domain. Brands, employees, and public figures are all guilty of some pretty gross behaviors. Thus, in this research, we examine whether the apparent relationship between pathogen threat and increased preference for products associated with physical purity transfers to moral purity and greater condemnation of purity violations. We propose that pathogen threat will amplify condemnation of purity violations, but this will only occur for those who grew up wealthy. Because wealthy childhood environments prioritize individual freedom over social coordination (Hoff, Laursen and Tardif 2002; Kraus et al. 2012; Weininger, Lareau and LaRossa 2009) and because fighting off infectious disease is an adaptive challenge that necessitates a coordinated, collective response (Gelfand et al. 2021), we reason that people with wealthier childhoods may feel ill-equipped to manage pathogen threats. Consequently, when pathogen threat is salient, they should become especially sensitive to violations of norms with pathogenic implications.

Seven studies, conducted pre- (studies 1-4) and mid-pandemic (studies 5a, 5b, and 5c), provide experimental and correlational evidence for this prediction. In **study 1**, 180 American MTurk workers (N = 180) were randomly assigned to one of two between-subjects conditions (threat: pathogen vs. control). Threat was manipulated by having participants view either a slideshow about disease in America (pathogen) or about architecture (control; Hill, Prokosch and DelPriore 2015). Next, participants reported their condemnation of a number of purity violations (Horberg et al. 2009) and completed an established measure of childhood SES (Griskevicius et al. 2011). As predicted, pathogen threat increased condemnation but only among participants with wealthier childhoods.

Study 2 investigated whether study 1's findings would replicate in a marketplace setting. American MTurk workers (N = 180) were randomly assigned to one of two between-subjects conditions (threat: pathogen vs. control). Threat was manipulated using the same manipulation as in study 1. Then, participants read a fictional article about a company that recalled several thousand jars of peanut butter because its new packaging featured "characters that were taken from a pornographic cartoon." Then participants reported their attitudes toward the company and their childhood SES. As predicted, pathogen threat decreased attitudes but only among participants with wealthier childhoods.

Study 3 and **study 4** were, respectively, designed to test whether the observed effect was unique to pathogen threat and purity violations vs. threat and moral violations more broadly. In **study 3**, 180 American MTurk workers were randomly assigned to one of two between-subjects conditions (threat: pathogen vs. *negative* control). To manipulate threat, participants were either asked to rate how interesting they found five different facts related to germs and/or illness (pathogen) or accidents and/or death (negative control) embedded in five unrelated facts. Then, participants read the same article used in study 2. As predicted, pathogen threat significantly decreased attitudes for participants with wealthier childhoods and unexpectedly, significantly increased attitudes for participants with poorer childhoods.

In **study 4**, 240 American MTurk workers were randomly assigned to one of four conditions in a 2 (threat: pathogen vs. control) 2 (violation: purity vs. loyalty) between-subjects design. After viewing the pathogen threat slides manipulation described in study 1, participants read an article about either a marketplace purity violation or a marketplace loyalty violation. Analyses revealed the predicted three-way interaction: the pathogen threat by childhood SES interaction was only significant in the purity condition; the interaction did not significantly predict attitudes in the loyalty condition.

Study 5a, 5b, and 5c tested whether perceived controllability mediates the effect of pathogen threat and childhood SES on condemnation of purity violations across social (5a), marketplace (5b), and political (5c) domains. In addition, as all of these studies were conducted in April 2020, instead of manipulating pathogen threat, we measured perceived threat of COVID-19. In all three studies, regression analyses revealed that perceived threat of COVID-19 and childhood SES interacted to predict condemnation. Further, in each study, perceived controllability mediated the effect of the interaction on condemnation. For participants with childhood SES at or above the mean, increasing COVID-19 threat predicted lower controllability, which then predicted greater condemnation.

The current research makes a number of contributions. First, this research extends the literature on consumer morality by identifying novel situational and individual factors that influence consumers' reactions to moral violations. Second, we contribute to growing interest in how pathogen threat affects consumer behavior and are the first to consider how pathogen threat influences consumers' condemnation of moral violations. Third, by identifying childhood SES as a novel moderator of the effects of pathogen threat, we provide further support for the notion that the effects of early childhood environments can have long-lasting effects on consumer behavior, especially in the face of threat (Mittal and Griskevicius 2016; Mittal, Griskevicius and Haws 2020; Whelan and Hingston 2018).

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Offensive-Stereotyping Ads: Disidentification Tendency in Action

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EXTENDED ABSTRACT

Offensive-stereotyping advertising includes insulting those low in social power (Dahl et al., 2003, Waller et al., 2004). We examine the short and long-term effects of such offensive ads on the consumer response of discriminated individuals. Offensive ads affront discriminated groups, such as women and Blacks (Magee and Galinsky, 2008; Waller et al., 2013). Women are demeaned compared to men, specifically in the use of sex-role stereotypes (Sengupta and Dahl, 2008). Blacks are often represented in ads in demeaning ways (Cohen-Eliya and Hammer, 2004). Such ads might threaten the 'self' of the offended individuals, causing an initial negative emotional reaction of anxiety, leading to fight-flight-freeze reactions (Bracha et al., 2004). Over time, we expect that this threat will decrease while the ad's content will be remembered (Kumkale and Albarracin, 2004), yielding stigma management actions. Avoidance response is activated when trying to reduce the self-threat when people accept the public representation of the group, but do not accept the stigma as applied to themselves, termed disidentification (Elsbach and Bhattacharya, 2001; Miller and Major, 2000). Formally, we expect:

Hypothesis 1: *Feelings of racial group discrimination when exposed to the offensive ad will moderate the relationship between group identification and purchase intentions in the long-term (not the short-term).*

Hypothesis 2: *Feelings of gender group discrimination when exposed to the offensive ad will moderate the relationship between group identification and actual brand choice in the long-term (not the short-term).*

METHOD

Study 1

Sample. 347 Prolific respondents (treatment=201: 103 White, 98 Black; control=146: White 80, Black 66). Participated in a longitudinal experiment on race-offensive ads promoted a hypothetical brand, "Bubble Soap".

Design. mixed 2 (race) x 2 condition (control, treatment) x 2 time-points (exposure: short (immediately), long-terms (10 days after exposure) design.

Measures. (1-7 scale). Perceived ads' offensiveness level of ad's offensiveness (Alwitt and Prabhaker, 1994). Group identification: asking "At what level do you identify with the race group you belong to? (Postmes et al., 2013). Feelings of *race* group discrimination: asking "How often have you felt that people of your race group are discriminated against in our society?" (Szymanski and Balsam, 2011). Consumer response was measured using purchase intentions - asking "If I want to buy this product, I'll probably buy this brand" (MacKenzie et al., 1986; Bergkvist and Rossiter, 2009). Last, we collected demographics.

In the long-term, we also measured brand awareness by asking "What is the brand that appeared in the ad from 10 days ago?" and memory of the ad's content by asking to describe the ad (Chessa and Murre, 2007).

Results and discussion. The treatment group showed greater perceived offensiveness of the ad than the control group ($M_{control}$=1.29, SD=.95; $M_{treatment}$=5.64, SD=2.18). In both the conditions, Black participants felt more discriminated against than White participants in both the short-term ($d_{control}$=-.35, SE=.27, *p<.001*; $d_{treatment}$=-3.10, SE=.26, *p<.001*) and long-term ($d_{control}$=-3.65, SE=.26, *p<.001*; $d_{treatment}$=-3.85, SE=.25, *p<.001*), suggesting they are indeed perceived as having lower social power. As predicted, feelings of group discrimination moderated the group identification-purchase intention relationship, but only in the treatment condition in the long-term ($B_{Group\_identificationXdiscrimination}$=-.10* (.05), *p<.05*(. The interaction effect was not evident in the control group in the long-term ($B_{Group\_identificationXdiscrimination}$=-.03 (.03), *p=.33*(. As expected, in the short-term, this interaction was not significant, neither in control ($B_{Group\_identificationXdiscrimination}$=-.033 (.032), *p=.29* (, nor in the treatment condition ($B_{Group\_identificationXdiscrimination}$=-.043 (.040), *p=.29*(. The disidentification tendency is evident only in the treatment group and in the long-term. The triple interaction between group identification x feelings of group discrimination x short vs. long-term was significant (B=-.36 (.10), *p<.001*(.

Study 2

Sample. 221 MBA students (treatment=141: 49 men, 92 women; control=80: 27 men, 53 women). *Design.* a mixed 2 (gender) x 2 conditions (control, treatment) x 3 exposure-times (baseline, short-term, long-term) design. Low and high-discriminated groups (men and women, respectively) were randomly exposed to control vs. treatment ads.

Measures. As in Study 1, except consumer response which was actual brand choice, and group discrimination referred to gender (not race). Long term measurement was extended to a month after exposure.

Results and discussion. The treatment differed from the control in terms of perceived ad's offensiveness ($M_{control}$=2.72, SD=1.60; $M_{treatment}$=5.50, SD=1.70, t(218)=-11.87, *p<.001*). Feelings of group discrimination were a significant moderator in the group identification-actual brand choice relationship and only in the treatment condition in the long-term, as expected in the predicted direction ($B_{Group\_identificationXdiscrimination}$=-.26* (.11), *p<.05*(. This relationship in the long-term was more negative for the discriminated groups than for the non-discriminated groups, similar to the pattern found in Study 1. This interaction effect was not evident in the control group in the long-term ($B_{Group\_identificationXdiscrimination}$=.068 (.20), *p=.74*(. As expected, when examining the model in the short-term, this interaction was not significant neither in control ($B_{Group\_identificationXdiscrimination}$=.21 (.24), *p=.37*) nor in the short-term treatment condition ($B_{Group\_identificationXdiscrimination}$=.01 (.10), *p=.92* (. Like Study 1, Study 2 shows the disidentification tendency is evident only in the treatment group in the long-term. The triple interaction between group identification x feelings of group discrimination x short vs. long-term was significant (B=-.28 (.14), *p<.05*(.

Conclusion

Offensive ads have a dynamic effect that changes over time and differs between discriminated-low-power and non-discriminated-high-power group members. In the short-term, discriminated group members exposed to offensive ads will respond with a fight-flight-freeze resections, resulting in lower consumer responses (purchase

intentions and actual brand choice). However, in the long-term, when the negative affective reaction will recede, they will process the content of the message, leading to low disidentification with their lower power group, which will result in higher consumer responses. Our contributions are addressing the *time* as a player in impacting consumer response; quantifying the response over time of *different consumer segment*s based on their sense of group discrimination; *integrating* literature about stigma management, approach and avoidance, and fight-flight-freeze, into literature in consumer behavior.

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Brand Hive Mind: Building the Bitcoin Decentralized Brand

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EXTENDED ABSTRACT

"Bitcoin is resilient. Bitcoin is principled. Bitcoin is native to internet ideals. And it's a great brand."[1] – Jack Dorsey (Twitter)

Bitcoin is a brand without a manager or a C-suite. It is the quintessential product of – and *for* – the digital age. The value of this decentralized brand continues to grow despite a lack of central authority; and it has become a cultural icon with global brand recognition (Holt 2004). All of this is happening without a traditional marketing apparatus. While many brands are co-produced (Schouten and McAlexander 1995; Holt 2002; Muñiz and O'Guinn 2001, Schau, Muñiz, and Arnould 2009; Diamond et al. 2009; Brown, McDonagh, and Shultz 2013; Parmentier & Fischer 2015; Swaminathan et al. 2020), Bitcoin takes branding toward extreme decentralization where the brand *itself* is decentralized. This conceptual paper is based on a longitudinal study of Bitcoin since 2014 drawing on 65 in-depth interviews, archival data, netnography, and fieldnotes from participant observation. We focus on Bitcoin as a decentralized brand with a *hive mind*. After the financial meltdown of 2008, a Bitcoin white paper was posted by a pseudonymous founder using the name Satoshi Nakamoto (Humayun & Belk 2018). From a value of zero in 2009, when the blockchain was launched, the cryptocurrency reached an all-time-high of $ 64,000[2] USD before tempering down in early summer 2021. While there have been growing signs of legitimacy, from PayPal allowing its customers to trade Bitcoin, controversial moves like El Salvador accepting it as a legal tender in 2021, to Elon Musk accepting then rejecting Bitcoin payments for Teslas – the fact remains that Bitcoin has grown tremendously in the last few years and its key innovation – the blockchain – has spanned thousands of cryptocurrencies.

Bitcoin has evolved a global brand ecosystem through what we are calling the *hive mind*. Kelly (1994, 25) describes the hive as "irredeemably social, unabashedly of many minds, but it decides as a whole when to swarm and where to move. A hive possesses an intelligence that none of its parts does…where distributed, headless, emergent wholeness becomes the social ideal." Kozinets et. al (2008) categorize online consumer communities and their collective intelligence as either hives, crowds, mobs, or swarms. They define *hives* as "self-organizing, industrious, diligent" with an intention to reach high and "produce quality product" (346). We extend these analyses by exploring how the *brand hive mind* produces a collective social memory of the decentralized brand through its varied narratives. The hive mind allows Bitcoin to survive and thrive in crisis after crisis without anyone at the helm.

Given that decentralized brands do not have a central management team, they often evolve through multiple stabilizing and destabilizing forces which serve as *metamorphic moments* that help shape the brand hive mind. Destabilizing forces include the multiple crises which have supplied a steady stream of news stories that stimulate new brand narratives, populations, and myths. Stabilizing forces include the developers, miners, the connective tissue of social media, content creators, meetups/conferences, journalists, entrepreneurs, cryptocurrency news media, the legitimacy halos of endorsements or use by business leaders and celebrities, associations, companies trying to co-brand with Bitcoin, memetic artworlds, and Bitcoin branded artifacts such as hats and t-shirts circulating in the ecosystem: all contribute to shaping the brand.

There is cross-pollination among various cryptocurrency brand hive minds as new cryptocurrencies emerge. Not unlike worker bees working in a hive, those contributing to their favoured cryptocurrency form symbiotic relations with others in the hive mind. These brand hive minds also feed off of each other. For example, the crypto news media ecosystem that arose to defend Bitcoin's reputation in its early years, helped sustain various cryptocurrencies besides Bitcoin. Decentralized brand hive minds assembled around a cryptocurrency like Bitcoin are brand communities (Muñiz and O'Guinn 2001) at their core and connect with brand publics (Arvidsson and Caliandro 2016) which in turn help consolidate the overall brand ecosystem.

Today, there are movements underway to return the internet to its early roots of a pseudonymous economy where the boundaries between economic and personal lives are maintained and where there is freedom of speech. There is renewed discussion about having a "decentralized web" Web 3.0 that is a kinder implementation rectifying the mistakes that social media has unleashed. Brand hive minds are likely to grow in the coming years with the rapid growth in DAOs (Decentralized Autonomous Organizations) which are a product of the crypto-ecosystem (DuPont 2017, Hsieh et. al 2018). There are emerging means of monetizing value created by fan/brand communities through NFTs (Non-Fungible Tokens), rapid experiments in DeFi (Decentralized Finance) where oracles allow for greater transparency creating newer financial markets. While many of these endeavors are still experimental, they pose important questions about how brand hive minds will operate in the coming years. What do decentralized brand hive minds offer? Will consensus solve all governance problems that arise? How will brand hive minds negotiate conflicts and coordination issues? Are they only disruptive in terms of the economy and ways of doing business or do they represent a threat to capitalism, corporate control, or other taken-for-granted institutions? The answer no doubt remains in how institutions like governments engage with them. But as Belk (2020, 168) put it "welcome to the era of distributed brand ownership…".

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Mythologizing the Dark Knight: A Process Enquiry

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EXTENDED ABSTRACT

The past two decades have seen a considerable increase in franchise movies (Garrahan, 2014). Preece et al. (2019) showed their contribution to the branding theory. In this article, we study one of the oldest movie franchises, Batman, to understand how it created value, why it failed sometimes, and how it adjusted to revive itself.

We adopt a historical study and discourse analysis approach, where triangulation is achieved by comparing narratives from multiple sources. Our sources include documentaries (15), newspaper articles (30+), Published interviews of movie producers and directors (12), memoirs (3), books on Batman (8), class assignments (4), and online forums (2000+ posts).

From the data, three significant value co-creation practices (Corsaro et al., 2014) emerge: Production Practice (PP), Creation Practice (CrP), and Consumption Practice (CP). CrP consists of the phases of movie-making from its conceptualization to creating prints; PP essentially involves financing, marketing, and other logistic support; while CP includes direct consumption, giving feedback, participating in fan movements, etc. In a movie franchise, these practices are replicated through a definitive process, making movies the ideal medium for mythmaking (McConnell, 1979).

In any franchise, mythos mediates the interaction between PP & CrP and affects CP - through *externalization*. In the process, certain elements are added/updated to the mythos – through *internalization*, i.e., internalization and externalization are interdependent subprocesses (Figueiredo & Scaraboto, 2016, p. 528), originating and terminating at the mythos. Essentially, a movie is an outcome of interactions not only between spatiotemporal practices (i.e., PP, CrP, and CP) but also between other nonhuman elements (past movies, blogs, comics, etc.) which create the mythos. The resultant "mesh of practices and material arrangements," i.e., the movie, then becomes what Schatzki (2002) calls the "Site of the Social."

Either of these adjectives unavoidably gets associated with Batman. Out of various meanings for the word 'camp' (Sontag, 2018), the most applicable here is "shockingly vivid color schemes, tongue-in-cheek dialogues and a dual address to both children and adults" (Brooker, 2012, p. 178). On the other hand, 'dark' refers to "that grim crime fighter driven by an obsession born of tragedy" (Brooker, 2012, p. 174), depicted through the *noir* tone of the movie, realistic portrayal of the characters, and fallibility of the hero.

Batman appeared in 1939 in the comic version; Batman emerged as a 'dark' character. However, to cater to the "kiddie" (Scivally, 2011) audience for a comic book superhero, the producers adopted a camp version. Still, the repeated failure of these endeavors prompted the creators to bring back the dark version of Batman. Once financial success was achieved, the darkness remained a persistent theme.

Producers archetypically look for financial profits, actively seek customer feedback, and oblige only when profit is at stake; Creators, on the contrary, could care less about finances but would not compromise their creative expression because they want to "leave their personal stamp on virtually [e]very movie they make" (Kuhn & Westwell, 2012; Simonton, 2004, p. 170); and the Audiences predominantly expect that their overall consumption experience should be worth their psychological and monetary investments (Holbrook, 1999; Sood & Drèze, 2006).

The comic version of Batman engaged the PP and CrP in establishing the foundational elements of the Batman ethos. While they formed the essential 'core' of the Batman franchise and were repeated every time, some other peripheral elements were introduced and dropped almost immediately. Other elements appear with irregular frequencies and occupy the space between the core and the periphery, e.g., the 1960s and 90s regularly experimented with alternate 'dark' and 'camp' themes. This establishes that mythos is not an abstract concept but has a particular structure. It consists of time-tested dimensions at the "core" that give identity to the site. Hence they also serve the "author function," which helps in identifying those "empty spaces that have been masked by [nonaccidental] omission" (Foucault, 1977, p. 135). On the other hand, non-crucial dimensions stay at the periphery, being weakly bonded to the site. Thus, the structure of mythos resonates with the loosely coupled system between hierarchical levels (Orton & Weick, 1990).

We propose that mythos is a "taste regime [which] … provid[es] the teleoaffective structure of a practice that orders objects, meanings, and doings" (Arsel & Bean, 2013, p. 902). It is a knowledge resource that is "continually regenerated through interaction and exchange" (Akaka et al., 2012, p. 32) to create value-in-context at each site (Chandler & Vargo, 2011). Finally, it is also a repository of "shared symbols, embedded within broader institutions, [that] guide[s] the enactment of value cocreation practices—normative, representative, and integrative — and enable effective coordination of interactions, communication of information, integration of resources, and ultimately, evaluation of value" (Corsaro et al., 2014, p. 7).

Our findings suggest that interaction logics through CP, CrP, and PP play a crucial role at all the steps of systematic value creation – enactment (e.g., recruitment of director), transvaluation (e.g., presentation on screen), assessment (e.g., critical reviews), and alignment (e.g., planning for next movie). The movie acts as a "context" where "resource integrators" (Vargo & Lusch, 2011) negotiate their practices to co-create the value. As shown above, the resource of "theme" has been utilized in alternate ways till 1998. However, its consistently same use (i.e., dark portrayal of Batman) in the past two decades has made it a core dimension of mythos and affected all the practices thenceforth. This paper brings in a unique type of circulation – circulation through disintegration. While the franchise model tries to maintain uniformity, the interplay of logics brings variety. The concept of mythos allows it by de-contextualizing the narrative element during transvaluation and re-contextualizing it during the alignment phase. Such conceptualization also overcomes the limitation of the practice theory of excluding non-routinized actions (Figueiredo & Scaraboto, 2016) because every activity impacting the story gets transvalued in the mythos.

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Can't Wait to Lose: The Desire For Goal Closure Increases Impatience to Incur Costs

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EXTENDED ABSTRACT

Consumers' impatience is often portrayed as the preference to receive gains sooner or to postpone costs for later. But can consumers also be impatient to incur costs *sooner*? We explore several common situations in which consumers are impatient to incur costs. We find that consumers prefer to pay and work more sooner rather than less later. This preference would seem anomalous in the context of both standard and behavioral models of time discounting, as it would suggest that consumers have *negative* time discounting. We propose that this behavioral pattern can result from a desire for goal closure.

Consumers who desire closure may be impatient to conclude tasks regardless of whether they gain or lose. Accordingly, our main hypothesis is that consumers can be impatient to incur costs when it allows them to achieve earlier goal closure (H1). Further, we predict that this preference increases with the desire for goal closure. Consumers have a stronger desire for goal closure when the mental cost of the unresolved goal is higher (such as when they need to invest mental effort to remember it) and when they are able to finish a goal (Hull, 1934; Kivetz et al. 2006; Koo and Fishbach 2012; Nunes and Dreze 2006; Roberts and Fishbach 2020). Thus, we predict that consumers are more impatient to incur costs when the unresolved goal is more mentally costly (H2) and when it allows them to finish a goal (H3). We tested our predictions across five studies (*N*=1,099), four of which are preregistered.

In Study 1, we explored whether people would be impatient to resolve a debt (H1). Participants either read that they owed a co-worker money or a co-worker owed them money. Participants chose between resolving the debt sooner and losing $2 (i.e., paying $2 more or accepting $2 less than owed) or leaving the debt unresolved and not losing money. The majority of participants preferred to lose money to resolve the debt sooner both when they owed money (91%), X^2(1, N=95)=62.41, *p*<.001, and when they were owed money (81%), X^2(1, N=101)=39.30, *p*<.001. Whereas people are often impatient to receive money, in Study 1 participants were impatient to lose money in order to close a debt and achieve closure sooner.

In Study 2, participants made incentive-compatible choices between two options that varied in the number of work tasks but offered the same payment. The majority of participants (65%) chose to complete the longer task when it occurred sooner than the shorter task, X^2(1, N=100)=9.00, *p*=.003. Only a minority of participants chose to complete the longer task when they both occurred sooner (21%), X^2(1, N=96)=32.67, *p*<.001, and later (18%), X^2(1, N=105)=42.75, *p*<.001. Thus, participants were only impatient to complete more work when it allowed them to finish the task and achieve closure sooner (H1).

In the remainder of the studies, we manipulated the desire for goal closure to test the effect of our proposed mechanism on impa-tience. Study 3 tested whether people would be more impatient to incur costs when the unresolved task was harder to remember, and thus, more psychologically costly to delay (H2). Participants were more impatient to complete a greater amount of work sooner (vs. smaller amount later) when they would receive no reminders (70%) about the task versus three reminders (54%), X^2(1, N=199)=5.57, *p*=.018. Thus, participants were more impatient to complete work when the mental cost of the unresolved task was higher. Telling people that they will receive reminders about a task can reduce impatience.

Studies 4 and 5 explored the mechanism further by testing whether people would be more impatient to incur costs when it allows them to finish a goal (H3). In Study 4, we presented a task as either first or last in a sequence. Participants were more impatient to complete more work sooner (versus less work later) when finishing a task (60%) than when starting a task (45%), X^2(1, N=199)=4.10, *p*=.043. Participants also reported a greater desire for goal closure when deciding when to finish (vs. start) the task, *t*(197)=2.28, *p*=.024. This desire for goal closure mediated the effect, indirect effect=-1.15, SE=0.57, 95% CI=[-2.39, -0.17]. Participants were more impatient to complete an incentive-compatible task when it determined when they could finish a goal.

Beyond the position of a task, the framing of a task can also influence the desire for closure, which in turn decreases patience. In Study 5, we manipulated whether participants would prefer to complete a longer product review task sooner (vs. shorter version later) if it was framed as "finishing the task" as opposed to "completing a bonus task." Participants were more likely to choose to complete the longer task sooner when it was presented as the last task (61%) instead of a bonus task (39%), X^2(1,N=200)=9.68, *p*=.002. Additionally, participants felt a significantly greater desire for goal closure when the task was presented as last compared to as a bonus, *t*(198)=3.70, *p*<.001. This desire for goal closure mediated the effect of the task framing (last vs. bonus) on the decision to work more sooner, indirect effect=-0.64, SE=0.22, 95% CI=[-1.14, -0.28]. Participants were more impatient to complete an incentive-compatible product review task when it enabled them to achieve goal closure.

While impatience is often portrayed as a preference to acceler-ate gains or delay costs, we find that consumers are also impatient to incur costs sooner. We propose that the desire for goal closure explains this behavior. Accounting for the desire for goal closure can explain impatience to incur larger costs sooner (vs. smaller costs later), which otherwise appears as discounting the *present* rather than the future. Our findings have important implications for consumer decision-making. Reducing the desire for goal closure can allow consumers to make more patient choices with their money and time.

The Temporal Slippery Slope: Decline in Sequential Ratings within Batches of Online Reviews

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EXTENDED ABSTRACT

Online reviews and product ratings are essential factors in consumers' decision processes (Chevalier and Mayzlin 2006). Previous research focused on how reviewers adjust their ratings for a specific product according to previous ratings of others given to this product (Moe and Schweidel 2012). The present research adds to this stream of knowledge by focusing on the dynamics of ratings given by a single reviewer for different products in a short time period. Specifically, we show that reviewers tend to generate ratings in batches, that is, to provide more than one rating during a session in an online review platform.

Moreover, we expect a sequential effect within a batch, considering how consumers' earlier decisions within a sequence influence their later ones (Sumer and Knight 1996). Specifically, we expect reviewers to start with the highest rating within a batch, with which they are extremely satisfied, given the tendency for positive skewness in online reviews (Schoenmueller, Netzer, and Stahl 2020). For later ratings within a batch, we expect reviewers to experience doubt, which is reflected by mixed feelings and indecisiveness about the product and a longer decision time (Bargh et al. 1992), and therefore reviewers may spend more time contemplating the score of each subsequent ratings, which is also predicted to be lower.

We formally hypothesize:

Hypothesis 1: A substantial fraction of online ratings is produced as part of a batch.

Hypothesis 2: Rating scores of the same reviewer will drop as a function of time within a batch.

Hypothesis 3: Doubt about rating scores will increase over time within a batch, such that later rating scores reflect higher doubt than earlier ones.

We examine our Hypothesis using a multi-method approach, incorporating analysis of large-scale field data and a set of controlled experiments. In study 1 we present evidence for the ubiquity of the batching behavior on five popular review websites—Yelp, IMDB, Rotten Tomatoes, TripAdvisor, and Goodreads. For each website, we determine the percentage of ratings given as a daily batch. In line with H1, we demonstrate the frequency under which two or more ratings are given by a single reviewer on the same date (varying between 12.41% and 80.94%) and the percentage of reviewers who produced a batch at least once (between 9.5% and 99%). Also, we show that on average reviewers' fraction of daily batch was higher than the assumed given a random distribution of activity with, using Kolmogorov-Smirnov test (all $p < .001$). Given the frequency of daily batch, we move forward to narrow the phenomenon into a shorter time.

In study 2 we crawled two different review platforms that specialize in (a) books (11.3M ratings produced by 49,816 reviewers) and (b) movies and TV series (110.49M ratings produced by 564,982 reviewers), both with a time resolution of seconds. In both platforms, we calculate the difference in seconds between each two sequential ratings created by the same reviewer and regress the reviewer's rat-

ing on the time (in seconds) passed since his or her last rating in the batch controlling for the reviewers' current average rating, number of previous ratings, current product average rating and number of ratings, and the batch size. In line with H2, we find that in a single session, a reviewer's rating score is negatively affected by the time passed since the reviewer's prior rating (both $p < .001$). Moreover, we show in both datasets that ratings' variance (which is associated with doubt, Snyder and Tormala 2017) increases as the time between two sequential ratings in a batch increases ($p < .001$).

In study 3 we rely on online experiments to better control and explain the role of doubt in driving the drop in sequential ratings within a batch (H3). In study 3A, participants (n = 200) were asked to rate either a movie or a book of their choice and report their doubt regarding each rating score. As expected, longer rating duration was associated positively with higher doubt, and negatively with rating score, regardless of product type ($p < .001$). In studies 3B (n = 300), participants were asked to specify a movie and rate it. Next, they were asked to specify a second movie and rate it. However, we operationalized the level of doubt about the second rating (high-doubt vs. low-doubt vs. baseline). In accordance with H3, a mixed ANOVA model revealed a significant interaction between the difference in ratings and experimental conditions ($p < .001$, $\eta^2_p = .099$): In the high-doubt condition, the second rating score was significantly lower than in the low-doubt and baseline conditions ($M_{high\_doubt} = 6.09$, $M_{baseline} = 7.71$, $M_{low\_doubt} = 8.1$, $p < .001$). In study 3C (n = 401), we used a similar design as in 3B. This time, we operationalized the level of doubt about both the first and second rating scores (first rating: high-doubt vs. low-doubt) X (second rating: high-doubt vs. low-doubt). A mixed ANOVA model revealed a significant interaction between the difference in ratings and experimental conditions ($p < .001$, $\eta^2_p = .250$): Having low doubt about the first rating and high doubt about the second rating replicates the drop in ratings (first rating: $M_{low\text{-}doubt\text{-}high\ doubt} = 8.83$, second rating: $M_{low\text{-}doubt\text{-}high\text{-}doubt} = 6.30$, $p < .001$). The drop was significantly higher than the low doubt–low doubt condition and the high doubt–high doubt condition ($p < .001$). Having high doubt about the first rating and low doubt about the second rating reversed the effect (first rating: $M_{high\text{-}doubt\text{-}low\text{-}doubt} = 6.87$, second rating: $M_{high\text{-}doubt\text{-}low\text{-}doubt} = 8.42$, $p < .001$).

The current investigation incorporates two novel aspects: 1) a focus on a single reviewer's ratings, as opposed to investigating how ratings of others influence reviewers; and 2) an analysis of reviewer's rating distribution at a high temporal resolution (seconds instead of days). It seems that the tendency to produce reviews in batches is quite common and is overlooked by previous research. The opportunity to identify the deliberation process for online ratings can enable companies, platforms, and consumers to take greater control over the review process.

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The Curse of Similarity: When and How Similarity Induces Persuasion Reactance

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EXTENDED ABSTRACT

It was suggested that a consumer has two possible roles in the face of a salesperson: a goal seeker and a persuasion sentry (Kirmani and Campbell 2004). As goal seekers, consumers utilize the salesperson and seek information to help them make a better purchase decision. As persuasion sentries, they resist and respond strategically to unwanted persuasion attempts. Thus, focusing on the consumer side, the effectiveness of a salesperson's persuasive effort is jointly determined by a salesperson's perceived helpfulness and sales intention. In this project, we study how consumers' product familiarity and salesperson-consumer similarity change the relative salience of the two forces. We propose that when consumers make a purchase in an unfamiliar product domain, the same persuasive effort from sellers of high (vs. low) similarity would be more effective; alternatively, when consumers make a purchase in a familiar product domain, the reverse is true.

To gather information or to detect persuasion could vary upon consumers' product familiarity. Consumers who are familiar with the product domain already have enough product knowledge or even possess an established preference, while consumers who are unfamiliar with the product domain are not yet able to identify their preferred attribute combination (Mogilner, Rudnick, and Iyengar 2008). These two groups of consumers are likely to have different goals when interacting with the salesperson. The former group is more directed and relies less on external information when making a decision. Therefore, they focus less on the salesperson's helpfulness, but more likely to recognize salespersons' sales intention when receiving a recommendation from a salesperson. In contrast, the latter group faces the task of forming a preference as they have limited knowledge about the products to distinguish different options. They rely more on external information to learn about the products and determine their preference (Hilton and Darley 1991). For this reason, though they may be aware that the salesperson is trying to sell, their primary goal is to evaluate the salesperson's helpfulness when receiving a recommendation.

No matter a consumer is evaluating the helpfulness or sales intention of a salesperson, they are making inferences about the salesperson. Interpersonal similarity thus plays a role. Similarity leads to an easier simulation of mental states, and people are more strongly engage in simulation for similar other (Faraji-Rad, Samuelsen and Warlop 2015; Woo and Mitchell 2000). Based on the assumption that consumers more easily simulate the mental states of similar rather than dissimilar persons, we propose that salesperson-consumer similarity increases consumers' confirmation of inferred helpfulness and sales intention of a salesperson. Thus, when making purchase decisions in unfamiliar product domains, where consumers' primary goal is to form their preference by seeking useful information, consumers are more confirm a similar (vs. dissimilar) salesperson is helpful, and thus similarity increases persuasiveness. Alternatively, when making purchase decisions in familiar product domains, as consumers have already formed their preferences, they focus more on the sellers' sales motives. Therefore, they are more confirm a similar (vs. dissimilar) salesperson's sales intention, and thus similarity decreases persuasiveness.

We first tested two assumptions. Pilot study 1 ($N = 371$) showed that consumers' familiarity with the product influenced their inference of the salesperson's helpfulness and sales intention. Pilot study 2 (the US, $N = 149$; Asia, $N = 57$) showed that people are more confirm about their inference on a salesperson who is similar than dissimilar to them.

Study 1a ($N = 284$) and study 1b ($N = 181$) tested the hypothesis that consumers who are unfamiliar (familiar) with the product domain are more (less) likely to accept a recommendation from a similar salesperson than from a dissimilar one. Results showed that participants with high product familiarity are more likely to take a recommendation from a salesperson with a different ethnicity (study 1a) and gender (study 1b) compared with a salesperson with the same ethnicity (study 1a) and gender (study 1b). For participants who are unfamiliar with the product domain, a similar salesperson has a higher persuasiveness.

In study 2 ($N = 326$), we tested the mechanism that consumers' inference certainty mediates the interaction effect of product familiarity and similarity (with the seller) on persuasiveness. We manipulated salesperson similarity and product familiarity (through familiar versus unfamiliar products) and measured inference certainty about information usefulness and sales intention. We found that inference certainty of information usefulness mediated the effect for unfamiliar products, and inference certainty of sales intention mediated the effect for familiar products.

In study 3 ($N = 473$), we examined a boundary condition to further test the underlying mechanism. To test the advantage of dissimilarity when consumers focus on sales intention, we added a third factor to manipulate the salience of sales intention. We found that the previously proposed effect replicated when participants were paying for the product but attenuated when they got the product for free (low sales intention).

In study 4 ($N = 421$), we tested the proposed effect in real purchase behavior. We gave participants a chance to buy products with four options, and a "salesperson" recommended one of the options. We replicated the interaction effect of product familiarity and ethnic similarity on participants' likelihood to purchase the recommended option.

Secondary data ($N = 10554$) from an insurance company lent further support to our proposition. An analysis of telesales data showed that renewals (customers who are familiar with the product category) were more likely to renew an insurance contract from a salesperson (through phone calls) of the opposite sex than same-sex, but the reverse pattern was found for new customers (i.e. customers who are unfamiliar with the product category).

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The Effects of Reviews on Consumer Experiences

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EXTENDED ABSTRACT

Product reviews influence consumers' decisions and, consequently, product sales (Chevalier & Mayzlin, 2006; Trusov, Bucklin, & Pauwels, 2009), but there is reason to suspect that the effect of reviews on consumption may not end when a product goes in a consumer's shopping cart. Can exposure to reviews shape the consumption experience itself?

We suggest that reading product reviews before consumption can affect actual experiences with the product, leading consumers to have different product experiences than those who interact with the product without reading reviews. We further suggest that consistent with the idea that negative information has greater influence than positive information on decision making (Herr, Kardes, & Kim, 1991), negative reviews will have a greater effect on consumption experiences than will positive reviews. We believe this happens because consumers are more likely to focus on and retain negative information than positive information (Robinson-Riegler & Winton, 1996). Thus, consumers are likely to recall more negative attributes of the product at the time of consumption after exposure to negative reviews than after exposure to positive reviews or without exposure to reviews, and this recollection may impact the consumption experience.

Study 1 tested the effect of review exposure on consumption experiences in an incentive-compatible setting. Participants either could choose or were assigned a book excerpt to read and were given negative reviews of the book, positive reviews of the book, or no reviews of the book. Then, participants read the book excerpt and evaluated their experience on five 7-point scale items (e.g., "I enjoyed reading this book"). As expected, there was only a main effect of review exposure on evaluations ($F(5,591)=65.73$, $p<.001$) indicating a greater effect of negative reviews on experience ($M=2.6$, $SD=1.31$) compared to positive reviews ($M=4.05$, $SD=1.35$, $p<.001$) and no reviews ($M=3.87$, $SD=1.37$, $p<.001$). There was no significant difference in evaluations between participants who read positive reviews and participants with no exposure to reviews, no effect of choice on evaluations, and no significant interaction between choice and review exposure ($p =.19$). Thus, negative reviews influence experience whether consumers choose or merely receive the product they consume.

Study 2 ruled out an alternative explanation for our results: rather than experiencing products differently, consumers may merely be adjusting their evaluations to be consistent with those provided by previous consumers. This study focused only on negative reviews of a poorly written book and included a condition where participants first experienced the product and only then read reviews, in addition to conditions where participants read reviews first and where they read no reviews. An ANOVA revealed a significant effect of experience sequence on evaluations ($F(2,360)=13.12$, $p<.001$). Participants who read reviews *after* consumption provided lower evaluations ($M=1.81$, $SD=1.06$) than participants who did not read reviews ($M=2.13$, $SD=1.41$, $p=.026$). However, consistent with our experience change account, evaluations of participants who were exposed to reviews *prior* to consumption were significantly lower ($M=1.48$, $SD=.89$) than those of both participants who read reviews after

consumption ($p=.002$) and participants who did not read reviews ($p<0.001$).

Studies 3a and 3b provided direct support for negativity bias as a mechanism, by showing that exposure to negative reviews enhances recall of negative consumption attributes and that this recollection mediates the effect of reviews on experiences. In both studies, participants listened to a piece of music after reading negative reviews, positive reviews, or no reviews. Study 3a's participants evaluated their experience after listening, and then wrote five things they remembered about the music and indicated whether they liked or disliked them. Study 3b's participants performed the recollection task before they provided their evaluations. In both studies, analyses (PROCESS Model 4; Hayes 2013) found that the indirect path from the review conditions to evaluations through the number of recalled negative attributes was significant when comparing negative reviews to no reviews (Study 3a: $b=.543$, $SE=.14$, 95% CI [.2652, .8306]; Study 3b: $b=.881$, $SE=.13$, 95% CI [.6290, 1.1404]), and when comparing negative reviews to positive reviews (Study 3a: $b=.375$, $SE=.15$, 95% CI [.0930, .6612]; Study 3b: $b=.586$, $SE=.15$, 95% CI [.2972, .8784]). The results point to increased number of recalled negative attributes after reading negative reviews, which in turn is associated with worse evaluations.

Study 4 explored consumers general orientations towards positivity (Caprara et al., 2012) as a boundary condition. If the power of negative reviews to worsen consumer experience is due to consumers' heightened focus on negative product attributes, these effects should manifest more prominently in some consumers than in others. It seems plausible that consumers who generally fixate more on positive aspects may be less sensitive to negative reviews. Thus, in addition to measuring participants' responses to review exposure, we measured participants' positivity orientations. Participants watched a stand-up comedy show after reading negative reviews, positive reviews, or no reviews. Next, participants evaluated the stand-up and reported the extent to which they felt responsible for reporting positive aspects of the consumption experience. Simple slope analyses revealed effects of positivity orientation on consumption experiences. The more positivity oriented participants were, the higher the evaluations they gave, regardless of the reviews they read: positivity orientation was positively related to evaluations in the reviews-absent condition ($b = .14$, $SE = .04$, $F(1,121) = 24.15$, $p < .001$), in the positive-reviews-present condition ($b = .44$, $SE = .06$, $F(1,123) = 65.87$, $p < .001$), and in the negative-reviews-present condition ($b = .22$, $SE = .05$, $F(1,126) = 17.44$, $p < .001$). Thus, a strong positivity orientation can, to some extent, counteract the negative effects of negative reviews on the consumption experience. Correspondingly, in the negative-review condition, those with positivity orientations that were higher than the scale midpoint gave evaluations ($M = 2.93$, $SD = 1.43$) that were no different from the means of the review-absent condition ($t(51) = -1.47$, $p = .149$).

Across 5 studies, we show that exposure to negative reviews enhances recall of negative attributes, and thus negatively affect product experience (above and beyond adjustment to others' opinions). Our work suggests that product reviews influence not only what consumers purchase, but how they experience those purchases, as well.

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Familiarity Attracts Consumer Attention: Two Methods to Objectively Measure Consumer Brand Familiarity

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EXTENDED ABSTRACT

Marketing practitioners and academics have long recognized the importance of brand familiarity—a consumer's prior direct or indirect experiences with a brand (Johnson and Russo 1984; Alba and Hutchinson 1987; Kent and Allen 1994). Past research has shown that brand familiarity impacts advertisement (Campbell and Keller 2003), evaluation (Laroche, Kim, and Zhou 1996), and consumer choice (Laroche et al. 1996). Consequently, brand familiarity has become a key element in models of brand strength and brand equity (e.g., Aaker 1997; Erdem 1998; Keller 2013; Heinberg et al. 2020).

While there is a clear support that familiarity is a major driver of consumer preferences, much less is known about whether and how familiarity influences more basic mechanisms, such as visual attention. Since past research on the impact of brand familiarity and research on visual design have mainly advanced in parallel, studies investigating brand-related features that impact visual attention have so far focused only on unfamiliar brands, and on bottom-up, logo-related features (Kim and Lim 2019).

Looking at theories from cognitive science and marketing, we found that studies investigating how familiarity or novelty influences visual attention have produced mixed results (reviewed in cognitive science: Wolfe and Horowitz 2017; and marketing: Sample et al. 2020). Therefore, we sought to bridge this gap by investigating the role of brand familiarity in consumer settings, beginning with asking whether familiar or novel brands attract human attention.

Based on a series of three preregistered visual search, we show that familiar logos are found faster than unfamiliar logos (Study 1), even when controlling for other logo-design features in a cross-cultural study using visual search task (Study 2), and that video recognition task provided an objective measure of brand familiarity which does not require multiple trials and yields in larger effect sizes (Study 3).

In Study 1, we aimed to test the hypothesis that brand familiarity, as opposed to brand novelty, impacts consumers' attention in a computerized visual search task. One hundred participants were recruited on Amazon's Mechanical Turk (MTurk) (M_{Age} = 35.9 years, SD = 10.5; 37% female). Participants were instructed to find different smartphone app logos ("targets") among either seven or 23 distractor logos. Half of the targets were familiar app logos from the Google Play store and the other half were unfamiliar logos from apps that were primarily used in China. The familiarity ratings at the end of the experiment were significantly higher for the familiar app icons (M = 3.7, SD = 0.7) than the unfamiliar app icons (M = 1.2, SD = 0.6), suggesting our manipulation of familiarity was successful. In line with our hypothesis, participants found familiar targets (Mdn = 568 ms) faster than unfamiliar targets (Mdn = 585 ms). To summarize, Study 1 demonstrated that brand familiarity as opposed to brand novelty enhances search speed and thus visual attention.

The Study 2 was a cross-cultural laboratory study. In this preregistered experiment, we again tested the influence of brand familiarity on visual search speed. In contrast to the first study, here we manipulated brand familiarity by using national brands from two countries, Switzerland and Slovenia. The same preselected set of brand logos from both countries was presented to participants from Switzerland and Slovenia, respectively. Thus, this design provides a rigorous control for bottom-up effects: If the results from the first experiment were driven by bottom-up effects, both Swiss and Slovene participants will be faster at finding bottom-up salient logos. However, if a shorter visual search is indeed the result of brand familiarity, Swiss participants will be faster at finding Swiss brands than Slovene brands and vice versa for Slovene participants. A total of 100 students from a large public university in Slovenia and 100 students from a large public university in Switzerland participated in the study (M_{Age} = 21.6 years, SD = 1.87, 49% female). The target stimuli were drawn from a set of 40 unfamiliar logos (Slovene for Swiss participants and Swiss for Slovene participants) and 40 familiar logos (Swiss for Swiss participants and Slovene for Slovene participants) in each session. To assess the effect of familiarity, participants were asked to repeatedly find a target logo among either seven or 23 distractor logos. In line with our hypothesis, Swiss participants were faster at finding Swiss logos than Slovene logos and vice versa for Slovene participants. The BIC difference between the baseline model (m0) and the extended model that included target familiarity rating as a predictor (m1) was 169. This translates into a BF of 4.4e + 36 (Wagenmakers, 2007).

To provide a more practical task for measuring brand familiarity objectively, for Study 3 we developed and tested a perceptual decision task in which participants watched a video that gradually changed from a noisy mask to the respective target brand image and where participants had to press a button as soon as they recognized the brand. Hence, the main dependent variables were reaction time and recognition accuracy. In line with our preregistered predictions, Swiss participants recognized Swiss logos (M = 11.64 s, 95% CI [11.40, 11.90]) about 2 s faster than Slovene logos (M = 13.87 s, 95% CI [13.57, 14.17]). To test if target familiarity had a credible influence on video response times, we compared the baseline model against an extended model that also included individuals' target familiarity rating as an additional fixed effect (m1). The BIC difference between the models was 128, which translates into a BF of 4.4e + 21 (Wagenmakers, 2007).

Our research sheds light on a prevalent, yet understudied research question of how brand familiarity affects visual attention. Across three studies, we found converging empirical evidence that familiarity improves visual search efficiency. As a methodological contribution, we introduced two objective measures of brand familiarity based on reaction times that can be used as a blueprint for researchers and practitioners alike. Both measures can be incentivized, rewarding participants for correct responses and thus avoiding the pitfalls of subjective self-reports based on Likert scales. Together with the use of real-world brand logos, this enhances the external applicability of our findings.

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Pavlov's Buzz? Mobile Vibrations as Conditioned Rewards

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EXTENDED ABSTRACT

One increasingly prevalent, but understudied, stimulus in the realm of digital consumption is mobile vibrotactile feedback. Online retail and e-commerce firms such as Amazon and ASOS have recently begun to deliver mobile vibrations to consumers in shopping contexts, such as for shopping cart adds. The majority of prior work examining subjective responses to vibrational stimuli comes from the ergonomics and information systems literature (Cole, Mohammed, and Shanmugam 2015; Koskinen, Kaaresoja, and Laitinen 2008; Lee and Lim 2014; Saket et al. 2013), with only one academic study from the marketing domain (Hadi and Valenzuela 2019). These initial findings indicate that mobile vibration can influence self-reported behavior broadly, but they do not elucidate how consumers psychologically respond to mobile vibrations, nor the underlying mechanism that governs subjective response to mobile vibrations. Anecdotally, people tend to report that a vibration from their phone evokes an approach response. Given that approach responses are very often triggered by reward-seeking (Simon et al. 2010), the question arises as to whether mobile vibration might be construed as a reward that can systematically influence consumer behavior.

Pilot

In the Pilot we sought to confirm that the most common vibration duration (400ms) maximizes reward response and examine how vibration reward response varies by consumer impulsivity and mobile notification valence. Online participants (n=150) reported their subjective reward response to mobile vibrations (ranging from 25ms to 3200ms; random presentation). We found that reward response varied by vibration duration $F(3,147)=6.52$, $p<.001$, with reward perception peaking at 400ms, as expected. We also found that both impulsivity and notification valence were significant moderators such that people who were higher in impulsivity ($\beta_{Imp\times Duration}=.02$; $t(1,1141)=2.05$, $p<.05$) or with more positive mobile notification valence ($\beta_{Valence\times Duration}=.63$; $t(1,1141)=2.68$, $p<.01$) also exhibited a stronger reward response across vibration durations.

Study 1

In Study 1 we tested whether pairing a rewarding vibrational stimulus with a simple action (pressing a button on a touchscreen) promotes that action, while also examining the potential role of arousal and novelty. We recruited 400 participants from an online panel (MTurk) who were randomly assigned to one of three experimental conditions that determined the kind of vibrational feedback item adds triggered: no vibration (n=130), 400ms vibration (n=129), or 3200ms vibration (n=130). We selected durations of 400ms and 3200ms because out Pilot showed that the 400ms mobile vibration evoked a stronger reward response but less arousal than 3200ms. Aside from conditional variation in vibration feedback, all conditions also received two forms of identical visual confirmation feedback (pop-up text box and numeric counter). We found that a rewarding mobile vibration boosts item count in a tightly controlled item adding task. On the contrary, we find that participants added significantly *fewer* items in the longer vibration condition (higher in both arousal and novelty) than in the intermediate-length vibration condition (lower arousal and novelty, but higher reward).

Study 2

In Study 2 we test three further propositions: (1) whether exposure to vibrotactile stimuli can influence item adds and shopping basket totals in a typical online shopping environment; (2) whether a rewarding vibrotactile stimulus more strongly affects consumers with higher (vs. lower) levels of impulsivity; and (3) whether the observed effects are influenced by artefacts of online panel recruitment, including selection bias and device heterogeneity, by conducting the study in a behavioral lab environment and holding the type of device constant across participants and experimental conditions. We recruited 137 participants for a lab study in which participants (randomly assigned to a vibration or control condition) sat at partitioned cubicles, each with a Samsung Galaxy Tab 10 that was identical in terms of hardware and software, with all settings held constant. Participants first completed a grocery shopping task using our custom-built simulator. In the control condition, adding an item updated the cart count and basket total, but did not produce any other feedback. In the vibration condition, clicking the add-to-cart button had the same visual feedback as in the control, but also triggered a rewarding vibration of intermediate duration. Extending the findings of Study 1 to a more ecologically valid setting, consumers in the vibration condition added a significantly more items to their shopping cart ($M_{VibrationTotalItemCount}=18.94$ vs. $M_{ControlTotalItemCount}=16.29$; $F(1,135)=4.13$, $p<.05$, $\eta^2=.03$). After controlling for individual differences in general online shopping behavior, we found that consumers who were impulsive or reported more positive notification valence and had a stronger vibration reward response also purchased marginally more items in the shopping task ($\beta_{Imp\times Reward}=.35$, $t=2.01$, $p<.05$; $\beta_{Valence\times Reward}=-.09$, $t=-2.65$, $p<.01$).

Study 3

Working in cooperation with a major European grocery store, we conducted an anonymous, randomized field experiment (N=6,866) drawing on regular online grocery shoppers of the company. We worked with this firm to develop an updated version of their mobile grocery shopping app for their customer base that included custom-made code that triggered vibration upon clicking the add-to-cart button (as in Study 2). Customers were randomly assigned to either receive rewarding vibrotactile feedback for shopping cart adds in the vibration condition or no vibrotactile feedback in the control condition. The initial timeseries dataset included all purchases (using any Android or iOS mobile device) made during the data collection period of one week. Replicating our lab-controlled Study 2 findings in a setting with real economic consequences, participants in the vibration condition purchased significantly more items per order ($M_{ControlItems}=53.15$ vs. $M_{VibrationItems}=54.60$, $F(1,6864)=5.58$, $p<.05$), which resulted in higher net sales ($M_{VibrationSales}=210.15$) relative to the control condition ($M_{ControlSales}=206.88$; $F(1, 6864)=4.00$, $p<.01$). These findings were robust when controlling for age, gender, and device operating system.

Discussion

We examined the impact of mobile vibrations on consumer decision-making in a variety of experimental settings, drawing on a diverse participant pool, leveraging both controlled experiments and a large, country-wide field anonymous experiment to assess theoretically and practically important boundary conditions. We find that common mobile vibrations evoke a reward response, particularly among impulsive consumers, which in turn boosts purchasing in online shopping environments. Our findings have implications for the effective design of haptic interfaces in marketing and the role of mobile vibrations as a novel reward.

Prosocial Poison: Using Sadness to Prompt Help Giving May Alienate Potential Help Seekers

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EXTENDED ABSTRACT

Marketers have developed a rich literature on encouraging donations to charities. What we haven't yet considered is whether those tactics to increase giving also impact the likelihood that people in need seek help. We show how one popular and well-cited fundraising tactic—portraying charity recipients as sad (Clark et al. 1987; Eisenberg et al. 1989; Small and Verrochi 2009; Baberini et al. 2015)—decreases help seeking, because it makes people believe seeking help would be more threatening to their self-esteem.

Previous work in other fields has argued help seeking decreases the more people believe it would threaten their self-esteem (Fisher, Nadler, and Whitcher-Alagna 1982; Kim, Zhang, and Park 2018). Self-esteem can be threatened in multiple ways. Consider someone in need, contemplating seeking help from Charity X. X, having read that portraying recipients as sad increases giving, has run campaigns emphasizing this. The consumer sees this on a billboard and on X's home page. The consumer may predict their self-esteem would be threatened by applying to Charity X, first because aligning themselves with the "sad" recipient group negatively affects their self-concept (Turner 1982; Turner et al. 1987; Tiedens 2001). Second, people might not seek help to avoid negative stereotypes about sad people (White and Dahl 2006), like that they are weak ("real boys don't cry"; Levant 1992). Third, the portrayal might be interpreted as disrespect, which is a signal of lower status (Blincoe and Harris 2011). People would not seek help from a disrespectful charity because it offers continued reminders of their negative status and makes it more likely they would be disrespected directly. Finally, seeking help from X despite these motives not to may signal dependence, which threatens self-efficacy. Across four experiments, we examine how this negative portrayal of charity recipients as sad lowers the likelihood people will seek help from that charity.

Experiment 1 (N=418) followed a between-subjects behavioral paradigm. Participants ostensibly completed a motor task for a performance-dependent bonus. We told everyone they didn't perform well enough for a bonus, but that participants who received bonuses could donate to the others. They could sign up to receive some of the donations. We showed participants our message requesting donations, which contained a photo of a hypothetical recipient with a happy or sad face. Participants indicated whether they wanted to receive donations, then answered a threat-to-self-esteem measure developed for this research (=0.79). The aggregate effect was directional ($Seek_{Sad}$=66% vs. $Seek_{Happy}$=72%, =1.60, p=.2053). More importantly and as hypothesized, the sad-faced message elicited less help seeking because it created a greater anticipated threat to self-esteem ($Threat_{Happy}$=3.81 vs. $Threat_{Sad}$=4.27, F=22.10, p<.0001; Indirect Effect=-0.16, 95% C.I.=[-0.28,-0.08]). The residual effect was not significant (Direct Effect=0.02, SE=0.11, 95% C.I.=[-0.21,0.24]), consistent with indirect-only mediation (Zhao, Lynch Jr., and Chen 2010).

Experiment 2 (N=134) followed a 2 group (Expression: Sad vs. Happy) within-subject design. Participants were given ads for two cancer research hospitals and asked which they'd contact for help if their child were newly diagnosed. One ad included a picture of a sad child, while the other showed a happy child (taken from Small and Verrochi 2009). Charity choice constituted our dependent measure. We also asked participants about the threat posed to their child's self-esteem. (=0.84). Consistent with our theory, consumers were less likely to seek help from the charity in the first ad if they displayed the sad child ($Choice_{Happy}$=70% vs. $Choice_{Sad}$=26%, =18.65, p<.0001), mediated by threat to their child's self-esteem ($Threat_{Happy}$=2.31 vs. $Threat_{Sad}$=3.42, F=26.17, p<.0001; Indirect Effect=-0.38, 95% C.I.=[-0.71,-0.16]).

Experiments 3a (N=152) and 3b (N=154) used actual ads for two types of need-based charities: homeless care organizations (3a) and services for children experiencing hunger (3b). They used the same procedure as experiment 2. To eliminate any confounds, and orthogonally manipulate emotion, all ads originally featured sad people. We created a happy version of each ad using Photoshop, and randomized which ad would feature which emotion. Participants more often chose to seek help from charities which used happy people in their ads (Experiment 3a: $Choice_{Happy}$=69% vs. $Choice_{Sad}$=28%, =23.57, p<.0001; Experiment 3b: $Choice_{Happy}$=62% vs. $Choice_{Sad}$=25%, =11.65, p=.0006).

Experiment 4 (N=1604), following a 2 (Emotional Expression: Happy vs. Sad) x2 (Message: Supportive Message vs. Control) between-subjects design, showed one way to mitigate the effect. Based on the self-esteem framework, presenting a self-esteem threatening stimulus like sadness in a supportive way should reduce the threat, mitigating its negative effect on help seeking. This would not work on happy portrayals because happiness is already perceived positively. Participants saw an ad for a financial aid charity, featuring a photo of a sad or happy woman and a brief charity description, and indicated the likelihood they would seek help from it. Half of participants also saw a headline in the ad, framing the ad's emotion in a self-esteem supportive manner. Consistent with expectations, we found interaction effects between the Emotional Expression and Message conditions for threat to self-esteem (F=6.17, p=.0131) and likelihood to seek help (F=4.47, p=.0347). Without the supportive headline, the ad with the sad woman constituted a greater threat to self-esteem ($Threat_{Happy/Control}$=4.02 vs. $Threat_{Sad/Control}$=4.81, F=106.57, p<.0001), lowering help seeking ($Seeking_{Happy/Control}$=3.53 vs. $Seeking_{Sad/Control}$=3.07, F=12.48, p=.0004; Indirect Effect=-0.27; SE=0.03; 95% C.I.=[-0.34, -0.21]; Direct Effect=0.06; SE=0.06; p=.36). Adding the supportive headline reduced threat when the ad featured a sad woman ($Threat_{Sad/Control}$=4.81 vs. $Threat_{Sad/Supportive Message}$=4.43, F=24.87, p<.0001) but not a happy woman ($Threat_{Happy/Control}$=4.02 vs. $Threat_{Happy/Supportive Message}$=3.91, F=2.06, p=.1518). With the supportive headline, differences in help seeking between happy and sad became non-significant ($Seeking_{Happy/Supportive Message}$=3.31 vs. $Seeking_{Sad/Supportive Message}$=3.23, F=0.26, p=.6134).

Together, in a comprehensive set of prosocial situations, these experiments demonstrate the use of popular and well-cited tactics previously shown to increase help-giving might depress help-seeking. Research on help seeking in consumer contexts is sparse. It is completely non-existent in mainstream consumer/marketing journals, outside of a handful of papers on mental health services, whose stimuli and processes are not generalizable to other contexts. This research highlights the need for increased research into help seeking: all along, the strategies we have given non-profits may have hampered their mission to help people in need.

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Context Even Matters in Virtuality: Perception of Object Proximity and Ownership in Augmented Reality

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EXTENDED ABSTRACT

Augmented Reality (AR) technologies are booming. Overall, the AR market is expected to grow at a compound annual growth rate of 46% from 2019 to 2024 (Wood 2020) and Forbes even encourages CMOs to consider experimenting with AR (Evans 2021). Worldwide, 334 million consumers have actively used at least one AR application (Boland 2020) and in some countries even more than half of consumers have experienced AR (Finken et al. 2021).

AR is defined as a technology that enables users to interact with virtual contents in their own context by reciprocal alignment of reality and virtuality (Azuma et al. 2001). Unlike Virtual Reality (VR), where users completely immerse into virtual environments, AR only superimposes virtual contents onto a user's screen device (Brooks 1999). In e-commerce, for instance, AR allows conveniently placing virtual furniture into consumers' homes or trying on virtual clothes from the comfort of consumers' homes. Initial evidence shows that this can increase sales or motivate consumers to select higher valued products (Heller et al. 2019; Tan et al. 2021).

Our research develops and tests a conceptual account for when and why AR can heighten product preference. Drawing on psychological distance and construal level theory we argue that products presented in AR (vs. in 3D or in 2D) are perceived to be more proximate (vs. more distant) to the self. Psychologically distant objects are evaluated in terms of abstract (high-level, de-contextualized) construal and psychologically proximal objects are evaluated in terms of concrete (low-level, contextual) construal (Maglio, 2020; Trope et al., 2010). We argue that, although physically and digitally equally distant to the self, presenting a product on a mobile screen (e.g., smartphones or tablets) in AR versus in 3D or in 2D reduces consumer's perceived distance (i.e., increases perceived proximity) between the self and the product. That, in turn, may increase feelings of perceived ownership, consumers' feeling that something "is mine" without legally owning an object **(Jussila et al. 2015; Pierce et al. 2003).**

Prior research has already started looking into perceived ownership from an AR perspective (Carrozzi et al. 2019), but with mixed results and often through a more practical lens (Brengman et al. 2019; Hilken et al. 2017). Research argues that AR positively influences perceived ownership due to exerting virtual control (e.g., manipulating or touching objects on digital interfaces or HoloLens) (Carrozzi et al. 2019). The link between control and ownership, however, does not only pertain to AR presentations—in 3D presentations without context embedding and white background consumers reported higher levels of behavioral control compared to AR (Petit et al. 2021). Importantly, we argue that our proposed mechanism is independent of perceiving control over products which has already been shown by prior research. **Thus, we propose:**

Hypothesis 1a: AR (vs. 3D or 2D) product presentation increases consumers' perceived ownership.

Hypothesis 1b: The positive influence of AR (vs. 3D or 2D) product presentation on perceived ownership is mediated by perceived proximity to the product.

As AR allows the product to be perceived in consumers' actual context, its effect on proximity and ownership perceptions will likely be influenced by the nature of that context. Context effects theory states that contextual data can affect evaluations of a target object (Meyers-Levy and Tybout 1997). Context effects occur when the interpretation of an object shifts when its context changes, even though the object itself does not change. Specifically, we also propose that contextual cues (i.e., congruent vs. incongruent usage contexts) moderate our conceptual account such that the boost from AR is less likely to occur (or occur at all) when the context is incongruent with the products' usage context. Therefore, we hypothesize:

Hypothesis 2: The positive influence of AR (vs. 3D) product presentation on perceived ownership is moderated by contextual congruity, such that it is attenuated in less congruent contexts.

In marketing research, perceived ownership can influence consumers' willingness-to-pay and also explains the endowment effect (Morewedge et al. 2020). As a result, we argue that AR product presentation increases perceived ownership, which has a positive impact on marketing downstream consequences (e.g., purchase intention). Thus, we propose:

Hypothesis 3: The influence of AR (vs. 3D) product presentation positively impacts downstream consequences.

We test our expectations in five controlled online experiments (N = 1,411) with different products (mugs, an orchid, or a blender) and varying forms of product presentation formats (AR, 3D product image (360-degree), or 2D product images) on mobile devices. In all studies, participants received instructions to observe a product and answered related measures (e.g., perceived ownership and perceived proximity). Specifically, in experiments 1 and 2 (pre-registered on OSF), we test for our causal expectations against various presentation formats. Experiment 3 tests for the robustness of our mechanism against other conceptual accounts (e.g., novelty or immersion) and experiment 4 tests for the impact of usage context by manipulating presentation format (AR vs. 3D) and contextual cues(congruent vs. incongruent). In experiment 4 participants were told that we study smartphone and tablet usage behavior in various parts of their homes. Next, we asked them to go to a specific place in their home, followed by observing a blender. The 3D-conditions displayed generic kitchen or bathroom images in the background of the virtual object. Our results show that incongruent usage context dampens the effect on perceived ownership in the AR condition, but not in the control condition. Finally, experiment 5 highlights the impact of AR product presentation on downstream consequences.

Overall, our conceptualization and later our empirical package provide evidence that consumers perceive to be more proximate (vs. more distant) to products presented in AR compared to 3D or 2D presentation formats. We argue that AR triggers a concrete (vs. abstract) thinking style with implications for e-commerce and our general understanding of virtuality. Importantly, we show that these

effects are triggered by embedding a virtual object in a usage context that is congruent with the product, independent of control and touch. Our findings imply that managers of e-commerce platforms are well-advised to find ways to encourage consumers to use AR, specifically in the right context.

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Consequences of Humanizing Robo-Advisor by Adding Phatic Communication Ability: Perceived Empathy and Investor's Trust

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EXTENDED ABSTRACT

Although robo-advisors have been deemed an excellent tool for financial inclusion, adoption rate is relatively low. One of the reasons why people resist to use algorithms is that people believe AI cannot feel (Gray 2017) so will not fully take the unique, personal condition of everyone into account. Thus, people could not trust AI because computers are perceived as less empathetic and only capable of operating structured tasks (Luo et al. 2019).

We posit that people will favor a robo-advisor with the phatic communication ability because they tend to view it as more empathetic. In linguistics and pragmatics, phatic communication (e.g., greetings) can be defined as a universal opening ritual for conversational interactions (Pillet-Shore 2012; Duranti 1997), aiming at creating a favorable impression and making the conversation at ease (Riggio, Friedman, and DiMatteo 1981). Thus, we posit that the robo-advisor's initiation of a conversation through phatic communication could mimic a relaxing human-to-human conversation, increasing the likelihood for consumers to believe that their AI counterpart attempts to understand and care for their needs, representing as empathy (H1).

We further posit that people tend to trust robo-advisors when they are perceived as empathetic (H2a). Previous studies have revealed two routes to build consumer trust. The first route is to demonstrate qualified competence (White 2005; Sniezek and Van Swol 2001). However, the competence path may not be effective for robo-advisors. Algorithm aversion research has indicated that although AI has been proved to outperform human in many areas, people still prefer services from human agent (Hildebrand and Bergner 2020; Luo et al. 2019; Longoni et al. 2019).

The second path is showing the benevolence, the extent to which one party believed that the other party had the intentions and motives beneficial to their joint interest (Ganesan 1994; Doney and Cannon 1997). Cognitive empathy is defined as the ability to accurately and completely understand other individuals (Ye et al. 2017). So, when we perceive our interaction partners as empathic, we tend to believe that they are more likely to response to our needs (Ye et al. 2017), act for our benefit or personal interest (Wirtz et al. 2018), and engage in prosocial behaviors (e.g., help; Batson 1987). These behaviors and reactions correspond with the definition of benevolence that involves taking care of joint interests and showing altruism, and therefore, represents a sign of benevolence (McCullough and Hoyt 2002). Thus, we predict that robo-advisors can build up consumer trust when they are perceived as empathetic.

Furthermore, the greater consumer trust should lead to the greater willingness to accept the advice from the trustees (H2b). Previous studies have revealed the positive effect of trust across different context (e.g., financial product, Johnson and Grayson 2005; online product recommendation agents, Benbasat and Wang 2005; Komiak and Benbasat 2006; mobile payment applications, Srivastava et al. 2010; internet banking, Roy et al. 2012).

Study 1:

To validate the Hypothesis and rule out an alternative explanation that the effect of phatic communication may come from the presence of human name rather than communication, one hundred twenty-three participants recruited from Amazon Mechanical Turk were randomly assigned to one of 2 (phatic communication (small talk): no vs yes) x 2 (human name: no vs yes) conditions. In phatic communication condition, participants were shown an image of a sample chatlog with relaxed topic starter (e.g., do you have any plans for the weekend?) whereas in no phatic communication condition, they were shown an image of an investment-related conversation (e.g., How may I help you today?). In robo-advisor with a human name condition, they were told that their advisor was Amy, an A.I. algorithm whereas in robo-advisor without a human name condition, they were only told that their advisor was an A.I. algorithm. Finally, participants answered their willingness to follow robo-advisors' recommendation, trust in the robo-advisor (adapted from Kumar, Scheer, and Steenkamp 1995), perceived humanness and control variables (i.e., age, gender, experience and familiarity with investment).

As H1 and H2 predicted, perceived humanness was significantly influenced by phatic communication (coefficient= 17.158, p=.001) but not human name (coefficient=.195, p=.062). More specifically, when perceived humanness and phatic communication were included in the analysis for trust, only perceived humanness remains significant (coefficient= .022, p=.000). Besides, both perceived humanness (coefficient= .011, p=.015) and trust (coefficient= .887, p=.000) were significant predictors of willingness to follow advisor's recommendation even when perceived humanness and trust were included in the analysis for willingness to follow advisor's recommendation.

Study 2:

Study 2 was a 3 (Robo-advisor with a human name vs Robo-advisor using phatic communication vs Robo-advisor without a human name and phatic communication) between-subject design and was designed as a replication of Study 1 with four key differences: inviting open discussion as implementation of phatic communication, recruiting different language speaking participants, using three-item empathy scale (Ye, Dong & Lee 2017) to measure perceived humanness and controlling for participants' expectation for robo-advisor performance by adding descriptions regarding robo-advisors' performance. Fifty-nine students recruited from Taiwan participated in the study.

The results were similar with those in study 1, supporting H1 and H2. Perceived empathy was significantly influenced by phatic communication (coefficient= 2.1, p=.000) but not name (coefficient=-.448, p= .179). Moreover, when perceived empathy and phatic communication were included in the analysis for trust, only perceived empathy remains significant (coefficient= .52, p=.000). Besides, when perceived empathy and phatic communication were included in the analysis for willingness to follow advisor's recommendation, only trust (coefficient= .669, p=.000) was significant.

Our findings highlight the role of phatic communication. Prior studies have indicated that humanizing AI by adding human-like communication features is effective to enhance trust (e.g., voice, Epley et al. 2007; emotions, Ketron and Naletelich 2019). Yet, little research investigates humanization from a pragmatics perspective (one exception please refer to Hildebrand and Bergner 2020). We are one of the scant studies of designing the AI-human conversation and

focused on how to initiate a conversation with phatic communication ability.

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Is This for Me? Differential Responses to Inclusivity Initiatives by Represented and Underrepresented Consumers

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EXTENDED ABSTRACT

Brands are taking on an ever-growing number of initiatives that speak to issues on inclusivity (Nittle 2018). One such initiative provides product lines that represent a diverse range of consumers' skin tones. For example, many cosmetics companies have expanded foundation lines to offer a wide range of skin tones shades. Band-Aid, in the summer of 2020, announced a line of bandages representing, for the first time, black and brown skin tones. While these initiatives are typically lauded by public opinion, do all consumers respond equally positively to them?

The extent of consumers' receptiveness to such initiatives may depend on whether they feel their skin tone is currently represented in the marketplace. Consumers who have not felt represented in the past may be skeptical about these initiatives. For example, they may question the authenticity of the brand's motivations ("woke washing"; Vredenberg et al. 2020), which might negatively affect brand perceptions (Cinelli and LeBoeuf 2020). Alternatively, negative reactions may evolve due to skepticism about product fit. Consumers often have concerns about whether a product's attributes match their needs (Hong and Pavlou 2014), and underrepresented consumers may be skeptical that a brand would have the ability to produce products matching their needs given the brand's lack of prior experience with underrepresented consumers. For example, while a brand may offer an inclusive line of foundation shades, it may still fail at choosing the proper undertones and pigments to flatter dark skin tones (Levy 2020).

This research seeks to explore how both represented and underrepresented consumers respond to a brand's inclusivity initiatives. We find underrepresented consumers are less positively inclined than represented consumers toward an inclusivity initiative. This hesitancy is driven not by brand authenticity perceptions, but rather by product fit skepticism.

Study 1a (n=146) and 1b (n =196) explore the differential reactions from represented and underrepresented consumers to inclusivity initiatives. In Study 1a, we utilized a real-world press release announcing Band-Aid's inclusivity initiative described above. Feelings of representation significantly predicted brand attitude (b=.186, t=2.38, p=.019), such that consumers who felt less represented experienced more negative attitudes. In Study 1b, we replicated these findings with a fictional brand, Stick-It (b=.299, t=4.30, p < .001).

Study 2 (n=135,907) sought to support our findings in a field setting. Partnering with a skincare company, we created a cosmetics advertisement for an inclusive product line. In the control condition, the ad was targeted toward all women who met predetermined criteria[1]. In the underrepresented condition, the ad targeted women who met these same criteria but were also interested in "African American" or "Asian American" culture. These were selected as the closest approximation for targeting underrepresented consumers (based on pretesting). The general population condition led to significantly more click-throughs (.44%, n=70,637) than the underrepresented population condition (.36%, n=65,270; b=.19, SE=.09, Wald $\chi^2(1)$=4.70, p=.030).

Study 3a (n=197) and 3b (n=373) explored the reasons why underrepresented consumers may react more negatively to a brand's inclusivity initiatives. We focus on two potential reasons: perceptions of authenticity of the brand's motives and skepticism the product line will fit one's needs.

In Study 3a, participants read an advertisement about a new line of inclusive cosmetics. Feelings of representation predicted concerns about product fit, such that the more underrepresented consumers felt, the more skepticism they had (b=-.52, SE=.08, t=-6.76, p < .001). Feelings of representation did not predict perceptions of authenticity of the brand's motives (b=- .07, SE=.09, t=-.617, p=.538).

In Study 3b, we examined the mediating role of product fit skepticism on the relationship between feelings of representation and brand attitude. We used the same design as Study 3a, but measured both brand attitude (α=.96) and product fit skepticism (α=.82). Feelings of representation predicted brand attitude, such that the more underrepresented consumers felt, the more negative their brand attitude (b=.17, SE=.05, t=-3.78, p < .001). Further, feelings of representation predicted product fit skepticism (b=- .57, SE=.05, t=12.20, p < .001). A formal test of mediation confirms that negative expectations about product fit drive consumers' more negative brand attitudes (indirect effect: b=.15, SE=.04, CI$_{95\%}$ [.08, .23]).

Study 4 (n=847) tests our process through moderation and provides guidance on how brands can assuage underrepresented consumers' skepticism by offering individualized solutions. We test two different means to introduce individualized inclusive products: personalization and customization. Personalization, where the brand ultimately decides on the formulation of a product, may be less effective than customization, where the consumer decides for themselves.

Participants were randomly assigned to one of three solution conditions (control vs. personalization vs. customization). In the control condition, participants saw an advertisement for a line of inclusive cosmetics. In the personalization condition, they saw the same ad along with information about how skin tone match technology would be used to generate an individualized product. In the customization condition, participants also saw the ad along with information about how they could customize an individualized shade for themselves. Next, participants were asked about their brand attitude (α=.96) and product fit skepticism (α=.87).

Again, feelings of representation predicted product fit skepticism (b=-.74, SE=.06, t=-12.65, p < .001). Moreover, as predicted, the customization condition (relative to the control) moderates product fit skepticism (b=.25, SE=.08, t=3.01, p < .003) while the personalization condition does not (t=.47, p=.64). When comparing the customization (vs. control), the index of moderated mediation was significant (index=−.095, SE=.040, CI$_{95}$ [−.176, −.021]), providing a formal test that customization moderates the mediation. When comparing the personalization versus control, the index was not significant.

While inclusivity initiatives are intended to reach a diverse consumer base, we find underrepresented consumers respond more negatively to these initiatives than represented consumers. This adverse reaction is driven by skepticism the product will actually fit their needs. We provide an actionable tool companies can use wherein skepticism can be assuaged. By providing consumers the ability to

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[1]   Ages 18-65+, women, location United States, interests: cosmetics, beauty, skin care, self-care.

customize (meaning that the consumer, not the company, has control over their product choice), product fit skepticism decreases.

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Hiding in the Crowd: Preference For Diversity in Competition

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EXTENDED ABSTRACT

Competition is prevalent, and people frequently make competitor choices when involved in a competitive context. Yet little research has examined how individuals choose whom to compete with. This research focuses on one important factor that could be irrelevant to the competition outcome while still influence competitor choices: the diversity of competitors.

Normatively speaking, people should always choose competitors who are inferior to them in factors that determine whether one would win the competition or not (the *determinant* factor). Other factors irrelevant to the competition outcome per se, such as factors that influence whether the comparison between different candidates is straightforward or not (the *alignment* factor), should also be irrelevant to the competitor choices. In reality, however, consumers may also strategically leverage the alignment factor. Literature in the structural alignment model (Gentner and Markman 1997) has shown that comparisons are easier and faster if made on alignable attributes (e.g., comparing an apartment with two bedrooms with an apartment with one bedroom), while harder and slower if made on nonalignable attributes (e.g., the comparison between a camera and a voice-recorder, Markman and Loewenstein 2010; Mussweiler and Epstude 2009). In addition, as the attribute alignability decreases, ambiguity would increase and additional assumptions may be drawn to make comparisons (Zhang, Kardes, and Cronley 2002). Consequently, factors that are not directly relevant may also play a role in competition by bringing ambiguity to the comparison, and thus adds noise to the decision. With this reasoning, we propose that people with disadvantages may strategically choose to compete in a less alignable context, hoping that the noise brought by the low alignability would blur their disadvantages and thus increase their chances to obtain the desired outcome. One real-world strategy to reduce alignability is choosing to compete with diversified others, such as competitors with different majors, nationalities, or constellations.

Across four preregistered studies, we observed that people preferred to compete with diversified over homogeneous competitors when they had disadvantages (Study 1 and 2). This preference persisted even when people were less likely to win the competition should they compete with diversified competitors (Study 3). We attributed this effect to the motivation to "hide" one's disadvantages and showed that such preference was attenuated when one had objective advantages over other competitors (Study 4).

Participants in Study 1 ($N = 177$) imagined that they were competing for a job as an accounting student and completed an online evaluation. They then chose to take an interview with either a group of three accounting competitors (homogenous) or a group of three competitors, each majored in finance, economics, and management (diversified). The online evaluation score of the participant ranked second in both groups. We found a preference for diversity: 62.2% chose to compete with diversified others ($p = .001$, compared to 50%).

Study 2 replicated the preference for diversity and ruled out the alternative explanation that the preference was driven by ingroup favorability, using a different operationalization. Participants ($N = 168$) imagined applying for graduate school and chose to take an interview from a school whose applicants all submitted GRE scores (homogenous) or a school whose applicants submitted either GRE or GMAT scores (diversified). Participants were informed that GRE and GMAT scores could be converted to each other, and their rank remained the same in both groups. Results showed that 70.2% of participants chose the school accepting diversified scores ($p < .001$, compared to 50%), replicating our finding.

Study 3 included an evaluator condition to test whether the diversity preference could be biased. Participants ($N = 301$) imagined being a sales manager competing for nomination for a manager award, with either a group of sales managers (homogenous) or a group of managers from diversified departments (diversified). Two factors were relevant to their competition outcome: KPI and peer evaluation, and participants had a higher objective rank in peer evaluation in the homogeneous group. Again, 64.4% of participants chose the diversified option and 59.7% predicted that choosing the diversified option would entail a higher likelihood to be nominated (both ps < .001, compared to the benchmark calculated with evaluator's nomination). Notably, participants were actually more likely to be picked should they compete with homogenous others than diversified others (25.6% vs. 13.5%, $p = .06$), consistent with the relative rank in determinant factors (peer evaluation). Results suggested that the preference for diversified competitors could override the rational consideration for determinant factors and lead to suboptimal decisions.

Study 4 explored the reasoning behind the preference for diversity by manipulating objective advantage. Participants ($N = 300$) imagined looking for a dating partner. All participants were told that they were Capricornus, and had a rating of 3.5 / 2 / 0.5 stars in the no / weak / strong disadvantage conditions (between-subjects). Competitors were either all Capricornus (homogenous) or had different constellations (diversified). Results showed that 73.7% in the strong disadvantage condition chose to join the diversified group ($p < .001$, compared to 50%). This proportion became lower in both the weak (59.0%, $p = .07$, compared to 50%) and the no disadvantage conditions (52.4%, $p = .63$).

The studies together documented a novel preference for diversity in competitor choices, showing that such preference resulted from a motivation to "hide" disadvantages in a diversified group, that it could be costly and cause welfare loss. This research contributes to the literature on competitor choice, competition, strategic thinking, and heuristics and biases in general.

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As Wages Increase, Do People Work More or Less? A Wage Frame Effect

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EXTENDED ABSTRACT

Marketing problems evolve as the market evolves. As new technologies and platforms like Uber become prominent, firms need to make pricing decisions for a variety of users, including both traditional consumers such as Uber riders and non-traditional consumers such as Uber drivers. Our research focuses on non-traditional consumers and studies a unique pricing problem—how to communicate a wage change to strategically affect work supply.

Charlie drives with Uber part-time. Driving with Uber is not exactly fun for Charlie. If it were not for the money, he would rather stay home and play video games or watch television. Assuming that there is a sudden increase in Uber's pay scheme, and everything else in Charlie's life remains unchanged, how will Charlie respond to this change? On the one hand, he can think of the wage increase as a great opportunity to earn more money. On the other hand, now that the wage has increased, he doesn't need to work as hard so he can have more free time to do things he really enjoys doing. So, will Charlie drive longer or shorter hours after the wage increase?

Economic theory does not make a clear prediction. The empirical literature also finds mixed evidence (e.g., Chen and Sheldon 2015; Camerer et al. 1997). This research proposes a reliable way to predict the effect of a wage change on labor supply. Suppose that Charlie used to make $20 per hour (he drove 30 hours and earned $600 a week). A new wage, $30 per hour, could be interpreted in one of two ways. Charlie could think, "from now on, if I drive the same 30 hours, I can earn $900," which is a pay-change frame. Alternatively, Charlie could think, "from now on, I need to drive only 20 hours to earn the same $600," which a load-change frame.

We propose that the direction of the work supply change depends on whether the wage change is framed as a pay change or a load change. In particular, the pay-change frame facilitates a change in work supply in the same direction as the wage change, while the load-change frame facilitates a change in the opposite direction. Normatively speaking, the frame of the wage change is irrelevant to the effect of the wage change on work supply and $WF=0$, but we expect WF to be positive if the wage change is positive (i.e., a wage increase) and negative if the wage change is negative (i.e., a wage decrease).

We tested our propositions in a series of experiments. Study 1 studied real workers in a real labor market: Amazon's MTurk workers (N=993). Personalized wage increase information in the pay-change frame generated, on average, 9.30 more hours of work per week on MTurk than that in the load-change frame (B=9.46, SE=0.66; t(991)=14.30, p<.001). Study 2 (N=132) replicated the wage frame effect with actual labor and actual payment—participants pumped up balloons for the lab—and for both wage increases and decreases, meaning that even a wage decrease can elicit the same amount of labor supply as a wage increase if the change is communicated strategically.

Study 3 (N=1,474) explored the cognitive mechanism underlying this wage-frame effect: In multi-attribute decision making, an attribute whose value varies across options receives greater attribute weight than an attribute whose value is shared among options (Dunn et al. 2003; Tversky 1972). In the wage-change context, the wage frame varies one of the attributes—either workload or payment—to enhance the corresponding motivation—leisure and money. We adopted the Charlie's Uber scenario and, as a theoretical extension, added a "default frame" condition. Because the default frame presented as an hourly rate (a conceptual pay-change frame), we predicted that it would yield a similar effect as our pay-change frame on the work supply decision. All participants were assumed a role as a part-time Uber driver who used to drive 30 hours and make $600 a week. Then, they were assigned to one of the wage-frame conditions: pay-change as "*From now on, you can drive 20 hours to earn the same $600*", load-change as "*From now on, you can drive the same 30 hours to earn $900*", and default as "*From now on, your rate increases to $30 per hour*". We replicated the wage frame effect on willingness-to-work (pay-change: +6.42hr; load-change: -3.94hr; WF=+10.36, SE=0.91; t(557)=11.43, p<.001, 95% C.I.=[8.58, 12.14]) and indeed found the effect of the default frame (+5.71hr) similar to that of the pay-change frame. More importantly, we asked all participants what motivated their work supply decision by choosing between: "*Now I can have free time to do things I really enjoy doing*" (weighting leisure) and "*It is a great opportunity for me to earn more money*" (weighting e money). Consistent with our theory, we found that the load-change frame caused a weight increase in leisure (+.24, p<.001) and the pay-change frame (-.08, p<.01), as well as the default frame (-.04), a weight decrease in leisure.

Like many economic variables, the influence of a wage change on work supply depends on the manner in which the wage change is communicated. Our wage frame effect not only provides psychological insights to the classical labor economic problem but also contributes to the marketing management literature on pricing (e.g., Liu and Soman 2008) and the consumer behavior literature on numerical cognition (e.g., Larrick and Soll 2008) and the relationship between time and money (e.g., Okoda and Hock 2004; Shaddy and Shah 2018).

Why Not Set Pen to Paper? How Typeface Design Influence Charitable Behaviors

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EXTENDED ABSTRACT

Consumers often rely on visual representations (e.g., text or pictures) to make decisions regarding charitable activities (Cryder, Botti, and Simonyan 2017). However, visual elements such as the typeface remain unexplored in the context of charitable appeals. The aim of the current research is to explore whether people facing a charitable appeal that uses a handwritten (vs. typewritten) typeface design are more willing to engage in the advertised charitable activities and conduct charitable behavior.

Two types of typeface design are classified: handwritten or typewritten (Schroll, Schnurr, and Grewal 2018). A handwritten typeface appears to have been written by human beings (Schroll et al. 2018). The curved, irregular strokes and letters (Henderson, Giese, and Cote 2004) appear to be more personal, friendly, and full of emotion, but less professional and more childish (Izadi and Patrick 2020). In contrast, typewritten typefaces have been entered via a keyboard and generated by a machine (Schroll et al. 2018). It is usually straight, square and regular (Henderson et al. 2004), considered to be impersonal and mass-produced, but more formal (Izadi and Patrick 2020). We propose that a handwritten (vs. typewritten) typeface generates this sense of connectedness which, in turn, increases people's willingness to engage in charitable activities. It is because a handwritten typeface embodies human characteristics (Schroll et al. 2018), associates with human origins (Izadi and Patrick 2020). Such sense of a human presence creates psychological closeness with consumers (Ren, Xia, and Du 2018)—a feelings of connectedness (Yim, Tse, and Chan 2008)—which also increases individuals' empathetic responses (Cialdini et al. 1997).

Two types of charitable appeals are proposed as the first boundary condition: self-benefit and other-benefit (Fisher, Vandenbosch, and Antia 2008). We suggest that the other-benefit appeal emphasizes that the beneficiaries are completely unrelated to oneself, but related to other people or organizations. A handwritten typeface design provides a visual connection between the donor and the cause or the beneficiary, thus justifying the donor's helping behaviors. In contrast, a self-benefit appeal emphasizes the fact that the main beneficiary is the donor, which creates a strong connection between the consumer and the cause. Thus, the handwritten typeface effect to make no difference when the connection between the consumer and the charitable activity is already strong.

Brand attachment is the second boundary condition. It is defined as a strength of connection between the brand and the individual from weak to strong (Park et al. 2010). Since brands desire to create a strong bond between themselves and their target consumers, and given the likelihood that consumers will switch to a company associated with a cause (Cone Communications CSR Study, 2017). When employing CSR to reach consumers who have a weak attachment to the brand, A handwritten typeface design may offer the opportunity to strengthen the brand-consumer relationship—enhances the sense of connection that the consumer feels with the brand, further increasing consumers' engagement in the charitable behavior. In contrast, consumers who are highly attached to the brand are more motivated to perform behaviors that use considerable consumer resources (Thomson, MacInnis, and Whan Park 2005). Therefore, when a brand applies CSR to reach consumers who are already strongly attached to the brand, the choice of typeface design may not have much of an impact on the brand-consumer relationship.

The first study was a pilot study using a single-factor (typeface: handwritten vs. typewritten) between-subjects design. It was a field experiment collaborated with two local convenient stores for two weeks. The results showed that the handwritten (vs. typewritten) donation box raised more money on average.

Studies 1 and 2 were a lab experiment to test the effect of handwritten typeface in a more control setting. The results of both studies replicated the findings in the pilot study. That is, participants were more likely to engage in sponsorship when exposed to charity ads using the handwritten typeface than a typewritten typeface. Furthermore, in Study 2, we tested feelings of connectedness as the underlying mechanism, including "love," "warmth," "uniqueness," and "cuteness" as possible alternative mechanisms. A parallel mediation analysis (Model 4 in PROCESS; 5,000 resamples) showed only significant indirect effect through feelings of connectedness.

Study 3 had a 2 (typeface: handwritten vs. typewritten) x 2 (charitable appeal: other-benefit vs. self-benefit) between-subjects design. As expected, in the other-benefit charitable appeal condition, participants who viewed the handwritten message in the ad showing a greater donation likelihood to the charity. No such differences were observed on participants in the self-benefit charitable appeal condition.

Study 4 had a 2 (typeface: handwritten vs. typewritten) x 2 (brand attachment: strong vs. weak) between-subjects design with real customers drawn from the loyalty program of a skincare brand in China. VIP customers and ordinary customers of the brand were represented as strong and weak levels of brand attachment. The result showed that in the weak brand attachment condition, participants who viewed the handwritten message in the ad indicated a greater willingness to support the charity. No such differences were observed on participants in the strong brand attachment condition.

This research makes several theoretical contributions. First, we extended the research on typeface design in charitable appeals, showing that a subtle manipulation of typeface design can enhance the effectiveness of a charity ad. Second, we examined the impact of using a handwritten typeface design in a charitable appeal for the first time, suggesting that the choice of typeface design should be dependent upon the type of charitable appeal and the strength of the relationship between the target consumers and the brand. Third, we extended the humanization literature, suggesting that a handwritten typeface is also a viable humanization strategy.

The current research offers rich managerial implications. Handwriting as an important factor in a charitable appeal, we provide brand managers an actionable strategy, especially when consumers are not strongly attached to the brand or when using an other-benefit charitable appeal. Also, we provided guidelines that can help social marketers and charity fundraisers in deciding the typeface design, giving them a greater understanding of the benefits of using handwriting in marketing communications.

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Assembling Fitness on Instagram – A Critical Visual Content Analysis of Consumer-Generated Content

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EXTENDED ABSTRACT

"The society of consumers brandishes before its members the ideal of fitness"
– Zygmunt Bauman, *Liquid Modernity*

Nowadays, social media provide access to digital interactive networks, which invite consumers to "become flâneurs, who 'survey and consume' others' bodies in the 'airport departure lounge' of postmodern society" (Gill, Henwood, and McLean 2005, 39). As such, visually-driven social media feeds constitute avenues paved with ostentatious displays of obsessively shaped bodies that appear like flawless statues carved out of white marble. Especially on Instagram, the body constitutes an object of consumption that needs to be continuously sculptured to meet the aesthetic requirements of the postmodern fitness regime, and, consequently, experience aesthetic inclusion (Bauman 2005; Schöps 2020; Tiggemann and Zaccardo 2018). Hashtags, such as #thinspo, #fitspo, #weightlosstransformation, or #nopainnogain, that consumers attach to their fitness visuals (Talbot et al. 2017), reinforce this fitness regime.

Recent consumer research frames fitness on social media as bio-pedagogical source for health and fitness information (Jong and Drummond 2016), which enables consumers to seek inspiration in fitness imagery on social media (Carrotte, Prichard, and Lim 2017; Santarossa et al. 2019; Slater, Varsani, and Diedrichs 2017). Yet, scholars demonstrate that fitness imagery on social media strongly reinforces idealizations of thin and muscular body shapes rather than transmitting health-oriented representations of fitness (Boepple and Thompson 2016; Talbot et al. 2017). Moreover, research finds that consuming visuals of these mostly unattainable bodily ideal types impacts beholders' self-perception negatively (Slater et al. 2017; Tiggemann and Zaccardo 2015). Although these studies recognize the dangerous and seductive potential of fitness imagery, and acknowledge Instagram's pivotal role in this regard, research on the very nature of visual fitness rhetoric on social media, that is, the compositionality of fitness imagery remains obscure.

Correspondingly, this study aims to contribute to research on fitness and body culture on social media by investigating the compositionality of fitness consumers' visual rhetoric on Instagram. Data analysis focuses on visual data material tagged with the hashtag #fitness. This study finds three communicative dynamics in fitness consumers' visual rhetoric, namely, *competing*, *acting*, and *balancing*. The article closes with discussing and delimiting findings, and offering possibilities for future research.

THEORY

A postmodern view on fitness

From a postmodern perspective, fitness can be understood as a fluid, transformative and unstable bundle of meanings—a cultural phenomenon that is processually constructed and subjectively experienced within different contexts and moments (Bauman 2000). Albeit the postmodern condition of fitness cannot be defined precisely (Bauman 2000), its contemporary usage generally refers to the "state of one's psycho-physical wellbeing" (Glassner 1989, 216), and an "esteemed mode of caring for the body" (Smith Maguire 2002, 449) within the tenets of heroic transformation and self-improvement (Featherstone 2010).

However, fitness entrenches individuals in a culture of permanent self-reproduction and self-aggrandizement (Bauman 2000) exploiting the aesthetic and functional potential of the body to limitless extent. Conforming to all standards of an exciting, satisfying and socially admitted lifestyle represents the postmodernist credo (Bauman 2000; Featherstone 2010). This credo demands a "chase after a[n ever-new] quarry" (Bauman 2000, 78) with no final triumph in sight. Simultaneously, this imperative constitutes a fitness consumer's dilemma—an obstacle course necessitating to balance the ethics of aesthetics and health obsessively and delicately (Bauman 2000).

Consequently, postmodern consumer society—a society of "universal comparison" (Bauman 2000, 76)—commodifies both fitness and bodies (Schöps 2020) by presenting "the good life as available for purchase" (Featherstone 2010, 200). This purchase, however, becomes a "costly affair" (Bauman 2000, 80). That is, fitness imposes a strict regime of normative regulations on the body. Nowadays, this regime foremost manifests on social media such as Instagram. On Instagram, consumers express themselves by assembling a visual rhetoric "of more-or-less discrete components" (Zappen 2005, 323). As such, fitness consumers' visual rhetoric encompasses material and expressive components (Rokka and Canniford 2016) which contextualize fitness as a whole.

Assemblage theory

DeLanda's (2006) assemblage theory offers a powerful lens to analyze fitness consumers' visual rhetoric composed of heterogeneous components, that is, material and expressive components. While material components refer to tangible physical entities, expressive components encompass signs, symbols, and language (DeLanda 2006). In the context of this study, we investigate fitness consumers' visual rhetoric as an assemblage of material objects, such as human bodies, fitness equipment, or distinct settings, as well as expressive, "communicative" (Rokka and Canniford 2016, 1798) capacities, such as triumph, vulnerability, or keenness.

A second helpful notion of assemblage theory is that dynamic, processual interactions between various components can have a stabilizing or destabilizing effect on an assemblage's corporate identity depending on its overall repertoire's homogeneity (DeLanda 2006). In the present study, this notion helps to address Instagram's "prone[ness] to fluidity" (Rokka and Canniford 2016, 1792) by shedding light on how fitness consumers' rhetoric of accumulated single visual bits provokes stabilizing or destabilizing effects within the fitness assemblage as a whole.

METHODOLOGY

This study draws on visual data that was scraped from Instagram by running the InstaCrawlR scripts in RStudio (Schröder 2018). Specifically, we performed a single #hashtag query for the hashtag #fitness, and scraped a meta data set of 10,000 posts in October 2020. The meta data set contains, for instance, post URL, and captions. We sampled every 10th visual in the data set by using the post URL to access and download the visuals until we achieved theoretical saturation. The final sample comprised 101 visuals.

Data analysis involved a critical visual content analysis (Rose 2012) in which we, in line with our assemblage theoretical perspective, analyzed and coded the visuals in terms of their material and expressive components, and their respective capacities (Schöps, Kogler, and Hemetsberger 2020). Analysis further encompassed a process of inductive categorization, constant comparison, and abstraction (Spiggle 1994) to grasp the essence of communicative dynamics within fitness consumers' visual rhetoric.

FINDINGS

The findings of this study provide insights into fitness consumers' visual rhetoric on Instagram. The following paragraphs give a detailed account of the communicative dynamics within fitness consumers' visual rhetoric—*competing*, *acting*, and *balancing*.

Competing

Our analysis reveals that fitness consumers compete with each other on who performs better (Bauman 2000) rather than sharing motivation and inspiration (Jong and Drummond 2016). This is foremost indicated by the low amount of instructions (16.18%), motivation (18.18%), solidarity (20.8%), and tolerance (11.9%), and, in contrast, by the repeated appearance of hostile (26.7%) and swanky (32%) expressions in the visuals. Visual statements, such as "*Best fitness classes*", or "*Beast Mode*", as well as visual representations of aggressive or wild animals (8.91%), e.g., lions, reinforce the competitive nature of fitness. This competitiveness is further expressed in consumers' keen (55.4%) attempts to carve out any muscular parts of their bodies (79.9%) through body-hugging poses (82.8%), or skin-tight clothes (31%). Interestingly, 76.19% of hostile, and 81.5% of swanky expressions, as well as 85.7% of raised eyebrows, and 78.6% of clenched fists are accompanied by at least one muscular body part.

By contrast, less well-defined bodies more often share contemplation (24.8%), disappointment (59.1%), and even fear (18.6%). Consequently, dependent on their bodily state, fitness consumers' visual rhetoric seems to convey either an unspoken invitation to competition, or an insecure request for mercy of others. These competitive dynamics point to a rigid hierarchical structure in which thin and muscular bodies experience aesthetic inclusion, while non-shaped bodies are stigmatized, or banned (Bauman 2000). Moreover, 68.75% of all bodies that are photographed in public settings show at least one muscular body part, while bodily flaws (3.17%), or expressions of exhaustion (3.96%) are strictly hidden. The only setting, in which problem zones are revealed, are before/after images illustrating individual transformational (12%) journeys (Bauman 2000; Edgley 2006).

We further find that 90.9% of seductive elements are expressed by well-shaped bodies highlighting such bodies' apparent superiority. As such, aesthetically pleasing bodies are "key to all enjoyments, the sensations, tastes and activities of consumer culture" (Featherstone 2010, 200). However, the competitive spirit of fitness does not only encompass the pursuit of fitness per se, but also a celebrity-oriented lifestyle (Marwick 2015). This manifests in celebrity-esque material components, for instance, sunglasses (4.95%), swimwear (6%), or holiday-indicating (12.5%) seaside (8.33%) settings combined with body modification elements, such as make-up (12.9%), and tattoos (20.3%). Moreover, accessories, such as watches (6.93%), jewelry (24.8%), as well as expensive brands, are repeatedly appearing in the visuals—typical status symbols of celebrity culture (Marwick 2015; Senft 2013). Selfie poses (28.6%), accompanied by duckfaces (9.26%) and attentional hashtags, e.g., #likeforlikes, as well as tags

to other profiles (18.8%), further illustrate fitness consumers' competitive quest for attentional capital (Marwick 2015).

Acting

In accordance with the platform´s etiquette of acting (Marwick 2015), fitness consumers on Instagram share ideal representations of their lives rather than documenting their true self (Featherstone 2010) illustrated by seemingly paradoxical pairings of material and expressive components. For example, visuals set in sports-related surroundings rarely show actual exercising (10.9%), or engagement in any other sport activity (15.6%). Similarly, material signs of exhaustion, such as sweat (5%), or red faces (3.33%), which would indicate previous exercise, are absent. Moreover, training equipment is strategically arranged for the photo instead of actually being used (42%)—just like decorative props in a stage play. Likewise, mouthwatering dishes appear unaffected in 85.7% rather than being eaten (1%).

Fitness consumers' dramaturgy (Edgley 2006) is further reflected in representations of human bodies in rigid, statuesque postures instead of being spontaneously caught (21%) in dynamic movements (23.4%). Accordingly, still poses (82.8%), marked by framed hips and bottom (32%), or squared shoulders (38.2%), are paired with training gear, which is, however, not worn during any physical training (92.1%) but rather fulfills the purpose of indicating athleticism, and optimizing the body shape. Interestingly, fitness consumers scarcely accept (19.8%), or triumphantly celebrate (23.8%) their bodies—59.1% of the visuals even convey a sense of disappointment. These expressive components illustrate fitness as an eternal lifelong process in which the goal is never fully reachable (Bauman 2000).

Although fitness consumers keenly try to imitate the visual iconography of mainstream celebrity culture (Marwick 2015) through typical model poses, holiday imagery, and similar material components, they eventually convey a different image. Contrary to the happy, brightly smiling models and celebrities in broadcast media, fitness consumers are restrainedly grinning (35.2%) rather than decently laughing (7.41%). Additionally, more than half of all displayed humans do not show any expression of contentment, and are depicted unaccompanied (80.95%) instead of being in the company of peers. Contrary to the idea of bodily excess and lust, the body's vulnerability (35.6%) is revealed through stiff and artificial poses (57.4%) underlined by expressions of insecurity (46.7%). Accordingly, fitness consumers' visual rhetoric creates a dreary atmosphere in which pleasure is lacking in 68.3%, while 92.08% of the situations seem to be neither exciting nor adventurous.

Balancing

Despite competitive and pretentious displays of fitness, fitness consumers also exhibit honest representations of a healthy, performance-oriented lifestyle. Correspondingly, consumers recurrently try to balance the contradicting ideals of a hedonistic celebrity and fitness culture. Paired rhetorical elements, such as lust and self-discipline, holiday and work, relaxation and exercise, body and mind, illustrate this balancing act.

Balancing lust and self-discipline manifests in food practices, for instance, replacing and up-valuing ingredients. That is, ingredients considered unhealthy are exchanged for healthy ones, e.g., swapping burger buns for lettuce leaves (table1). Moreover, visuals containing unhealthy groceries often simultaneously entail healthy food elements, e.g., an avocado-topping on the burger, or a Coca-Cola bottle, which is held up in front of a fruit basket (table 1). Additionally, a large number of different food types (41.1%) indicates

fitness consumers' concern for a balanced diet in which the majority of depicted groceries is appetizingly arranged for the visual, while still featuring indulgent expressions (44.4%).

Furthermore, balancing is reflected in visuals that simultaneously display components indicating holiday and work, for instance, beach-photography showing a tanning person while holding a notebook in his hands (table 1). Taking into account that "the 'good' life" is directly linked to "making career" (Senft 2013, 139), and the main purpose of notebooks is to enable location-independent work, this image perfectly illustrates fitness consumers' balancing rhetoric. Balancing exercise and relaxation is foremost evident in visuals of resting places, which simultaneously contain material components that indicate sportive activity, for instance, couches or beds (3.53%) repeatedly appear next to humans wearing training gear. Moreover, fitness consumers frame their balancing rhetoric around bringing mind and body in harmony. This manifests in contemplative expressions (24.8%), calm (43.6%), idyllic (18.8%) settings in nature (21.4%), yoga exercises (15.4%), as well as visual statements such as *"A beautiful day begins with a beautiful mindset"* underpinned with hashtags, such as #mindset or #mentalhealth.

DISCUSSION

This research contributes to an increased understanding of fitness and body culture on social media by illustrating how the compositionality of fitness consumers' visual rhetoric frames the fitness assemblage on Instagram as a whole. Besides of seemingly being spurred by a relentless hustle for attentional capital (Marwick 2015), fitness consumers' fierce chase after muscles and thinness reflects the postmodern fitness credo of "leav[ing] every already achieved standard behind" (Bauman 2000, 78), and succumbing to a strict regime of permanent self-improvement (Bauman 2000).

Accordingly, the findings of this study indicate that this normative concept of postmodern fitness does not seem to experience any destabilizing waves of resistance but is "justifie[d] with no need to argue" (Bauman 2000, 97)—"well mapped and closely watched and guarded" (Bauman 2005, 95). The findings particularly show that fitness consumers' visual rhetoric is framed as an assemblage of fragmented, seemingly immaculate body parts. This rhetoric further pushes the already illusive postmodern bodily ideal types to even higher "unattainable heights" (Bauman 2000, 80). Yet, higher heights come along with deeper depths. That is, postmodern fitness consumers are no longer only burdened with the requirement to balance health and bodily appearance delicately (Bauman 2000), but also to forcefully perceive these burdens as part of a pleasurable lifestyle of concupiscence itself (Featherstone 2010). Rather than a process of self-castigation, fitness is therefore framed as an envisaged status—ready to be instantaneously consumed in the "supermarket of identities" (Bauman 2000, 83). However, the rhetorical compositionality of acting reveals that this logic only promises momentary sparkles of winning in lieu of final triumph (Bauman 2000; Bauman 2005). Instead of being key to a "meaningful, satisfying and socially approved lifestyle" (Featherstone 2010, 200), the hunt for these fitness ideals seems to be a never-ending "chase after utopias" (Bauman 2005, 96), brought into life and brandished before its members by postmodern consumer society.

We delimit our study to one social media platform. We see potential in conducting a cross-platform analysis of visual fitness content. Future research could, for instance, investigate the relationship between content of professional content creators on YouTube and regular users on Instagram.

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When Insect Consumption is Socially Risky: Social Norms as a Major Barrier to Widespread Acceptance of Non-Normative Food

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EXTENDED ABSTRACT

The reduction of meat consumption is often discussed as an important intervention to mitigate climate change. However, alternative food concepts are needed to fulfill the demand for essential proteins. Alongside other novel foods like in-vitro meat, insects are a promising alternative source of high-quality protein and micronutrients, while maintaining sustainable production and healthful consumption (Oonincx and Boer 2012; Rumpold and Schlüter 2013; van Huis 2013). One major problem is the low acceptance of insects as food within Western cultures (Hartmann et al. 2015; Vanhonacker et al. 2013). Previous research has focused on factors that influence the acceptance of insects as food. Some of the most important barriers are disgust, opposing cultural influences, food neophobia and unfamiliarity (Batat and Peter 2020; Looy, Dunkel, and Wood 2014; Tan et al. 2016; Verbeke 2015). Our research extends previous findings by examining the role of social norms and social context with respect to the refusal to eat insect-based dishes.

Social norms contain information about what behavior others usually approve (injunctive norms) or typically practice (descriptive norms) (Cialdini, Reno, and Kallgren 1990). Food can be considered normative if the majority consumes it and approves its consumption. This includes most staple foods like fruits, vegetables, dairy products, and meat. Food can be considered non-normative if only a minority consumes it, while the majority of consumers resist and reject its consumption. Non-normative foods are often associated with disgust, moral opposition, feelings of unnaturalness, or contamination. Recent examples are genetically modified foods, in-vitro meat, or insect-based dishes (Hartmann et al. 2015; Hingston and Noseworthy 2018; Siegrist, Sütterlin, and Hartmann 2018). As such, the consumption of some novel foods in Western countries is still not normative and is predominantly perceived as a violation of prevailing social eating norms. According to Higgs (2015, p. 39), "social eating norms are perceived standards for what constitutes appropriate consumption." Prior research suggests that violating social eating norms bears some inherent social risk. This risk manifests as a threat to group affiliation and can lead to negative evaluations by other group members (Deutsch and Gerard 1955; Higgs 2015). In general, people adhere to social norms to be accepted and liked by others, and to avoid negative social consequences such as disapproval (Baumeister and Leary 1995; Cialdini, Kallgren, and Reno 1991). Thus, if individuals have no further information about deviating group norms, they will strive to adhere to majority-accepted social eating norms. It can therefore be assumed that individuals show avoidance tendencies when it comes to consuming a non-normative food in the presence of others. Accordingly, we formulate our first hypothesis:

Hypothesis 1:   *Lower willingness to consume non-normative food (insect-based dish) versus normative food (meat-based dish) will be serially mediated via perceived norm-violation, perceived social-risk, and perceived threat of negative evaluation.*

The degree to which individuals strictly adhere to these social eating norms varies with the degree to which they already feel accepted by others present (Higgs 2015; Robinson et al. 2011). It is likely that social eating norms are more salient and perceived as more mandatory in social contexts where individuals are more concerned with being accepted and sympathized by others (like on a first date). Consistently, previous research teaches us that eating decisions are influenced by impression management concerns, which in turn increase norm adherence (Herman, Roth, and Polivy 2003; Mori, Chaiken, and Pliner 1987; Roth et al. 2001). This suggests that the mechanism described in H1 is more pronounced in situations where individuals are keen to make a good impression. Accordingly, we formulate our second hypothesis:

Hypothesis 2:   *The serial mediation effect formulated in (H1) is moderated by the social context (with low vs. high impression management concerns).*

For social context as moderator, we identified two levels using a qualitative and a quantitative pre-study, namely "a meal with close friends" (= low impression management concerns) versus "a meal with new colleagues" (= high impression management concerns). To test our Hypothesis, we used a moderated serial mediation model with three mediators (PROCESS Model 85, Hayes 2018, p. 609). We employed a 2 (food type [X]: meat-based dish vs. insect-based dish) x 2 (social context [W]: close friends vs. new colleagues) between-subjects experimental design. We used indirect questioning and asked participants to put themselves into a hypothetical situation. Participants then rated *perceived norm-violation* (M1), *perceived social-risk* (M2), *perceived threat of negative evaluation* (M3), and *willingness to consume* (Y) for the experimentally manipulated food type. We recruited online participants from Germany, Austria, and Switzerland via SurveySwap and arrived at N = 186 valid responses.

We initially tested for moderation using 2-way ANOVA and found significant main and interaction effects for each mediator and the dependent variable. Importantly, we observed no gender effects in these analyses. Our test for moderated serial mediation confirms hypothesis H1. Lower *willingness to consume* insect-based dishes (vs. meat-based dishes) (Y) is serially mediated via *perceived norm-violation* (M1), *perceived social-risk* (M2), and *perceived threat of negative evaluation* (M3) on both levels of the moderator. Our moderation hypothesis H2 is also confirmed. As predicted, the mediation effect is amplified by the social context which evokes higher concerns of impression management (i.e., new colleagues vs. close friends).

The results of our study show that there are social inhibitions among consumers regarding the consumption of insect-based dishes. This is reinforced by social contexts in which individuals strive to make a good impression, which shows how unpresentable the consumption of insect-based dishes remains. Future research should investigate how to make the consumption of such non-normative foods appear normal, widespread, and socially accepted in order to reduce the associated perceived norm violation. If the consumption of novel foods like insects is not perceived as socially acceptable, then the intake is not only a matter of personal preference, but also of social risk-taking. This barrier to the acceptance of healthful and sustainable novel foods must be recognized in order to develop appropriate interventions to ultimately reduce meat consumption.

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Blending In or Popping Out? Which Photos of Consumption Experiences Positively Affect Consumer Engagement

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EXTENDED ABSTRACT

Consumers engage in consumption experiences and capture these experiences in photos, and share them on social media such as Instagram and Facebook every day (Facebook 2021; Instagram 2021). Given that these millions of photos are viewed by others, it has become an organic way for companies to gain awareness from other viewers (i.e., potential consumers) to obtain awareness and engagement (e.g., Likes).

Some of these photos records the consumption event without the focal consumer, such as a photo of the Ferris wheel at a theme park. We label this an "Experience" photo. The other type of photo captures both the consumption experience and the focal consumer engaging in the experience. We label this type of photo a "Person" photo. Which type of consumption experience photos trigger consumer engagement vis-à-vis the most likes?

Research in marketing and psychology has well-documented the antecedents and consequences of consumer photos. However, most of this research focuses on the consumer who is taking the photo, their sharing intention and how taking and sharing photos affect their well-being. In contrast, scant work has examined how such posted photos affect other viewers' attitude and engagement. With the rise of social media where consumer photos of consumption experiences are pervasive, how such photos affect consumer engagement is highly relevant.

We propose that Person (vs. Experience) photos lead to more positive consumer engagement through theories of aesthetic judgement, and that people view Person (vs. Experience) photos as more attractive, which further lead to their feelings of empathy of the focal consumers' consumption experience, and thus generate greater consumer engagement. We test these propositions using a multi-method approach including lab experiments, secondary data, and simulated eye tracking data.

This paper contributes to the literature in consumer experience by demonstrating that different types of consumer photos differentially affect consumer engagement. This substantive finding has implications for marketing of consumption experiences.

Further, we provide a unique theoretical explanation that photo type affects perceptions of attractiveness and in turn empathy. Whereas past research in marketing, has shown how photos and emotional texts/photos (Bagozzi and Moore 1994; Mooradian, Matzler and Szykman 2008) are linked with empathy and consumer engagement, the link between types of consumer experience photos and aesthetic judgement, empathy, and consumer engagement has not been established.

Extant research has well-documented that consumer photos generate differential effects on both the focal consumer and other consumers that are viewing the photos. On balance, less attention has been devoted to the psychological consequences on viewers. Emergent work has attempted to close this gap (e.g., Berger and Barasch 2018; Hofstetter et al. 2020; Hartmann et al. 2019). Based on the literature there are likely many ways to examine effects of photos of consumption experiences. Our focus is on unexplored aspects of consumer engagement.

First, we examine how others perceive the shared photo of a consumption experience. This should provide insights as to what types of shared photos engender the most influence on others. Second, in addition to the informational effect provided about an experience in photos, photo types could generate positive psychological reactions from other consumers. Studying this effect can provide insights on consumer well-being, and provide insights to marketers.

Viewers judge the attractiveness of consumer photos through attractiveness and emotional expressions of focal consumers in photos (Bryan, Perona and Adolphs 2012). The differential aesthetic judgement then influences people's social behavior and consequential evaluations of the subject (Wald 2015). We argue that in addition to the appearance of the focal consumer, the structure of a photo also affects viewers' aesthetic judgment.

Aesthetic judgment has been shown to stimulate emotional sensations that triggers our ability to share others' emotional states (Gallese 2003). We hypothesize that viewers are more likely to feel the emotions and understand the consumption experience of a consumer when they find the photo posted by the consumer attractive.

Research in marketing, psychology, and computer science has shown that the presence of a human-being, leads to better advertisement effectiveness (Babin and Burns 1997; Bagozzi and Moore 1994; Sajjacholapunt and Ball 2014). Based on this, we predict that viewers engage more with Person (vs. Experience) photos because they are more aesthetic, and thus, the viewers empathize the focal consumers' experience more, and thus, lead to higher engagement.

In Study 1, we use data obtained from public accounts on Instagram, and showed that Person (vs. Experience) photos generate higher engagement (i.e., more Likes) from other users through Likes, after controlling for the number of followers and linguistic features of the captions.

Study 2 further tests for the role of aesthetic judgment and empathy through serial mediation. We show that Person (vs. Experience) generated more favorable "Like" intention (; ; $F(1, 209) = 4.58$,). Serial mediation analysis uncovered a positive, significant indirect effect of the suggested pathway).

Study 3 examines this process using simulated eye-tracking program. The heatmaps and visual sequence maps show that when a photo contains the focal consumer in it, viewers will collect visual information from both the focal consumer and the consumption experience, thereby leading the viewers to perceive this photo as more attractive, and developing feelings of empathy with the consumer.

Thus far the comparisons have been between Experience and Person photos. However, it is reasonable to expect consumers to want to focus exclusively on themselves (Person-focused) or choose to include much of the consumption in the backdrop (Person-in-context).

In Study 4, we show that Person-in-Context (vs. Person-focused) photos generate higher consumer engagement (; ; $F(1, 321) = 9.27$,) and anticipated enjoyment (; ; $F(1, 321) = 12.33$,).

In this article, we identify and define how different types of photos affect consumer engagement. With the findings of our work, marketers can benefit from this knowledge by encouraging consumers to take photos of a particular type, training their employees to take a particular type of photo when they are asked by the consumer, or rewarding the best photos by featuring them on their event website or provide a monetary award.

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Algorithms Just Want Attention: Consumers' Resistance through Digital Detoxing

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EXTENDED ABSTRACT

We live in a surveillance economy where our attention is constantly being monetized (boyd 2012, Davenport and Beck 2001, Wu 2017, Zuboff 2019). If data is the 'new oil', algorithms are its miners; and they feed off of our attention (Lanier 2014). A rising trend in recent years has been the growing need to "digital detox," whether it is situated in digital/mindfulness well-being discourses, or the recognition that many of our digital tools may be addictive by design (Purohit et. al 2020, Humayun 2020). Even before the release of *The Social Dilemma* in September 2020 – a documentary about how tech companies monitor and compete for their users' attention – the movement towards a more mindful digital existence had been underfoot (Newport 2019). Scholars have pointed out the need to slow down and take stock in our accelerated world (Honoré 2004, Rosa 2013, Husemann and Eckhardt 2018). For example, there has been a resurgence of analogue consumption in recent years, and a recognition that the digital has infiltrated all aspects of life. As Humayun and Belk (2020, 633) describe: "Our digital world encourages a sedentary form of *flaneurship* where we scroll past various windows into the lives of others."

While we know that digital detoxing or social media breaks can be driven by a quest for authenticity (e.g. Syvertsen and Enli 2019), we know a lot less about consumers resisting algorithmic control over their attention. We do not know how complete this resistance is, or what narratives form these escapes from "the system." What underpins the politics of this technological (social media) refusal? What escapes are truly possible in a digitally saturated world? Drawing on the metaphor of extraction and attention, we examine how consumers manage to meaningfully disconnect. Based on data from 25 in-depth interviews, 23 email interviews, a netnographic study of r/digitalminimalism, people posting #digitaldetox/#offline/#socialmediabreak/#digitalwellness on Twitter/Instagram/YouTube videos, and in-person meetups (pre-Covid) alongside archival data drawn from mainstream news media, we focus on such refusal in the form of digital detoxing by consumers who are letting go of not just their digital devices – but their connections to the new public forums that social media represent.

Rosa (2013) posits that alienation is often caused by the fast pace of technological change, the acceleration of life, and hyper competitiveness in society. With monetization of social media, there is a growing infiltration of a neoliberal mentality where every status update amounts to constructing a brand (Marwick 2013; Ashman et. al 2018). Kozinets et. al (2017) argue that social networks stimulate desire and the passion to consume. The ad-based business models of social media platforms have turned them into virtual shopping malls filled with influencers. There are debates about whether social media consumption will be considered the new smoking – and if alongside the long list of terms and conditions if there should also be the warning about its potentially harmful impacts on mental health and addictiveness. Sutton (2017, 2020) for instance uses a food metaphor to explain how social media is akin to junk food; processed, thereby lacking in authenticity.

We focus on how consumers experience technological deceleration through the practice of giving up their social media. While previous work has focused on extreme instances of such digital detoxing (e.g. going to detox camps, or taking a digital detox vacation), the new evangelical consumers are the ones who are resisting *algorithmic creep* into their daily lives. Unlike pilgrimages, yoga retreats, Burning Man, or going off into the mountains to relive the past (Belk and Costa 1998, Kozinets 2002, Husemann and Eckhardt 2018), digital detoxing represents a new form of consumer emancipation and resistance in times when everything is digitally mediated. As other scholars have noted, it is not always an easy exit either (Karppi 2018, Van Dijck 2013).

According to Rosa (2019), the alternative to alienation is *'resonance'* – the ability to connect meaningfully. Many of these consumer narratives indicate a need to find such *resonance* in their interactions. Connecting meaningfully entails regaining control over one's social media consumption, which involves the interrelated processes of *reflecting, refraining, reconnecting, relapsing,* and eventually *regaining* control of their attention. Some consumers point to the need to curate and edit, be it the algorithmic newsfeeds they encounter or their "friends" list. Others point to how they need to be more extractive when it comes to where they spend their time and attention on social media. They do this by choosing seemingly lesser evils (e.g., giving up Facebook's feed for a more intentional experience on Reddit/podcasts). Even consumers who manage to regain control eventually experience periods of relapse. Our findings suggest that in the world where possibilities of escaping algorithmic control are limited and incomplete, being able to control our own attention has become a virtue; a technology of self. Boym (2001, 351) suggests that "the disease of the millennium will be called chronophobia or speedomania and its treatment will be embarrassingly old-fashioned." Our analysis shows how consumers are taking back control over their time, attention, and emotions through digital detoxing. This research contributes to the evolving discussion around consumers' quest for digital well-being and the desire for new forms of humane technologies that enable rather than entangle us as we keep turning into our digital selves (Belk 2013).

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How and When Non-Costly Status Signals Increase Perceptions of Status

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EXTENDED ABSTRACT

Literature suggests that effective status signals should be costly (Veblen, 1899). We investigate the conditions under which signals that are not costly, and thus are supposedly ineffective status signals, could increase perceptions of status and preferences.

Although status signals that do not entail any cost are theoretically ineffective, they may still be symbolically associated with constructs related to status, such as power and quality. Thus, they may still signal status under certain conditions. We propose two such conditions. First, consumers *should be seeking status.* These consumers look intensively for status signals (Han et al., 2010), and thus might perceive status even from non-costly signals. Second, supposedly ineffective status signals *should not become salient* during status evaluations. The symbolic association that these signals have with status is inconsistent with the fact that they are not costly. This inconsistency may become apparent when they are salient and, hence, their influence on status perceptions may be discounted (c.f., Schwarz and Clore, 1983). Finally, we suggest that the described increase in status perceptions carries over to preferences.

We study the case of color-value, a supposedly ineffective status signal, the cost of which is not important for managers (Gorn, et al. 1997). A pilot study (N=64) verified our assumption that color-value was not considered as effective as other established status signals.

However, low color-value (i.e., dark colors) can increase perceptions related to status such as power (Labrecque and Milne, 2012) and quality (Jacobs et al., 1991). Given this association, low color-value could increase perceptions of status, under the conditions outlined previously. First, when consumers are seeking status they may associate lower (vs. higher) color-value products with status, and prefer them over higher color-value products. Second, this effect is inconsistent with the fact that, color-value is not costly. Hence, making color-value salient during status evaluations might discount its influence on perceptions of status. Three initial studies tested these predictions.

In study 1, 84 participants were randomly assigned to either a "seeking status" or a "*not* seeking status" condition, by imagining that they were in a position of low versus high status, respectively. Participants were asked to choose among six pens (3 white, 3 black; same design, and price). A chi-square test revealed that participants seeking status were more likely to choose the low than the high color-value product (84% vs. 16%; $p<.0001$). This choice was reversed, but not significant, for participants not seeking status ($p=.09$).

In study 2, 222 participants were randomly assigned to a 2×2 between participants design with color-value salience (salient vs. not) and product replicate (scarfs vs. hats) as factors. Participants were randomly presented a pair of hats or scarfs: one product was darker and the other was lighter. Participants were either explicitly reminded of the difference in color-value or not, depending on their salience condition. They were asked to evaluate comparatively status perceptions and choose between the two products. We measured perceptions of status on a six-point comparative scales with lighter and darker products as anchors, and status-seeking (Eastman, et al., 1999).

Analysis revealed a significant mediated moderation (95% CI:.0127 to 1.0264). The status-seeking x color-value salience interaction significantly influenced status perceptions ($p=.02$). Participants high in status-seeking perceived higher status from lower (vs. higher) color-value products in the "non-salient" condition than in the "salient" condition ($\hat{y}_{Non-salient}$=4.59 vs. $\hat{y}_{Salient}$=3.84, $p=.001$). Color-or-value salience did not affect perceptions of status for participants low in status-seeking ($p=.97$). Subsequently, higher perceptions of status increased preference for lower over higher color-value products ($p<.001$).

Study 3 used field data. We recorded the color-value, hue, and chroma, of 198 "Gucci" or "Prada" handbags from two online stores: one luxury replica store and one original fashion store. Bestselling rank of a bag at each store was our dependent variable. A regression revealed a significant interaction effect between color-value and store ($p<.0001$). Moreover, for the replica store, where customers were assumed to seek status more (Han et al., 2010), lower color-value bags were the better-selling ones ($p=.01$). For the originals' store, color-value did not predict ranking ($p=.40$).

Two additional studies examined when color-value can influence status perception and preferences, even if it is salient. Thus, color-value was salient for everyone. We predicted this effect, first, *under cognitive load*, because symbolic associations are still impactful (Fitzsimons and Williams, 2000), but discounting effects such as that of salience are unlikely (Kahneman, 2003). Second, when consumers *believe that low color-value is costly*.

In study 4, 381 participants were randomly assigned to a 2 (not seeking vs. seeking status; Griskevicius et al., 2010) x 2 (control vs. cognitive load; Fitzsimons and Williams, 2000) between-participants design. Participants were presented with four bags that only differed in color-value. To make color-value salient, participants were reminded that the bags differed only in color-value. They indicated which version they preferred, and evaluated perceptions of status having each bag as a point in a 4-point scale.

Analysis revealed a significant mediated moderation (95% CI:.0273 to .5448). The status-seeking × cognitive load interaction significantly influenced perceptions of status ($p=.03$). Cognitive load increased status perceptions for the lower over the higher color-value products for participants seeking status ($M_{High-CogLoad}$=2.99 vs. $M_{Control}$=2.74; $p=.04$), but did not affect perceptions of status for participants not seeking status ($p=.36$). Higher perceptions of status increased preference for lower over higher color-value products ($p<.001$).

In study 5, 408 participants were randomly assigned to a 2-cell (beliefs:darker is not costly vs. dark is costly) between-participants design. We manipulated color beliefs using an excerpt suggesting that darker colors are equally (vs. more) costly than lighter colors. Participants chose one of four bags (as study 4). We measured chronic status-seeking (Eastman, et al., 1999).

Regression analysis revealed a significant status-seeking×color beliefs interaction effect on preference ($p=.04$). Participants high in status-seeking preferred relatively more the lower (vs. higher) color-value products in the "dark is costly" than in the "dark is not costly" condition (M_{Costly}=3.45, $M_{NotCostly}$=2.96; $p=.0005$). Color beliefs did not affect preference of participants low in status-seeking ($p=.44$).

Our findings contribute to theory by showing when non-costly signals can increase status and influence preference.

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More Trust in Fewer Followers: Diverging Effects of Popularity Metrics and Green Orientation Social Media Influencers

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EXTENDED ABSTRACT

Influencers are primarily categorized by popularity metrics such as number of followers and like counts. Micro-influencers are generally considered to be more trustworthy and authentic than mega-influencers (Appel et al. 2020). However, research shows that high follower counts reach most consumers and are beneficial in terms of influencer likeability (De Veirman, Cauberghe and Hudders 2017). With macro-influencers, higher engagement metrics are understood as a signal of greater success (Arora et al. 2019). These conflicting results beg the question of when brands should partner with different levels of influencers.

We explore the idea that explicit, visible popularity metrics such as follower count and number of likes can influence invisible influencer characteristics such as trust (Seo et al. 2019) in different ways. We specifically investigate green living orientation of influencers as a moderating characteristic. Based on prior literature, we hypothesize that green influencers with lower popularity will have greater success in sponsoring sustainable products than green influencers with a large following. The opposite would be true for regular (non-green) influencers (De Vries 2019, Seo et al. 2019). We expect this effect to be mediated by trust.

We conducted three experiments with female MTurk panel workers to test our Hypothesis. In Study 1, we investigated the effects of follower count of non-green influencers compared to green influencers on purchase intentions and attitudes toward a product. Study 1 was a 2 (follower count: 1,190 vs. 119,109) x 2 (influencer type: influencer vs. green influencer) factorial design. We invited 275 female Instagram users (M_{age} = 40) to participate in our survey on MTurk. Several participants failed simple attention checks, leaving a final dataset of 263 participants.

Participants were asked to look at the profile of an influencer or green influencer. Next, we showed participants a sponsored post. Participants indicated their purchase likelihood for the focal product (laundry detergent) on two items (r=.82) and indicated their product attitudes on three items (α = .92).

An ANOVA with influencer type and follower count as independent variables and purchase intent as the dependent variable revealed a significant interaction effect ($F[1, 259]=12.11$, $p=.001$, $\eta^2=.05$). Specifically, post hoc tests comparing the groups showed that the micro-greenfluencer's post led to higher purchase intentions than the micro non-green influencer ($M_{micro—greenfluencer}=5.20$ vs. $M_{micro\_influencer}=4.32$, $F[1, 259]=12.04$, $p=.001$, $\eta^2=.04$). Purchase intent was higher for the macro non-green influencer ($M=4.99$) than for the micro non-green influencer ($M=4.32$; $F[1, 259] = 6.65$, $p=.01$, $\eta^2=.03$), while purchase intent was higher for the micro-greenfluencer ($M=5.20$) than for the macro-greenfluencer ($M=4.60$; $F[1, 259] = 5.48$, $p=.02$, $\eta^2=.02$). Differences between the two different macro influencers were not significant.

An ANOVA with the same independent variables and attitudes toward the product as the dependent variable revealed a significant interaction effect and comparable differences between the groups. We also found a moderated mediation (PROCESS model 8) for the interaction effect of influencer type (green versus non-green) and influencer status (low versus high following) with attitudes toward the product as a mediator and purchase intent as the dependent variable ($B=-.825$, SE=.254, CI_{95}: -1.346, -.337).

In Study 2, in line with prior literature (Seo et al. 2019), we decided to manipulate popularity by the number of likes on the post itself. The influencer status was implied by the number of likes on the post and participants saw only one image. The study was a 2 (like count: 98 vs. 20,298) x 2 (influencer type: non-green influencer vs. influencer) factorial design. In addition to answering questions about purchase intentions and product attitudes (a white shirt), participants indicated their trust perceptions on three items (α = .98) (McCroskey and Teven 1999).

In this study, we replicated the findings from Study 1 for purchase intentions and attitudes. We also conducted a moderation mediation (PROCESS model 85) to test the complete model. The index of moderated mediation was significant, indicating that like count moderated by influencer type was serially mediated by trust as the stage-one mediator and attitudes toward the product as stage-two mediator ($B=-1.152$, SE=.247, CI_{95}: -1.6520, -.6895) (Hayes 2017).

Next, the purpose of Study 3 was to replicate the moderated serial mediation found in Study 2 and to show that there are behavioral downstream effects of the interaction between popularity counts and influencer types.

Study 3 was conducted with a sample of three hundred and eighteen female MTurk participants. Six participants who entered the survey from another country were excluded from the analysis, leaving a final sample of three hundred and twelve (M_{age}=37.2). In addition to responding to the same questions as in Study 2, participants completed a donation task. Participants were told that the company collaborated with a charity and were offered a 50-cent bonus. Then, they were instructed to indicate if they were willing to donate all or a portion of their bonus (Goenka and Van Osselaer 2019).

In this study, we were able to replicate the moderated serial mediation (PROCESS model 85) found in Study 2. A zero-inflated Poisson regression with influencer type and follower count as the two independent factors revealed a significant interaction ($B=-.306$, SE=.05, $Z=-6.15$, $p<001$). We explored this interaction through planned comparisons. We found that donations were significantly higher in the low follower greenfluencer condition, than in the low follower non-green influencer condition ($B=-7.51$, SE=1.69, $Z=-4.45$, $p<.001$). Donation amounts between the two "high follower" conditions did not differ. Additionally, we found significantly higher donation amounts in the low follower count green influencer than the high follower count green influencer conditions ($M_{low}=27$ cents vs. $M_{high}=20$ cents; $B=5.42$, SE=0.80, $Z=6.75$, $p<.001$), while donation amounts directionally reversed for the non-green influencer ($M_{low}=$ 17 cents vs. $M_{high}=22$ cents).

Despite green marketing efforts becoming more commonplace, our results indicate that something about a green lifestyle may still be considered non-mainstream: participants were more apt to trust a greenfluencer when popularity metrics were low. Inflated popularity metrics may carry connotations of financial or materialistic success that seem antithetical to a more sustainable lifestyle.

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Why Do Some Consumers React More Negatively to Losing than Others? The Effect of Support-Oppose Framing on Reactions to Undesired Outcomes

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EXTENDED ABSTRACT

This research was motivated by a common, consumer puzzle: When two consumers prefer the same outcome to the same degree, why does one of them react much more negatively when the non-preferred outcome transpires? In trying to answer this question, we turn to research on *framing effects*, where construing the objectively same choice or preference in different forms can impact people's evaluations and behaviors (Levin, Schneider, and Gaeth 1998). In using framing effects to address the present question, we consider an ecologically common, yet relatively understudied type known as *support-oppose framing* (Bizer and Petty 2005).

Support-oppose framing refers to construing one's preference between two options (e.g., sports team A > B) in terms of support for the liked option (e.g., being pro-A) or opposition to the disliked one (e.g., being anti-B). Although most framing research examines how frames influence which choices consumers make (e.g., Meyerowitz and Chaiken 1987), support-oppose framing uniquely applies to choices where a preference is already established, framing that preference in terms of opposition to the disliked option or support for the liked one. So, which framing would likely elicit more negative reactions to nonpreferred outcomes?

Previous research suggests that an opposition (vs. support) mindset could lead consumers to feel less *ambivalent* in their preference; and these reduced feelings of ambivalence could lead to more negative reactions. That is, an opposition (vs. support) mindset focuses people on the negative (vs. positive) information behind their preference, which is more likely to reduce feelings of ambivalence (Snyder and Tormala 2017). Consequently, because lower ambivalence is associated with being less able to see the "silver lining" in undesired outcomes, it should elicit more negative reactions (Reich and Wheeler 2016). Thus, in the following studies, we provide evidence for what we label the *opposer's loss effect*: preferences framed in opposition (vs. support) lead to more negative reactions to undesired outcomes, because opposers (vs. supporters) experience reduced feelings of ambivalence about their preference. Moreover, we show how these augmented, negative reactions can lead to increased retaliatory behavior (i.e., enacting one's negativity toward the perceived source or cause of it).

In Studies 1 and 2, we use longitudinal designs to test whether consumers' natural framing of their preferences at Time 1 (i.e., as being more opposition vs. support driven) could impact their reactions to negative outcomes at Time 2. In Study 1, we recruited fans of the NFL teams competing in Super Bowl 53. Before the game, we measured fans' preference between these teams and the extent to which that preference was motivated by their support for the liked team or opposition to the disliked team (i.e., on a single bipolar scale). A day after the Super Bowl, we contacted fans of the losing team and measured their reactions to their team's defeat. Holding constant the extremity of fans' Time 1 preference, the more consumers framed that preference in terms of opposition (vs. support), the more negative they were toward their team's loss. In Study 2, we ran a conceptual replication in the context of the 2018 U.S. Midterms elections, where we measured Ohio and Georgia voters' preference and preference framing (i.e., on two unipolar scales, one for opposition, one for support) between gubernatorial candidates. A day after the election, we contacted voters who had favored a losing candidate for their reactions to the defeat. Again controlling for the extremity of voters' Time 1 preference, only voters' degree of opposition (and not support) significantly predicted their post-election negativity.

In Studies 3-5, we provide experimental support for the opposer's loss effect. In Study 2, participants completed a "stock selection game," where they chose between pairs of companies in which to invest – either done by selecting companies they support or those they oppose. Although this manipulation did not impact how much participants preferred their kept stocks over their discarded ones, participants in an opposition (vs. support) mindset were more upset when their kept stocks ostensibly lost. In Studies 4 and 5, we provide further evidence for the opposer's loss effect as well as (1) evidence for the mechanism behind it, subjective ambivalence, and (2) consequences of it, retaliatory behaviors. In Study 4, we manipulated participants' support-oppose framing in choosing between two tasks to complete for their participation reward. Later, all participants learned they were to complete the nonpreferred task. Although opposers (vs. supporters) reported no differences in the extremity of their preference, opposers (vs. supporters) reported (1) less ambivalence in their preference, (2) more negative reactions to this undesired outcome, and (3) greater intentions to retaliate against the research team. A test of serial mediation as outlined above was significant. Finally, Study 5 conceptually replicated Study 4 with actual behavior. That is, we manipulated participants' support-oppose framing in their preference between one of two videos to watch, where their feedback on the content of the video was ostensibly important to the researchers. We then assigned them to watch the nonpreferred video and measured how long they watched it (i.e., less time watching = greater retaliation by providing worse feedback). Replicating Study 4, opposers' (vs. supporters') reduced ambivalence and heightened negativity toward the undesired outcome of watching the nonpreferred video serially mediated opposers' reduced time watching the video.

Across our studies, we provide robust evidence for the opposer's loss effect: consumers holding the same preference to the same degree, but who frame that preference in terms of opposition (vs. support), react more negatively to nonpreferred outcomes. We provide evidence that this effect is mediated by opposers' (vs. supporters') reduced feelings of ambivalence, and that these effects can lead to increased retaliation. For marketers, we believe the current work is valuable in light of how products are commonly positioned, either in opposition to the competition or support for one's own offering. Although this framing should not impact overall preferences, it may have important differences if the consumer is eventually dissatisfied – a particularly important consideration in light of the retaliatory behaviors in which consumers might engage.

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The Ghost in the Gift: A Contagion Perspective on Heirloom Gift-Appreciation

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EXTENDED ABSTRACT

In general, heirlooms symbolize and preserve familial heritage and memories, which makes them highly appreciated gifts (Grayson and Shulman 2000; Kessous et al. 2017). Overall, this is in line with past consumer research showing that inanimate objects can serve as memory storage devices (e.g., Belk 1991; McCracken 1986; O'Guinn and Belk 1989; Peñaloza 2001) and that consumers appreciate items that allow them to recall past events (Marcoux 2017; Wallendorf and Arnould 1988; Zauberman et al. 2009).

In the current work, we build upon research on heirloom gifts by demonstrating that their value is not only driven by their ability to conjure memories (i.e., memory-value), but also their ability to channel the spiritual essence of past owners (i.e., essence-value). This is because an heirloom gift, beyond being a piece of familial heritage, is unique in the sense that family members may have also *used* it. Drawing from past research on the magical-law-of-contagion (Nemeroff and Rozin 2000; Rozin et al. 1989; Rozin and Nemeroff 1990), we suggest that prior physical contact allows for the transfer of a spiritual essence to an heirloom, further increasing recipient appreciation beyond its ability to cue memories. However, consistent with the magical-law-of-contagion, this effect could also backfire if prior family members had nefarious pasts. Yet, extending this research, we also suggest that imagining your own essence in an item be gifted to your own child in the future as an heirloom can increase appreciation when receiving that same gift in the present.

Method

In a single-factor three-level (Gift: brand-new, unopened-heirloom, used-heirloom) between-participants design, Study 1 tested the role of essence-value in driving the appreciation of heirloom gifts above and beyond memory-value. Participants imagined receiving a Montblanc pen gift from their father that was either recently purchased (brand-new), purchased by their grandfather but never opened (unopened-heirloom), or it was purchased and used by their grandfather (used-heirloom). Participants then indicated their gift-appreciation (Paolacci et al. 2015; $\alpha = .96$) and their agreement with two items to assess memory-value ("The pen would represent the happy memories I have with my father") and essence-value ("I would feel like my dad is around me with this pen").

Participants in the used-heirloom condition ($M = 8.08$) indicated higher gift-appreciation than both the unopened-heirloom ($M = 7.30$; $F(1,157) = 4.94$, $p = .028$) and brand-new ($M = 6.50$; $F(1,157) = 20.61$, $p < .001$) conditions. PROCESS analysis (model 4; Hayes 2017) revealed that compared to brand-new, the positive effect of a used-heirloom on appreciation was mediated by essence-value ($\beta_{indirect} = .28$, $CI_{95\%} = [.011, .637]$), whereas an unopened-heirloom was not ($\beta_{indirect} = .08$, $CI_{95\%} = [-.123, .339]$). Importantly, the positive effect of a used- (vs. unopened-) heirloom on appreciation was mediated by essence-value ($\beta_{indirect} = .20$, $CI_{95\%} = [.001, .508]$) but not memory-value ($\beta_{indirect} = .20$, $CI_{95\%} = [-.045, .581]$) (Figure 1).

Study 2 tested whether an heirloom once possessed by a family member with a negative (vs. positive) past influences gift-appreciation when it was previously used (vs. unopened). In a 2(Gift: unopened-heirloom, used-heirloom) × 2(Previous user: negative, positive) between-participants design, participants were asked to imagine a person receiving their grandfather's Montblanc pen from their fa-ther that was either used or not (Gift) and that their grandfather was either a criminal or not (Previous user).

A significant interaction ($F(1,343) = 8.41$, $p = .004$) showed that when the previous owner had a negative past, the participants indicated that the gift would be appreciated more if it was unopened ($M = 4.99$) compared to when it was used ($M = 4.29$; ($F(1,343) = 4.72$, $p = .03$). When this negative connotation information was absent, however, the effect flipped to replicate the findings of Study 1, such that arappreciation for the gift was marginally more when it was used compared to unopened ($M = 8.00$ vs. $M = 7.39$; $F(1,343) = 3.70$, $p = .055$).

Study 3 tested the effect of receiving a gift that was intended to be a heirloom. In a single-factor two-level (Gift: future-heirloom, control) participants imagined receiving a brand-new record player as a gift from their father and were either told that their father wanted them to use the product and to one-day gift it to their own child in the future (future-heirloom) or not (control). Participants then indicated their gift appreciation ($\alpha = .95$) and responded to two items measuring the legacy memory-value ("In the future, the record player could serve to represent the memories I have to someone else") and legacy essence-value ("In the future, the record player could make someone else feel like I am always around them") (1 = strongly disagree, 9 = strongly agree).

Results showed that participants in the future heirloom condition would appreciate the gift ($M = 7.55$) more than those in the control condition ($M = 6.94$; $F(1,201) = 5.57$, $p = .019$). PROCESS analysis (model 4, Hayes 2017) revealed that the effect of gift type on gift-appreciation is mediated by legacy memory-value ($\beta_{indirect} = .09$, $CI_{95\%} = [.002, .195]$) and legacy essence-value ($\beta_{indirect} = .17$, $CI_{95\%} = [.054, .311]$). The direct effect of gift type on gift-appreciation was no longer significant ($\beta_{direct} = .05$, $t = .61$, $p > .60$).

General Discussion

In terms of gift-appreciation, several paradigms have been used to understand the acts of gifting and receiving. Both economic (Belk 1976; Sahlins 1972) and social exchange (Chan and Mogilner 2017; Ruth et al. 1999) paradigms highlight that norms of reciprocity are crucial. The agapic framework emphasizes gifts as a device to communicate feelings (Belk and Coon 1993; Ward and Broniarczyk 2016). And finally, the identity-based paradigm (Klein et al. 2015; Paolacci et al. 2015; Ward and Broniarczyk 2011) focuses on the identity signalling power behind giving and receiving. Our experimental demonstration for the increased appreciation felt towards heirloom gifts cannot be adequately explained by these prior paradigms. Instead, our results point towards a contagion-based paradigm, where prior usage and physical touch of a gifted item can further influence appreciation.

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Holding Your Tongue for the Sake of Mother Earth: When and Why Consumers React Less Negatively Following Green Product Failures

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EXTENDED ABSTRACT

One of the reasons consumers react negatively after a product failure is to help others and the society with their choices, by discouraging exploitive firms from existing in the marketplace altogether (Hennig-Thurau et al. 2004; Walsh et al., 2004; Wetzer et al. 2007). In general, acting in a prosocial manner like this is desirable (Sherman and Cohen 2006). Similarly, consumers simply feel good for buying (Trudel 2019) and even using (Tezer and Bodur 2020) green (i.e., environmentally-friendly) products because it is the prosocial thing to do. However, reacting negatively towards these products if they were to fail should be counter to this prosocial motive. This research tests how negative reactions following product failures differ depending on whether the product is considered environmentally-friendly or not.

Method

See Table 1 for result summary. Study 1 built a data set consisting of 50 brands from Amazon.com that sold both a green and conventional version of the same product. We then compared the percentage of one- and two-star reviews to the total number of reviews for each product. Results showed that the percentage of negative reviews on average is significantly lower for the green (M = 11.94%) compared to conventional (M = 16.58%; $F(1,49) = 15.33$, $p < .001$) versions of products.

Replicating this in an experiment, participants read about buying an umbrella (Study 2A), detergent (Study 2B), or a backpack (Study 2C) with an environmentally-friendly attribute or not that later failed. Results revealed that participants in the green (vs. conventional) condition were more likely to forgive the brand (M = 2.94 vs. M = 2.46; $F(1,198) = 7.82$, $p = .006$; Study 2A), less likely to share negative reviews (M = 4.56 vs. M = 5.14; $F(1,138) = 4.44$, $p = .037$; Study 2B), and more likely to give the brand a second chance (M = 3.62 vs. M = 2.74; $F(1,143) = 5.07$, $p = .026$; Study 2C).

Study 3 followed the same product and failure scenario as Study 2A, asked the same likelihood to post a negative review items as Study 2B and asked how much they would perceive reacting negatively to the failure as a prosocial behavior. PROCESS analysis (model 4, Hayes 2017), revealed a significant indirect effect of product type on likelihood to post a negative review through prosocial behavior ($\beta_{indirect} = -.21$, SE = .08, $CI_{95\%} = [-.372, -.059]$; See Figure 1).

In Study 4 participants read the same green (or conventional) product failure scenario as Study 2C, indicated their likelihood to post a negative review (Study 2B and 3), and completed a 6-item environmentally-consciousness scale ($\alpha = .94$, Haws et al. 2014). Regression analysis showed a significant main effect of product type ($\beta = -.31$, $t = -2.26$, $p = .026$), replicating prior studies, and a significant interaction with environmental-consciousness ($\beta = -.38$, $t = -3.74$, $p < .001$). Probing this interaction by re-centering at +/-1SD above and below the mean of environmental-consciousness, results showed that at higher levels the effect of product type on likelihood to post a negative review was significant ($\beta = -.85$, $t = -4.28$, $p < .001$) but not at lower levels of environmental-consciousness ($\beta = .14$, t = .78, $p > .40$).

Study 5 examined how a product made environmentally-friendly intentionally vs. unintentionally acts as a boundary condition to this effect in a single-factor three-level (product type: conventional, green-unintentional, green-intentional) between-participants design. The product descriptions in the green-intentional and green-unintentional conditions were identical to those used by Newman et al. (2014, study 1). Specifically, in the green-intentional condition, participants were told that the product was environmentally-friendly as the result of the brand working on developing this new formula to ensure it would be better for the environment. In the green-unintentional condition, participants were told that the brand has been working for months on developing this new formula, which unexpectedly happened to be better for the environment. The conventional product condition did not include any of this information. All participants then imagined that the product failed to perform as intended and indicated their likelihood to post a negative review. Planned contrasts showed that participants in the green-intentional condition (M = 3.83) were less likely to post a negative review compared to participants in the green-unintentional condition (M = 4.68; $F(1,192) = 6.13$, $p = .014$) and conventional condition (M = 4.56; $F(1,192) = 4.63$, $p = .033$). The likelihood to post a negative review was not significantly different between the green-unintentional and conventional conditions ($F < 1$, $p > .60$).

General Discussion

The availability and sale of green products has been growing (e.g., Kronthal-Sacco et al. 2020). Therefore, it is necessary to shift attention from getting people to purchase green products to understanding post-purchase behaviors for a more holistic view of green product marketing. To help fill this gap, this current research shows how reactions to product failures differ depending on whether the product is considered "green" or not.

We demonstrate that in the case of green products, the prosocial motive that drives negative reactions is not as strong. Instead, the prosocial motive to react negatively directly conflicts with the general prosocial motive to support and protect green products and brands (e.g., Du et al., 2007; Hur et al., 2014; Johnson et al., 2019; Sen et al., 2006). This results in consumers reacting less negatively towards a green (vs. conventional) product failure, especially if they are more environmentally-conscious or the product is intentionally positioned as "green." Overall, the finding extends prior research in negative reactions to product failure, demonstrating that the overall prosocial motive to reacting negatively to product failures can decrease, when the product itself is good for society in general.

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If I Can Change, So Can They: The Sense of Self-discontinuity in Increasing Donation Intention

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EXTENDED ABSTRACT

Recipients of a charitable campaign can generally be bifurcated between innocent victims who are not personally responsible for their current unfortunate situations and those whose unfavorable situations can be attributed to their own actions. The first group includes recipients who were born into a less privileged background or suffered from natural disasters. The latter group often made mistakes in the past that have caused their own miseries. Receiving support and assistance from the public is the first step for them to reintegrate into society. However, nonprofits often find themselves facing pushback from donors when raising donations for this group, as donors cast doubt on whether they are capable of changing or learning from their past mistakes.

Research in self-continuity might provide insights into donors' resistance as it suggests that people believe their core self remains unchanged (Chandler 1994). In contrast, people experience self-discontinuity when they perceive that who they are now is not connected to who they were in the past. Empirical evidence shows that individual donors are concerned with whether their donation can make a difference to the cause they are supporting (Bekkers and Wiepking 2011; Diamond and Kashyap 1997; Zhou et al. 2021) and donors are not willing to make a donation if they hold the perception that their donation will probably not make an impact (Duncan, 2004; Gneezy et al., 2014). Thus, the common belief of self-continuity could pose a challenge for nonprofits when they are raising donations for certain groups. If donors believe that the true self could never change, they are less likely to help those who have made mistakes in the past because their donation could be perceived as not meaningful, or even wasteful. Since self-continuity might add to the belief that people do not change, we propose that nonprofits could potentially benefit from a sense of self-discontinuity. By making donors experience that their current self is different from their past self, nonprofits could prime them with a mindset that allows them to believe that the delinquent recipients could also change.

We further propose that people's willingness to donate to delinquent recipients when they are primed with a sense of self-discontinuity could differ between independent and interdependent self-construal. Since individuals with independent construal perceive the core self as not changeable, they are less likely to be affected by our manipulation and adopt a mindset that people could change. Furthermore, they may also experience psychological reactance and generate counterarguments to defend their beliefs, further decreasing their donation intentions. On the other hand, we expect individuals with interdependent self-construal to increase their donation intentions when primed with self-discontinuity.

In the first study, we aimed at providing initial evidence that the feeling of self-discontinuity could increase donations for delinquent recipients. Participants were first primed with self-discontinuity or self-continuity condition and we measured their donation intentions for someone who lost his house because of gambling addiction. An independent-samples t-test revealed that donation likelihood was significantly lower for the self-continuity condition (M_{sc} = 2.89, SD = 1.98) than for the self-discontinuity condition (M_{sdc} = 3.62, SD = 2.04; $t(127)$ = 2.05, p = .04).

Study 2 tested the moderating role of self-construal. We first manipulated self-discontinuity. Then, we asked participants to indicate whether they were willing to donate their payments earned from this study to a delinquent recipient. In the end, we measured self-construal by using the scale developed by Singelis (Singelis 1994). A logistic regression revealed a significant interaction of self-construal and self-discontinuity on donation (β = 11.01, $\chi^2(1)$ = 4.53, p = .03). When participants experienced self-continuity, the probability of agreeing to make a donation remained unchanged regardless of their self-construal. However, in the self-discontinuity condition, those who scored lower on the self-construal index (thus more independent) had a lower probability of making a donation and those who scored higher on the self-construal index (thus more interdependent) had the highest probability of agreeing to donate their payments.

Study 3 formally tested the mediating role of the belief that one can change. It also examined the influence of the valence of self-change. Participants were assigned at random to one experimental condition in a 2 (self-discontinuity vs. self-continuity) x 2 (change valence: positive vs. negative) between-subjects design and they also indicated their donation intentions to a delinquent recipient. We found a significant interaction effect of self-discontinuity and self-construal (β = 3.88, p < .01) on change belief. We found a significant three-way interaction effect (β = 8.75, p = .01) of self-discontinuity, change valence, and self-construal index with donation likelihood as the dependent variable. Specifically, when participants considered a positive change, the interaction of self-discontinuity and self-construal was significant (β = 6.33, p < .01). When the change type was negative, we did not find a significant interaction effect of self-discontinuity and self-construal (β = -2.26, p = .40). The moderated mediation was supported (indirect effect = 3.01, SE = 1.24; 95% CI [.8365, 5.7655]) by using Hayes' PROCESS macro model 7 in SPSS (Hayes 2013).

Our research provides important contributions to the literature that studies donation behaviors. Gaining support and help from the community is the first step for delinquent recipients to reintegrate into society. Common fundraising strategies often attempt to induce the empathy of donors to encourage donation, however, it might be less effective for delinquent recipients. Thus, it is essential, both theoretically and practically, to explore how to encourage donations for those recipients. Our research also extends the understanding of self-continuity in various ways. Existing studies mainly studied self-discontinuity when the past self is better than the current self. Our research extends the discussion and provides a glimpse into the consequences of self-discontinuity with self-change in both directions.

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The Effect of Anatomical Product Representations on Consumer Outcomes

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EXTENDED ABSTRACT

Knowledge of how a product is put together from various components helps understanding product architecture. Prior literature from a firm-oriented perspective shows that understanding and improving product architecture reduce manufacturing cost and time (Baldwin & Clark, 1994; Mikkola & Gassmann, 2003; Schilling, 2000). Firms also utilize product architecture for marketing communications. For example, the VR headset ad of Quest 2 employs exploded views which visually deconstructs the product, revealing its internal components that are normally invisible to consumers. We term such product visualization as *anatomical representations*. Anatomical representation is commonly used to advertise technology gadgets and various consumer goods. While extant consumer research has studied different product visualization and its impacts on product evaluation and perception (e.g., Childers & Houston, 1984; Edell & Staelin, 1983; Lurie & Mason, 2007), little to no research has examined how depicting product architecture affects consumers. Thus, we fill this gap by outlining how anatomical representations affect understanding product architecture and its influences on consumers' judgments and behaviors.

When a product is composed of physically decomposable parts, the process of putting together such parts may aid to acquire a relational knowledge of how the parts come together (Baldwin & Clark 1994, 2000) which we call *architectural knowledge* (AK). Since architecture relies primarily on grasping component assemblage, AK could be gained via images (i.e., anatomical representation) without verbal information (Kosslyn, 2006). Furthermore, neuroscience research has showed that an object evokes goal-directed motor simulation associated with it (Chao & Martin, 2000; Grezes & Decety, 2002). Therefore, we suggest that anatomical representation that activates simulation of assembling components increases AK.

Drawing upon learning research (Hutchinson & Alba, 1991; Lutz, 1975), acquisition of product knowledge and experience increases consumers' certainty. For example, when consumers perceive a product to be riskier due to limited, inaccurate information (Bauer, 1960), consumers restore certainty and confidence by gaining new information (Cox, 1967; Keller & Staelin, 1987). Similarly, anatomical representations would function as a consumer empowering tool by augmenting AK that produces better outcomes (i.e., decrease in performance risk perceptions; increase in product purchase). We test our propositions in the following experiments.

Study 1 establishes the main effect on product preference. 168 undergraduates participated in a 2 (ad: exploded view vs. control; between-subjects) × 2 (product category; within-subjects) mixed design experiment. Participants in the exploded view (vs. control) conditions viewed dissembled components (vs. fully intact products). After viewing each ad, participants indicated liking and purchase intention which formed product preference ($r_{headphone}$ = .788; r_{shoe} = .844). We conducted a between-subjects ANOVA on product preference which treated ad as a fixed factor and adjusted for the random effect of product category. As expected, exploded view (M_{shoe} = 4.03, $M_{headphone}$ = 4.65) led to greater product preference than intact image (M_{shoe} = 3.68, $M_{headphone}$ = 3.33; $F(1,333)$ = 11.77, p = .001).

Study 2 examined visualization of product architecture in anatomical representations by maintaining assembly sequence. We adopted a 3 (ad: ordered sequence, random sequence, control; be-tween-subjects) × 4 (product category; within-subjects) Latin square design. We similarly manipulated ads for the control and ordered sequence conditions as in Study 1; but the random sequence conditions employed exploded views whose product parts were shown in a random order. 152 MTurk participants viewed four product ads in total. After viewing each ad, participants reported three-itemed AK (e.g., based on the ad, I can easily imagine how the product is assembled together; adapted from Sarantopoulos et al., 2019).

After removing disqualified participants which left 142 participants (M_{age} = 37.03, 81 males), an ANOVA on AK (α = .79) was conducted by building a random effects model which treated anatomical representation and product replicate as fixed factors and controlled the random effect of participants. The main effect of ad was only significant ($F(2,421)$ = 6.33, p = .002). A post hoc Tukey HSD test showed that the mean difference between the ordered sequence (M = 5.31) and control (M = 5.05) conditions showed a significant difference ($M_{ordered-control}$ = .26, SE = .07, p = .001), however, other comparisons revealed insignificant differences. The results illustrated that the core effect dissipated if ads failed visualizing product architecture.

Study 3 tested two different types of anatomical representations, specifically, we employed an exploded (vs. X-ray) view to manipulate the high (vs. low) relational knowledge. Compared to X-ray view, exploded view visually separates components so that product architecture is easily graspable. 225 undergraduates were randomly assigned to one of the three ad conditions (exploded view vs. X-ray view vs. control). After viewing the ad, they completed the AK scale (α = .92). An ANOVA on AK revealed a significant main effect ($F(2,222)$ = 23.33, p < .001). Three contrast tests revealed that participants who viewed exploded image (M = 5.29, SD = 1.29) scored higher on AK than X-ray (M = 4.21, SD = 1.51; $t(222)$ = 4.64, p < .001) and regular images (M = 3.66, SD = 1.29; $t(222)$ = 7.00, p < .001). Moreover, AK in the X-ray condition was higher than the control ($t(222)$ = 2.34, p = .019).

Study 4 tested the downstream effect and the moderating effect of visual processing style. 125 undergraduate students participated in a single-factor (exploded view vs. control) between-subjects experiment. Participants viewed an ad and responded to product preference (r = .72), performance risk (e.g., "how confident are you of the advertised product's ability to perform as expected?"; adapted from Agarwal & Teas, 2001; r = .80), AK (α = .97), and visual processing style (Childers et al., 1985). Three ANOVAs showed that participants in the exploded view condition, compared to the control, reported higher levels of product preference ($M_{exploded}$ = 5.03, SD = 1.46; $M_{control}$ = 4.52, SD = 1.35; $F(1,123)$ = 4.19, p = .043), performance risk ($M_{exploded}$ = 2.33, SD = 1.10; $M_{control}$ = 2.85, SD = 1.30; $F(1,123)$ = 5.68, p = .019), and AK ($M_{exploded}$ = 5.03, SD = 2.17; $M_{control}$ = 3.38, SD = 1.86; $F(1,123)$ = 20.95, p < .001). An analysis using PROCESS (Hayes, 2017; Model 83) further confirmed a significant moderated mediation effect (anatomical representation × visual processing style → AK → performance risk → product preference). The serial mediating effect was significant for participants who scored high (95% Cl = [.023, .204]) and moderate (95% Cl = [.017, .152]) on visual processing style (95% Cl = [−.003, .095]).

Future studies will test AK utilizing objective measures (e.g., recall) and explore other consequential outcomes on confidence, pertaining to product assembly.

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A Tale of Two 'States': Partisan Differences in Consumer Response to Brand Activism

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EXTENDED ABSTRACT

Political ideology has become associated with one of the most salient identities in the current environment (Iyengar and Krupenkin, 2018; Van Bavel and Pereira, 2018). Research in the last decade has demonstrated its significant impact across a variety of factors such as openness to new experiences (Van Hiel et al. 2000), morality-based judgments (Silver and Silver 2017), collectivism and interdependence (Janoff-Bulman 2009), and consumer behavior (Crockett and Wallendorf 2004). For example, it has been found to influence response to persuasive appeals and sustainable behavior such as recycling intentions (Kidwell et al. 2013).

In recent times, a phenomenon called 'brand activism' where the brand takes a stand on controversial socio-political issues (Moorman 2020; Mukherjee and Althuizen 2020; Vredenburg et al. 2020) has emerged. This can hurt brands by alienating consumers opposed to the issue (Mukherjee and Althuizen 2020). Given the significance of political ideology-based differences in consumer response in the marketplace (Crockett and Wallendorf 2004; Jost 2017), it is critical to understand *whether* and *how* it might influence consumer response to brand activism. Past work has shown that conservatives (vs. liberals) favor self-responsibility and personal control in solving problems (Everett et al. 2020; Eidelman et al. 2012; Jost 2017). They also exhibit greater compliance with social order and prefer status-quo (Jung et al. 2017). The current research thus seeks to examine how brand activism might influence brand attitudes and willingness-to-pay (WTP), and whether political ideology moderates this effect. Both affective (positive and negative) and cognitive (brand-value identification) routes as drivers of these effects are tested.

Authentic Activism versus Slacktivism. Consumers can either see the brand as genuinely engaged with the issue or as just engaging in 'slacktivism' or inauthentic brand activism, seen largely as an opportunistic involvement via marketing messages (Kristofferson, White, and Peloza 2014; Vredenburg et al. 2020). Thus, it is important to empirically assess how consumers respond to it, and whether the effect is distinct for conservatives versus liberals.

Affective route as a driver. When dissatisfied with the brand, consumers can experience an array of negative emotions (Patterson, Brady, and McColl-Kennedy 2016; Wetzer, Zeelenburg, and Pieters 2007), leading to negative brand consequences (Kähr et al. 2016; Sen, Gurhan-Canli, and Morwitz 2001; Wetzer et al. 2007). On the other hand, a firm's participation in valued actions elicited positive emotion of gratitude (Xie, Bagozzi, and Gronhaug 2015). Thus, we expect that when brand activism is supported by the consumer, they will experience positive affect and vice-versa; which might in turn be implicated in downstream outcomes.

Cognitive route as a driver. Consumers tend to be drawn to brands where their values are aligned with the brand's (Johar and Sirgy 1991). This has been shown to positively influence consumers' brand-value identification and thereby, positive WOM, brand attitudes, and commitment (Tuskej, Golob, and Podnar 2013). Given that brand activism reflects the brand's values (Vredenburg et al. 2020), we argue that when consumers' values match brand's and they identify with them, they will be more likely to hold positive brand attitudes and higher WTP.

Studies and Results

Study 1 examined the interactive effect of brand activism (present, absent) and political ideology (continuous) on consumers' brand attitudes and willingness to pay. Results revealed a significant interaction between brand activism and political ideology for brand attitudes ($F(1, 248) = 50.76$, $p < .0001$) and WTP ($F(1, 248) = 41.95$, $p < .0001$). Specifically, for both brand attitudes and WTP, liberals (vs. conservatives) report more positive brand inclinations in the activism condition, but this effect is reversed for conservatives. Further, mediation analysis revealed a significant index of moderated mediation for happiness on brand attitudes (= 3.29, SE = .51, 95% CI = 2.35, 4.35) and WTP (= 3.31, SE = .52, 95% CI = 2.33, 4.37), confirming a significant pathway through positive affect.

Study 2 examined how political ideology moderates the effect of activism issue type (pro-conservative, pro-liberal). It also included measures of pride and gratitude. Results showed a significant interaction between brand activism and political ideology for brand attitudes ($F(1, 246) = 88.64$, $p < .0001$) and WTP ($F(1, 246) = 97.59$, $p < .0001$). Specifically, liberals (conservatives) had more positive attitudes and higher willingness to pay for the brand when it engaged in pro-liberal (pro-conservative) issue activism. Mediation analysis revealed a significant index of moderated mediation for attitudes via emotions (happiness: $I = -1.79$, SE = .49, 95% CI = -2.87, -.90; pride: $I = -1.19$, SE = .51, 95% CI = -2.29, -.27) and WTP (happiness: $I = -1.63$, SE = .55, 95% CI = -2.86, -.68; pride: $I = -2.41$, SE = .60, 95% CI = -3.67, -1.32); supporting and building on Study 1's findings by establishing happiness and pride as mediators.

Finally, *Study 3* studied how conservatives and liberals respond to "slacktivism" compared to activism-present and absent conditions. It also assessed brand-value identification as a mediator. Results showed that conservatives had lower attitudes and WTP when the brand engaged in activism ($M = 3.83$) versus slacktivism ($M = 4.40$) ($b = -.57$, $SE = .26$, $t = -2.21$, $p = .03$; 95% CI = -1.07, -.06), while liberals had more positive attitudes and WTP in the activism ($M = 6.16$) versus slacktivism ($M = 3.99$) ($b = 2.17$, $SE = .22$, $t = 9.78$, $p < .001$; 95% CI = 1.74, 2.61) condition. Finally, when both affective and cognitive routes were accounted for in the same model, pride (but not happiness) ($\beta = -.19$, $SE = .11$, 95% CI = -.44, -.02) and brand-value identification ($\beta = -.85$, $SE = .31$, 95% CI = -1.48, -.26) significantly mediated the interactive effect of political ideology and brand activism on consumer's response.

Discussion

Overall, our findings demonstrate that while liberal (vs. conservative) consumers had higher brand attitudes and WTP in the brand activism versus absent condition (Study 1), this effect depended on issue type (pro-liberal vs. pro-conservative) (Study 2). Further, our results show that engaging in inauthentic activism or slacktivism, is poorly received by *both* conservatives and liberals (Study 3). Affective and cognitive factors mediate these effects.

While past work has looked at how consumers react to brand activism (Mukherjee and Althuizen 2020), our research is one of the first to examine consumer response to it through the lens of political ideology as well as contributing to the emerging literature on brand activism by demonstrating the pitfalls of brands engaging in slacktivism.

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Psychological Ownership as an Intervention: Addressing the Government Benefits Participation Gap

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EXTENDED ABSTRACT

Each year, eligible individuals forgo billions of dollars in financial assistance in the form of government benefits. For example, approximately 20% of eligible individuals do not claim the EITC, forgoing an estimated $7.3 billion annually (1). This difference between eligibility and uptake in government benefits is commonly referred to as the "benefits participation gap." Closing this participation gap is important, as receiving government benefits can reduce poverty, childhood hunger, educational gaps, as well as physical and mental illness (2-4).

While existing research focuses primarily on awareness and logistical considerations (5-7), we suggest that applying for government benefits feels like requesting assistance, which can feel aversive and decrease individuals' desire to apply for them. As such, we hypothesize that psychological ownership interventions can increase interest in applying for government benefits. Psychological ownership refers to the extent to which a target feels like "mine" and can be felt towards a range of targets including money (8-11). By encouraging individuals to conceptualize government benefits as their own money, psychological ownership interventions should make applying for government benefits seem less like an uncomfortable "ask for help" and more like a rightful "ask for what is mine."

We first report three large-scale field experiments ($N = 60,729$) examining the effectiveness of psychological ownership interventions in increasing the pursuit of the EITC and stimulus checks. For all field experiments, Code for America, a non-profit aimed at improving how the government serves the public, randomly generated experiment participants from an internal list of low-income individuals likely to be eligible for these benefits. A final controlled study (N = 810) provides a full test of the proposed conceptual model utilizing another type of benefit (i.e., COVID-19 funds). It demonstrates that increasing psychological ownership of available COVID-19 funds decreases individuals' discomfort around asking for help, increasing their probability of pursuing those funds. All studies were pre-registered on AsPredicted.

Experiment 1 aimed to message a random sample of 10,000 U.S. residents from Code for America's user base that were likely EITC-eligible via email or text message. Participants received either a control message or a higher psychological ownership message. One week after the messages were sent, we compared participants' likelihood of visiting the website and beginning the process of claiming their benefits (i.e., clicking "Get Started" on the homepage) by condition. As predicted, participants in the psychological ownership condition were more likely to visit the website (PO: 29.9% vs. Control: 15.5%; Wald χ^2 (1) = 282.54, $p < .001$) and click "Get Started" on the homepage to begin the process of claiming the EITC (PO: 11.5% vs. Control: 5.1%; Wald χ^2 (1) = 128.92, $p < .001$). All results remained significant regardless of message format. A post-test revealed that these results cannot be explained by the higher psychological ownership framing increasing participants' perceptions of their eligibility, increasing the certainty of receiving benefits, decreasing the perceived difficulty of applying, increasing loss aversion, or reducing perceptions of social stigma.

Experiment 2 expanded the ecological validity of our findings by testing the impact of higher psychological ownership framing for another benefits program: the stimulus checks. We randomly assigned 50,000 individuals to receive a higher psychological ownership message or a control message. All messages were delivered via text. As predicted, binary logistic regressions revealed that participants were more likely to visit the website (PO: 17.5% vs. Control: 14.0%; Wald χ^2 (1) = 91.52, $p < .001$) and click "Start Filing" on the homepage to begin the process of claiming their stimulus checks (PO: 8.9% vs. Control: 7.4%; Wald χ^2 (1) = 30.80, $p < .001$) in the psychological ownership versus control condition.

Experiment 3 compared the relative effectiveness of psychological ownership to other popular interventions. Code for America identified 10,000 individuals who were likely EITC-eligible. Participants received an email or text message with one of four messages based on condition. In addition to the control and psychological ownership conditions, we included a social norm condition ("Millions of people like you have filed…") and a deadline condition ("File before the deadline…"). Participants were more likely to visit the website in the psychological ownership (36.7%) versus the control (20.7%), social norm (17.4%), and deadline (27.5%) conditions, all Wald χ^2 (1) ≥ 47.12, all $p < .001$. As in Experiments 1 and 2, participants in the psychological ownership condition were also more likely to begin the benefits claiming process (all Wald χ^2 (1) ≥ 30.61, all $p < .001$).

Experiment 4 investigated whether psychological ownership increases interest in government benefits by reducing participants' discomfort towards requesting assistance. Eight hundred and ten participants on Cloud Research completed this incentive compatible experiment for a small payment. Participants read either a control or higher psychological ownership message about available COVID-19 funds and indicated whether they were interested in receiving more information. As predicted, a greater proportion of participants chose to receive information about the COVID-19 funds in the psychological ownership (68.1%) versus control condition (53.6%), Wald χ^2 (1) = 17.88, $p < .001$. In addition, participants reported lower discomfort towards asking for assistance in the psychological ownership (M = 4.15, SD = 2.62) versus control (M = 4.83, SD = 2.68) condition, $t(808) = -3.63$, $p < .001$. Moreover, discomfort around requesting assistance significantly mediated the effect of message framing on participants' choice (95% CI: .017, .116; 20,000 resamples). These results replicated when using participants' visits to the website as a second DV.

Substantively, our work offers psychological ownership as a new means for reducing the government benefits participation gap. More broadly, as the first large-scale field investigation of psychological ownership interventions, our work shows that psychological ownership can be a powerful nudge. Our results suggest that in some contexts psychological ownership interventions can be more efficacious than other common interventions informed by behavioral science. Given that psychological ownership interventions, such as those used in the current research, can be simpler and cheaper to implement relative to logistical interventions, our work highlights

the importance of psychological ownership as a new tool in the portfolio of potential behavioral science interventions.

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How Do Self-Service Technologies Shape Consumer Value Co-Creation? Insights From the Cultural Sector

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EXTENDED ABSTRACT

As technologies are rapidly developed and adopted, increasing number of companies replace their traditional human-based services with self-service technologies in order to lower cost and improve efficiency and service quality. Self-service technologies (SST) refer to "technological interfaces that enable customers to produce a service independent of direct service employee involvement" (Meuter et. al. 2000, p.50). However, technology adoption cannot guarantee service success (Bitner, Ostrom & Meuter 2002). Kmart, which is the first retailers adopting self-checkouts in 2001, removed those machines two years later (Tiffany 2018). This is the result of many factors. One of them is that technology infusion has changed the way consumers interact with other service elements over their consumption journey. Understanding how consumers use SST helps explain the reason they response to technological stimuli unexpectedly. Giebelhausen et. al. (2014) argues that technology usage significantly influences rapport-building between employees and customers. However, customer experience is multi-dimensional, including not only relational dimension, but also physical, sensorial, affective and cognitive dimensions (Schmitt 1999; Becker & Jaakkola 2020; Verhoef, Lemon, Parasuraman, Roggeveen, Tsiros & Schlesinger 2009; Gentile, Spiller & Noci 2007). This study takes a holistic point of view, exploring how SST usage influence overall customer experience. More specifically, this research aims to answer two questions: 1) how do consumers use self-service technology to co-create experiences and values over the entire consumer journey? 2) what are the roles of SST in value co-creation?

These questions are studied in the context of Cité Mémoire, which is one of the largest outdoor video-projection installations in the world. A mobile app is designed to assist with visits. Visitors need the app to explore and access projections over their consumption journey. This differentiates our study from previous SST research that mainly focus on SST usage in a specific consumption phase. A mixed research strategy is taken: researcher's personal experience, observation, and semi-structured interviews. 27 visitors in 18 visit groups participated this study. The unit of analysis is experience of individual visit group. Following grounded theory (Strauss and Corbin 1990), we coded transcripts and notes and compared visit experiences of the 18 visit groups.

We adopt appropriation theory to exhibit co-creation process. Appropriation is "a subjective process through which consumers gradually immerse themselves in an experiential setting" and transform the experience into expressions of themselves (Stavraki et al. 2018, p. 1890). It involves "exercise of authority, control and physical or psychological power over an object or place" (Carù and Cova 2005, p. 43). The appropriation process comprises three major practices: nesting, investigating, and stamping. Nesting implies consumers' active search for familiar elements in an experiential context as anchorage points. Consumers further explore unknown experiences and enhance their knowledge and control over the experience with investigating practice. Stamping, as the final practice, is an imaginative and intellectual activity that consumers involve to attribute personal meanings to the experience. The appropriation process is incisive in explaining customers' interactions with and perceptions of diverse service elements in consumption context and thus enables us to unfold the mechanism of consumer value co-creation.

Results reveal two entangled appropriation processes: SST appropriation and core service appropriation. The appropriation of the mobile app is considered as a process out of the appropriation of core service. Visitor #24 said "it felt like homework…it was something we had to pass through to get to the fun stuff". It seems not to be an enjoyable task, but it is the necessary "sacrifice" for the real fun. Otherwise, they may miss partial experiential and functional value. In general, adopting the mobile app increases their workload.

Before visit officially started, visitors explored the app and pictured upcoming visit experiences in their minds based on the project information found in the mobile app. Visitors' nesting and investigating operations on the core service were largely consistent with SST nesting and SST investigating because the mobile app is the only avenue where visitors acquired project information. The pre-visit stamping of core service was vague impressions of the overall project and personalized visit plan, different from but based on pre-visit SST stampings. When visitors started their visit, their knowledge of the mobile app and the project and their visit plan were transformed into anchorage points, serving for onsite physical and sensorial investigating of core service. After they found projection locations with the help of the app, investigating of projection content depended on the result of SST investigating. For example, visitor #9 failed in playing the soundtrack in the app and thus misunderstood stories in the projections. She missed the cognitive value because of failed SST investigating. After watching video projections, visitors had stamping on cognitive value, emotional value, personal value of the project and the mobile app. Visitors' appropriation, in post visit phase, only happened on the core service level and SST appropriation stopped.

Furthermore, we have found three roles of SST in co-creation process: experience implementor, experience transformer and economic value signal. The fundamental role of SST is service implementer. Previous SST research are mainly on this role. SST affects investigating of core service through its performance and functionality. SST can also be an experience transformer, transforming ordinary experiences to extraordinary experiences or terrible experiences. Some visitors feel excited because they perceive strong sense of control and ownership. The intensive emotional and psychological perceptions generated by using the mobile app color the emotional and personal stamping of the core service. This corresponds to the service psychological ownership dimension of service appropriation. SST usage can improve consumers' service psychological ownership when consumers experience strong positive emotions and have psychological perceptions. It is also possible that SST usage weakens consumers' psychological ownership if consumers' emotional and psychological perceptions are negative. SST also plays the role of economic value signal. In our study, participants see the app as an economical alternative of human service. If the price for SST-mediated service is the same as human employee service, visitors would quit the service or feel less satisfied with the service. This perspective directly associates with consumers' visit decisions and evaluations.

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Received! The Effect of Take-Back Program Acknowledgment on Perceptions of Company Sustainability and Consumer Recycling Intentions

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EXTENDED ABSTRACT

A growing number of companies offer take-back programs, whereby consumers send or drop off used products for recycling, as part of their sustainability initiatives and move toward a circular economy. Prior research offers insights for companies to encourage consumers' recycling behaviors in an effort to initiate participation (Burn and Oskamp 1986; Hornik et al. 1995; Iyer and Kashyap 2007; Trudel 2019; Winterich, Nenkov, and Gonzales 2019). But beyond simply offering such take-back programs, are there additional actions companies can take?

We propose a simple yet effective action that companies can take to positively impact their sustainability image and encourage continued recycling from consumers: acknowledgment. Specifically, we argue that when a company acknowledges consumers' recycling (e.g., an email confirming the receipt of the goods to be recycled), consumers perceive that the company is willing to responsibly communicate with them regarding the take-back program (Morales 2005; Parris et al. 2016; Weiner 2001). This increased transparency, in turn, makes consumers trust the company's recycling claims more (Dubbink, Graafland, and van Liedekerke 2008; Reynolds and Yuthas 2008). As a result, consumers perceive the company to be more sustainable and have greater future recycling intentions with the company.

We present the results from six studies, using both fictitious and real brands in various product categories (coffee capsules, athletic shoes, and clothing), in support of this argument. The basic design of all studies is as follows: participants first imagined that they frequently purchased products from a company and received an email from the company that encouraged the recycling of their unused products using the company's prepaid mailing label. They also imagined that they collected their unused products and dropped them off at the UPS store to recycle. Then participants were randomly assigned to one of the acknowledgment conditions.

Study 1 provided an initial demonstration of the acknowledgment effect using a one-way (acknowledgment: no acknowledgment vs. acknowledgment vs. compensation) between-subjects design. Given that compensation does not offer greater transparency than acknowledgment alone, we expected that it would have a similar effect as the acknowledgment. After reading the scenario, participants indicated their sustainability perceptions of the company and future recycling intentions with the company. As predicted, participants in both the acknowledgment and the compensation conditions perceived the company to be more sustainable and were more willing to continue recycling with the company compared to those in the no acknowledgment condition ($ps < .001$).

Study 2A demonstrated whether recognition alone, without gratitude in acknowledgment, results in similar effects and also examined the underlying process of acknowledgment effect. Participants were assigned to one of three conditions (acknowledgment: no acknowledgment vs. acknowledgment without gratitude vs. acknowledgment with gratitude) in a between-subjects design. As our theorizing regarding the effect of acknowledgment on transparency perceptions does not require the presence of gratitude, we did not expect a significant difference between acknowledgment with gratitude and acknowledgment without gratitude. After reading the sce-

nario, participants completed the same measures from study 1 and rated their transparency perceptions (Dapko 2012) and trust toward the take-back program (Erdem and Swait 2004). As predicted, participants perceived the company as more sustainable and had greater future recycling intentions when they were acknowledged for their recycling, regardless of whether gratitude was expressed ($ps < .01$). Furthermore, transparency perceptions and trust serially mediated the effect of acknowledgment on sustainability perceptions and future recycling intentions.

Study 2B replicated the acknowledgment effect found in prior studies for a real brand (Nike) using a one-way (acknowledgment: no acknowledgment vs. acknowledgment) between-subjects design. Also, this study further supported the proposed process of transparency perceptions to trust and ruled out alternative processes (warm glow and personal impact) for the acknowledgment effect.

Study 3 demonstrated that the effect of acknowledgment holds only when the company offers acknowledgment, not when any kind of marketing communication is offered. To do so, we added a factor to our experimental design: whether or not participants received an email advertisement from the company. Participants were assigned to a condition in a 2 (acknowledgment: yes vs. no) x 2 (advertisement: yes vs. no) between-subjects design. We only expected a main effect of acknowledgment, such that participants in the two conditions with acknowledgment would have greater sustainability perceptions of the company and future recycling intentions with the company, compared to those in both no acknowledgment conditions, which was indeed the case ($ps < .001$).

Study 4 provided evidence of the process for the acknowledgment effect by examining information provision as a moderator. Specifically, we further examined the role of transparency by manipulating the amount of information about the company's take-back program given to participants, since transparency centers around consumers' perceptions of how open the company is to share information (Kang and Hustvedt 2014; Vaccaro and Echeverri 2010). Participants were assigned to one of four conditions in a 2 (acknowledgment: yes vs. no) x 2 (information provision: yes vs. no) between-subjects design. Consistent with the proposed role of transparency perceptions, providing additional information about the take-back program increased sustainability perceptions and future recycling intentions in the no acknowledgment condition ($ps < .01$), demonstrating that the company's provision of information regarding their take-back program (transparency) influences the acknowledgment effect.

Study 5 demonstrated the downstream behavioral outcome of the acknowledgment on consumer word of mouth using a one-way (acknowledgment: no acknowledgment vs. acknowledgment) between-subjects design. Specifically, acknowledging consumers' recycling led more consumers to indicate that they would tell their friends and family about the company's take-back program ($p = .02$) and to list more people that they would tell about the take-back program ($p = .05$). Also, study 5 replicated the mediation results of Studies 2A and 2B.

This research contributes to sustainable behavior literature, which recognizes the need to make consumers' sustainable behavior sustainable beyond one-time action (White, Habib, and Hardisty 2019), as well as the literature on acknowledgment and transparency.

Additionally, as the demand for circular approaches is growing (McDonough and Braungart 2010), this research offers companies a viable and straightforward way to strengthen their sustainable image and encourage repeated consumer recycling through their take-back programs.

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Hostile Consumption Communities: Unwelcoming New Consumers

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EXTENDED ABSTRACT

This study explores how new consumers experience and cope with the challenges of a hostile community. Consumption communities are rife with conflict, with studies such as Husemann, Ladstaetter, and Luedicke (2015), Muniz and O'Guinn (2001) and Beverland, Farrelly, and Quester (2010) and Chalmers Thomas, Price, and Schau (2013) illustrating how communities manage conflict and different understandings of authentic participation. Additionally, consumers face challenges when participating in a community including social stigma (Kozinets, 2001) and material barriers (Schouten & McAlexander, 1995). These studies illustrate how communities manage conflict and different understandings of authenticity. However, what is less known is how these conflicts and different understandings shape the new consumer experience. As the consumer's initial impressions can influence their overall consumption experience, particularly when experienced with other consumers (Bhargave & Montgomery, 2013), it is important to understand how hostile communities shape the beginnings of the consumer journey. We draw upon the consumer journeys literature to help understand the interactions a consumer has with a consumption experience across multiple interactions and touchpoints (Hamilton & Price, 2019), with focus on the beginnings of the consumer journey. Thus we ask the question: how does a hostile community shape the beginnings of the consumer journey?

This research is conducted in the context of esports – "an organised and competitive approach to playing computer games" (Witkowski, 2012, p. 305). Esports has an insider culture, where participation requires understanding the norms, behaviour, and language to authentically participate (Seo, 2013; Taylor, 2012). Semi-structured in-depth interviews and netnography were combined to capture consumers' first experiences within the esports fields and to understand the challenges they faced when entering the community. These data sources provided emic accounts of how consumers experience esports. Data was analysed using a practice theory lens to understand the contextual meanings surrounding the routinised behaviours of actors (Nicolini, 2013) and drew upon the first author's past experiences as an insider within the field to provide a nuanced understanding of the data set (Askegaard & Linnet, 2011; Blythe, Wilkes, Jackson, & Halcomb, 2013).

The new consumer experience within hostile communities is illustrated through three themes: field-level challenges, unwelcoming practices, and coping practices. Within inhospitable consumption communities, field-level challenges and unwelcoming practices create a hostile environment for new consumers. New consumers enter a complex field, where knowledge requirements and material barriers present challenges to engagement. Video games are highly complex and liquid (Bardhi et al., 2017), with constant updates radically changing how the game is played. Furthermore, experienced consumers engage in practices that unwelcome new consumers such as blaming new consumers for miserable experiences while playing the game or smurfing (purposefully playing in lower skilled games to beat less experienced players), creating tensions within the community and a difficult beginning for new consumer journeys. However, new consumers can cope with their first experiences through independently acquiring knowledge or finding a mentor throughout their journey. Coping practices such as parasocial mentoring allow new consumers to ease their transition from new player to community member.

This study contributes to the literature in two ways. Firstly, while consumption communities are known to have conflict (Chalmers Thomas, Price, & Schau, 2013; Husemann et al., 2015; Muniz & O'Guinn, 2001), less is known about how conflict shapes the new consumer experience. The present study illustrates how conflict shapes the beginnings of the consumer journey and the tensions that arise between new and existing community members. Due to their lack of knowledge stemming from the subpar tutorials and learning content provided by producers, new consumers are seen as a burden by existing community members. Thus, new consumers enter a community that is hostile to inexperience and are expected to navigate the field with minimal assistance from the producer. Secondly, in contrast to the social relationships that assist in welcoming new consumers to consumption communities (Goulding et al., 2013, Schau et al., 2009, Littlefield & Ozanne, 2011), new consumers to hostile communities rely on parasocial relationships with content creators within the esports field to learn the basics of the game and overcome unwelcoming practices. Knowledge acquisition is individually driven, with the creators of guides and tutorials often being well-respected members of the community. Rather than personal relationships, new esports consumers experience one to many or parasocial relationships with content creators such as streamers (Leith, 2021), where the individual develops what is perceived to be an intimate relationship with a media figure (Horton & Wohl, 1956). Overall, new consumers can cope with this hostile community through parasocial relationships with content creators or seek mentors through subcommunities created by experienced consumers.

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Is My AIVA Reducing My Intelligence? The Effects of AIVA-enabled Search on Consumer Cognition

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EXTENDED ABSTRACT

AI-enabled virtual assistants (AIVAs) have become increasingly popular (e.g. Amazon Alexa, Google Home), and assist consumers with a variety of tasks, including home automation, access to media, entertainment and shopping. Indeed, they have a significant influence on what their users hear, watch, and buy through offering suggestions in response to verbal commands (Segan & Greenwald, 2020). Despite their popularity, little is known about how consumer interactions with these devices can impact subsequent outcomes including cognition, emotions and choice. Our research addresses this gap and focuses on one consumer outcome – cognitive performance. Specifically, drawing on previous research on cognition (Pekrun, 2006; Schukaljow et al. 2012) and perceived control (Ryan & Deci, 2000; Chen, Lee & Yap 2016), we predict that interacting with AIVAs (versus online search engines) will lead to decreased cognitive performance, thereby impacting important downstream outcomes such as WOM and search intentions.

We suggest that these effects arise because information search using AIVAs offers less perceived control as compared to traditional online search (e.g. inability to parse through a set of results, presentation of results controlled by AIVA), thereby adversely impacting cognitive performance. Since consumers can attempt to restore lost control through sharing word-of-mouth (Consiglio et al., 2018), we also predict that respondents Intentions to search and WOM will increase after search interactions with AIVAs.

We find support for our predictions across four studies, using different tasks to assess cognitive performance (verbal and quantitative), after interactions with both real (Amazon Alexa) and fake (Halo) AIVA brands, thereby enhancing confidence in our findings. Studies 1 and 2 document the performance disadvantage for AIVAs as compared to online search engines. Study 3 establishes the mediating role of perceived control, and study 4 documents the implications of these findings on WOM intentions.

Contribution

While the use of AIVAs has increased dramatically among consumers, little is known about the effects of interacting with these devices on consumer cognitions, emotions, and behaviors. Our research begins to address these gaps and documents that information search using AIVAs lowers consumers' perceptions of control and subsequently reduces their cognitive performance. Attempting to restore lost control increases consumers' interest in future search and word-of-mouth intentions, leading to more positive evaluations of subsequent information. These results hold significant implications for research on the effects of cognition and technology.

While previous research has focused on technology as a distraction (Ward, Duke, Gneezy, & Bos 2017; Strayer & Johnston 2001) and as a repository for information (Sparrow, Liu, & Wegner 2011), our results suggest that perceptions of control play an important role in subsequent cognitive ability, thus adding a new mediator to this literature. This is consistent with prior research, which has found deleterious effects on learning and performance when students lack control over their learning (Schukaljow et al., 2012; Bieg 2017). Two, the outcomes of lost control can be manifold and hold important implications for marketers, suggesting that future research on these outcomes, as well as ways to attenuate/amplify them, will be beneficial. Three, the finding that the similarity between the search and the subsequent cognitive task impacts cognitive performance is an important qualifier to my effects. Thus, when consumers use AIVAs to search for information, there may not be a subsequent detrimental effect on their ability to complete routine consumption-related numeric tasks such as computing discounts or comparing relative value.

Our research also offers significant implications for marketing practitioners. More than a fifth of consumers in developed countries use AIVAs for a variety of tasks (Hippold 2018), and due to the circumstances brought about by Covid-19 (e.g., contactless shopping – expanding e-shopping and e-services; and remote working/learning), this usage is likely to grow faster than originally predicted (Khan, 2020). In fact, recent research indicates that almost 60% of AIVA owners have used the device to make a purchase and they predict that voice commerce has the potential to reach $40 billion by 2022 (Osman, 2021). This widespread adoption of AIVAs renders understanding the effects of such use on consumers highly critical. It is evident that both firms and consumers are fascinated by this new AI-enabled technology, but neither fully understand their capabilities or the effects they have on consumer behavior. Limiting consumers' cognitive functioning influences countless aspects of their everyday lives, from decision-making (Bettman. Johnson & Payne, 1991) to the enjoyment of experiences (Weber et al., 2009). Thus, the use of AIVAs for information search may consequently lead to sub-optimal consumer outcomes, including greater impulse purchases and choices favoring vices (e.g., unhealthy foods) over virtues (e.g., healthy foods), increased consumer spending (reduces searching effort – reducing fatigue), and increased susceptibility to persuasive advertising (especially if presented through the device).

A Field Study Investigating the Effect of Four Established Message Framing Theories on Mask-Wearing Behavior

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EXTENDED ABSTRACT

The COVID-19 pandemic dramatically affected daily life. Workplace and school closures played an important role in containing community spread (e.g., Leidner et al. 2021), but these closures came with significant economic and social costs (e.g., Chatterjee 2021). Amidst the pressure to reopen (Honein, Barrios, and Brooks 2021), organizations are looking for ways to safely resume in-person operations. In lieu of vaccination – for which uptake is startlingly low in the U.S. (New York Times 2021) – one of the most effective behaviors for reducing transmission is public mask wearing (CDC 2021). Willingness to comply with mask-wearing recommendations, however, varies widely among individuals, with only 65% of the US population reporting full compliance (Institute for Health Metrics and Evaluation 2020).

In a large, longitudinal field experiment, we compared the effectiveness of four theoretically motivated public service announcements (PSAs) designed to increase public mask wearing in a large organization: social proof (e.g., Cialdini et al. 1991), implementation plans (e.g., Gollwitzer and Sheeran 2006), peer accountability in goal pursuit (e.g., Lee and Ybarra 2017), and loss aversion (e.g., Rothman et al. 2006). Based on the extensive body of previous work, our expectations were that all four would perform better than control (informational) conditions.

A longitudinal field study was designed and conducted in cooperation with a large public university in the Southwestern United States and approved by the University's Institutional Review Board (preregistration: https://aspredicted.org/blind.php?x=dp8ku2). Our sample consisted of $n = 4{,}083$ students living in 16 dorms divided into six comparably sized participant pools and randomly assigned to six conditions (2-3 dorms per condition). We measured mask-wearing behavior over a 5-week period in response to either a pure informational (control) PSA, or one of four different theoretically motivated treatment PSA messages. Dorm residents were exposed to one version of the PSA (depending on the randomly assigned experimental condition) delivered via print advertisements, digital advertisements, emails, and professionally filmed videos.

Seven research assistants (blind to condition) observed mask-wearing in two distinct common areas of each dorm each day for five weeks. The primary observation location was in direct view of dorm staff (by the main entrance) and a secondary location was in an equally high traffic area that was not observed by dorm staff. This distinction was important because mask-wearing was mandatory and enforced by the dorm staff during the data collection period. In total, 388 observation sessions occurred over the five weeks, with a total of 7,328 unique observations.

We first ran a model including all relevant two- and three-way interactions:

$$y_{it} = \beta_0 + \beta_1\,Condition_i + \beta_2\,Exposure_t + +\beta_3 Location_t + \beta_4\,Condition_i \times Exposure_t + \beta_5\,Condition_i \times Location_t + \beta_6\,Condition_i \times Location_t + \beta_7\,Condition_i \times Exposure \times Location_t + \varepsilon_{it}$$

where y is the proportion of observed students wearing a mask in dorm i at time t, *Condition* represents one of the conditions to which a dorm is assigned, and *Exposure* equals 1 for weeks 2-5 (exposure to PSA) and 0 for week 1 (no PSA exposure), and *Location* equals 0 for primary location monitored by dorm staff coded as 0, and 1 for secondary location not monitored by staff. Standard errors are clustered at the dorm level.

We found a marginally negative effect of observation location on proportion of observed students wearing a mask ($\beta = -0.047\ (0.024)$, $p = 0.074$). This indicates that, as expected and consistent with extant theory (McCambridge et al. 2014), students were significantly more likely to wear a mask when monitored by an authority figure such as the front desk staff. Next, we found a significant negative interaction between Location and Loss Aversion Condition ($\beta = -0.204\ (0.061)$, $p = 0.004$), qualified by a marginally significant three-way interaction between Location, Loss Aversion Condition and Exposure ($\beta = -0.115\ (0.058)$, $p = 0.066$). No other effects were significant.

To decompose the three-way interaction, directly test our theory, and better describe the nature of these patterns, we next estimated a difference-in-difference model for each location separately. Further, because there was no difference between two control conditions on the main dependent variable of interest nor interactions (all ps > .27), to simplify the exposition we use the combined data from both control conditions as the control (reference) group when testing the efficacy of the four treatment conditions. There was no significant effect of any of the PSA messaging conditions in the monitored location 0. More importantly, in the unmonitored location 1, the Loss Aversion condition has a positive and significant effect, increasing mask-wearing after exposure to PSA as compared to control condition ($\beta = 0.178\ (0.081)$, $p = .04$). No comparable effects were observed for other PSA messaging conditions. Further analysis looking at the week-by-week effect reveals that the effect of Loss Aversion condition on mask wearing behavior in the unmonitored location 1 accumulates over PSA exposure weeks (week 3: $\beta = 0.234\ (0.131)$, $p = .09$; week 4: $\beta = .226\ (0.121)$, $p = 0.081$; week 5: $\beta = 0.282\ (0.088)$, $p = 0.006$). Finally, the results remain qualitatively unchanged when including dorm-level demographics (e.g., composition of gender, age, race, etc.) are includes as control variables.

These results offer promising insights for organizations that want to reopen and stay open. Namely, interventions encouraging individuals to think about the loss they may experience if they do not wear a mask in public have a significant and positive effect on public mask-wearing behavior. The present research also highlights the potential for using passive measures (e.g., advertisements in populated areas) to encourage individual mask-wearing behavior. This finding is crucial in the fight to save lives and resume in-person interactions amid the ongoing COVID-19 pandemic.

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Unfair Value Allocation: The Role of Data Ownership in Privacy Concerns

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EXTENDED ABSTRACT

Privacy is an issue of increasing public concern. In response to such concerns, governments and technology companies have taken steps to reassure consumers that their data is being protected from exposure. For example, the tech giant company, Google, recently began assigning consumers to cohorts rather than tracking individual-level information to protect individuals' information from exposure while displaying relevant advertising. Will this initiative to be sufficient in assuaging consumers' privacy concerns?

Prior research has broadly documented privacy concerns in terms of data exposure, its associated costs and risks (e.g., identity theft, embarrassment), and the general perception of being intruded upon (Acquisti, Brandimarte, and Loewenstein 2015; Acquisti, John, and Loewenstein 2012; John, Acquisti, and Loewenstein 2011). It is often assumed that consumers tradeoff the risks/costs of data exposure for the benefits they receive from divulging their private information. However, this research proposes another important consideration consumers have when disclosing their data: are they receiving fair value for their data? In this sense, the exchange of private data for services is similar to other exchange transactions consumers engage in, such as exchanging money for goods and services. As when exchanging money for goods (or vice versa), consumers desire to receive fair value in return for their private information.

Across five preregistered experiments, this research shows that among other cues, consumers frequently rely on the profits that firms earn through the use of consumer data, ascribing more value to their private information when firms are able to exploit it to earn higher profits. As such, they are less happy to disclose their data when firms earn relatively higher profits from their data.

Experiment 1A was designed to test our main hypothesis. Participants (N = 169) imagined their experiences of using multiple applications from a company called WI and were informed that WI would integrate their information across products. Subsequently, participants in the low (vs. high) profit increase condition were told that WI would get a small (vs. huge) increase in profit. After that, participants reported how concerned they are that WI would invade their privacy. Results revealed that privacy concerns were significantly higher in the high profit condition (M_{high} = 5.18, SD = 1.55) than in the low profit condition (M_{low} = 4.07, SD = 1.89, $F(1, 167)$ = 17.50, $p < .001$, $partial\ \eta^2$ = .09).

To clearly assess whether consumers would spontaneously express privacy concerns, in experiment 1B, we asked participants to elaborate any concerns if they have and reported the intensity of their concerns. A chi-square test revealed that a higher proportion of consumers expressed privacy concerns in the high profit condition (50.34%) than in the low profit condition (35.61%, $\chi^2 (1)$ = 5.56, p = .018). Furthermore, privacy concerns were significantly stronger in the high profit condition (M_{high} = 2.75, SD = 2.96) than in the low profit condition (M_{low} = 1.95, SD = 2.74, $F(1, 277)$ = 5.46, p = .020, $partial\ \eta^2$ = .02).

Experiment 2 was designed to provide support that privacy concerns arise from the perception of not receiving the fair value created from the personal information. All participants (N = 187) were assigned to either elaborate on the firm's or the customer's benefit from the integration of information and reported how they feel about disclosing their information to WI. Subsequently, we measured the mediator about the extent to which they feel the benefits they re-ceive reflect the fair value of the private information they give up. A planned contrast revealed that participants felt happier about disclosing their information when they were in the customers' benefit condition ($M_{customers}$ = 4.12 SD = 1.55) than in the firm's benefit condition (M_{firm} = 3.04, SD = 1.63, $p < .001$, $partial\ \eta^2$ = .11). Mediation analysis confirmed the perception of unfair value allocation explained the effect, (β = .677; 95% CI = [.342, 1.030]).

In experiment 3, we measured two types of privacy concerns (how they feel the firm is profiting off their data without giving them fair value in return and how they are worried that their data would be exposed). Subsequently, participants indicated the likelihood that they would be to vote that WI be examined for its practices in profiting from user information. Results revealed that the perception of unfair value allocation was significantly higher in the high profit condition (M_{high} = 5.24, SD = 1.73) than in the low profit condition (M_{low} = 4.77, SD = 1.75, $F(1, 238)$ = 4.31, p = .039, $partial\ \eta^2$ = .02). Conversely, data exposure did not reveal a significant main effect of the profit level (M_{high} = 4.67, SD = 1.89, M_{low} = 4.47, SD = 1.83, $F(1, 238)$ = .67, p = .412). Besides, participants were more likely to elect the more profitable firm (M_{high} = 5.44, SD = 1.60) than less profitable firm (M_{low} = 4.98, SD = 1.54, $F(1, 238)$ = 5.15, p = .024, $partial\ \eta^2$ = .02) to be examined by the government. Mediation analysis supported our theorizing about the perception of unfair value allocation.

In experiment 4 we examined how directing participants to focus on either fair or unfair value allocation affected privacy concerns. Consistent with our prediction, the effect of profit level on privacy concern depends on whether it is a fair value allocation ($F(1, 179)$ = 6.18, p = .014, $partial\ \eta^2$ = .03). When value allocation was unfair, participants' concerns over privacy were greater for the high profit than for the low profit firm (M_{low} = 4.13, SD = 1.75 vs. M_{high} = 5.10, SD = 1.65, $t(86)$ = 5.12, $p < .001$). However, this effect was attenuated when the value allocation was fair (M_{low} = 3.91, SD = 1.60 vs. M_{high} = 4.28, SD = 1.71, $t(93)$ = 2.26, p = .026).

Consistent with our account, five experiments offer convergent evidence that the degree to which consumers perceive they do not receive a fair value created from their personal information raise consumers' concerns over their privacy. The findings are meaningful in broadening future privacy research by identifying a new dimension to consumers' considerations regarding whether to disclose their data. Insights from this research might suggest that adequate protection of consumer data involves not only preventing consumers from data exposure but also ensuring a competitive and transparent market in which consumers can obtain the fair value in exchange for their data.

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At The Pursuit of Harmony Between Men, Land and Brands : A Chronotopic Exploration of Slow Cosmetic Brands' Narratives

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EXTENDED ABSTRACT

"*Conservation is a state of harmony between men and land*" wrote Aldo Leopold in his *Sand County Almanach* (1949). Conservation is increasingly staged by firms through brand discourses in order to value their sustainable agenda, making even more saillant the role of marketing institutions as "*prime movers of both matter and meaning, shaping culture both material and immaterial*" (Scott et al, 2014) and the calls to further explore their transformative potential, not only to make coexist men's and land's needs along one another but also to reframe our relationship(s) to nature and abundance. In the branding literature, sustainability has mostly through the lens of green marketing or corporate social responsbility (Melo & Galan, 2011 ; Kumar & Christodoulopoulou, 2014 ; Paswan, Guzman & Lewin, 2017 ; Harjoto & Salas, 2017, Chen, 2010, Naidoo & Abratt, 2017 ; Ishaq, 2020), brand discourses on sustainability and its impact on meaning-making processes has been relatively understudied (few notable exceptions are to be noted, e.g de Burgh-Woodman & King, 2013 ; Ourahmoune & Binninger, Robert, 2014). Yet, the entanglement between brands and culture (McCracken, 1986 ; Holt, 2004 ; Allen, Fournier & Miller, 2008 ; Fournier & Alvarez, 2019) calls for exploring the emergent paradigm to uncover the transformative potential for change that lies behind brands and highlights its possible contribution as a social actor to the transition toward more sustainable lifestyles.

Sustainability is often depicted as a triptych of social, environmental and economic sustainability. Yet, what lies behind each type of sustainability and how these relates to one another is controversial (Purvis et al, 2019). As a modern concept, sustainability is the product of diverging subjectivities and political agenda (De Pisani, 2006), what Purvis et al (2019) calls "conflicting realities", echoing very different approaches, values and agenda actors push for through the notion of sustainability. As an idea, sustainability is much older. Sustainability is also "*our primal world heritage*"(Grober, 2012). A critical reflection on time is central to the concept of sustainability as sustainable development refers to "*the development that meets the needs of present without compromising the ability of future generations to meet their needs*"(Brundtland Report, 1987). Sustainability also posits a reconstruction of space as it emphasizes belonging to mankind living on Earth and individual and collective duties to ensure human and non-human lives to sustain (Grober, 2012). Consequently, the notion of citizenship is not only a nation-state construction but growingly a combination of supra-national, national and local identities and awareness (Mansouri, Johns & Marotta, 2017). Sustainability profoundly reframes our relationship to time and space, nature and culture, questionning us the future but also how the past contribute to our own present and vision of sustainability.

Through concepts such as sustainability marketing (Belz & Peattie, 2009 ; Thomas, 2018 ; Kemper & Ballantine, 2019) but also green commodity discourse (Prothero & Fitchett, 2000 ; Prothero, McDonagh, & Dobscha, 2010 ; McDonagh & Prothero, 2014) or new materialism (Scott, Martin & Schouten, 2014), authors explore the ability of marketing to forge new subjectivities that may help promote an alternative to an unsustainable system based on materialism and overconsumption. The embeddedness of branding into the fabric of society makes them social and moral agents (Roper, Min & Iglesias, 2017 ; Thomas, 2018) that contribute to meaning-making processes and invites them to explore the transformative potential of branding when it comes to rethink production, consumption and disposal for sustainable aims. Concepts such as brand citizenship (Willmott, 2001, 2003 ; Crane, Matten, Glosen & Spence, 2019) and brand activism (Bhagwat et al., 2020 ; Moorman, 2020 ; Vredenburg et al, 2020) well illustrate the political and social responsibilities that goes along with the involvement with society and its future in the transition toward more sustainable lifestyles. Few research has paid attention to sustainable brand narratives and its structure (de Burgh-Woodman & King, 2013, Ourahmoune & Binninger, Robert, 2014) but such investigations could help us to better understand how brands related to consumers so as to nature and communities in their narratives and how it transforms consumer-brand dynamics.

In order to investigate sustainable brand discourses, we have selected a set of 177 sustainable brands narratives that have received the « Slow Cosmétique » mention. Drawing on the centrality of time and space regarding sustainability, we chose to explore the temporal and spatial dimensions in brand sustainability discourses, building on both emerging data and existing literature on chronotope (Bakhtine, 1978 ; Bemong, & Borghart, 2010). Qualitative analysis aimed at creating emerging temporal and spatial categories and chronotopes (time-space relationships) in brand narratives, adopting a constructivist grounded theory approach (Charmaz, 2006, Minas, Anglin & Ribeiro, 2018 ; Charmaz & Thornberg, 2020).

This chronotopic exploration identifies three types of time dimensions (spiritual, grounded, legacy-oriented) so as of spatial dimensions (caring, creative, citizen-oriented) which enable us to build time-space categories (untouched nature, nature as a ressource, nature as a moral construct) and reframe the identity of brands so as of nature. These chronotopes recreate new forms of myths which contribute to brand meaning-making processes by situating the consumers into webs of mutuality. Each of the chronotope puts the emphasis on different types of value creation by tying consumers to nature, to people and their own self in various ways.

This qualitative investigation offers a new perspective on sustainable brand narratives, reminding us that brands as cultural and social actors are definitely under investigated agents of change in the transition toward more sustainable lifestyles. This research is not without limitation. Brand discourses could have been enriched by other sources of information (brand visual content, interviews with brand managers) in order to have a more complex picture of the given brands. And the focus on the slow cosmetic movement makes it a requirement to replicate research and increase generalizability of findings. Nevertheless, results yield some interesting contributions by highlighting the distinctive role of time-space relationships in brand sustainable narratives and open stimulating areas for future research in branding and consumer ethics. We hope this research will encourage more students and academics to pay close attention to the potential of brands to contribute and accompany positive change for society, environment but also for individuals.

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Indulgent Consumption Signals Interpersonal Warmth

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EXTENDED ABSTRACT

Indulgent consumption is pleasurable and provides instant gratification (e.g., Kivetz and Keinan 2006; Shiv and Fedorikhin 1999), but it often has aversive consequences in the long run (e.g., Siddiqui, May, and Monga 2017; Wertenbroch 1998). Thus, indulgent consumption usually signals that the consumer is impulsive and has poor self-control (Dhar and Wertenbroch 2012). Due to this negative effect, consumers tend to choose healthy foods and avoid consuming indulgent foods in public (Sinha 2016).

Our research, by contrast, uncovers a positive signaling effect: indulgent consumption can signal interpersonal warmth. This is because consumers believe indulgent consumption reflects one's genuine preference, and thus choosing indulgent consumption enhances the perceived authenticity of enjoyment. As authenticity of enjoyment is an important driver of warmth perception (Grandey et al. 2005), people should consider a consumer engaging in indulgent consumption as warmer. Thus, we hypothesize that engaging in indulgent (vs. healthy) consumption will increase warmth perception of the actor, and this effect is mediated by the perceived authenticity of enjoyment.

Five studies provided converging support for our Hypothesis. In Study 1, we created two versions of tweets from a fictitious Twitter account called Jeannie. The tweet posted a drink picture with the description: "Look at what I drank today", depicting a cup of chocolate milkshake (spinach juice) in the indulgent-consumption (healthy-consumption) condition. Participants reported their warmth and competence perceptions towards Jeannie on two warmth-related traits (warm/friendly) and two competence-related traits (competent/capable) on seven-point scales (1 = not at all, 7 = very much). Results show that participants perceived the blogger to be warmer when she posted about an indulgent consumption ($M_{indulgent}$ = 4.80) versus a healthy consumption ($M_{healthy}$ = 4.45; $F(1, 199)$ = 9.23, p = .003). There was no significant difference on competence perception ($M_{indulgent}$ = 4.53 vs. $M_{healthy}$ = 4.76; $F(1, 199)$ = 1.90, p = .17).

Study 2 tested whether consumers intentionally use indulgent consumption to signal warmth to others. Participants themselves meeting a new neighbor (warmth-signaling condition) versus a business supervisor (competence-signaling condition) at a café, and then indicated whether they would like to order a chocolate cake or a fruit salad. Results revealed that participants in the warmth-signaling condition were more likely to order a chocolate cake (68.00%) than those in the competence-signaling condition (50.00%; χ^2 = 6.70, p = .01).

Study 3 sought to investigate the underlying process. Participants viewed an ice-cream picture posted by Jeannie on Instagram. In the indulgent-consumption condition, the tagline read, "Double-Cream, Vanilla Ice-Cream. Indulge Myself: Life Is Sweet." In the healthy-consumption condition, the tagline read, "Sugar-Free, Non-Fat Ice-Cream. Go Healthy: Health is Wealth." The text read, "I had this ice-cream today. So yummy (healthy)! #indulgent (healthy)" in the indulgent-consumption (healthy-consumption) condition. Participants rated their warmth and competence perception of the blogger as in Study 1, and rated the authenticity of enjoyment ("I think Jeannie is truly enjoying this consumption," "I think Jeannie's behavior expresses her genuine preference," and "I think Jeannie pretends to enjoy something when in actuality she really doesn't" [reverse-coded]; 1 = strongly disagree, 7 = strongly agree; α = .87; adapted from Kernis and Goldman 2005). Results revealed that the blogger's warmth was rated higher in the indulgent-consumption condition ($M_{indulgent}$ = 5.25) than in the healthy-consumption condition ($M_{healthy}$ = 4.81; $F(1, 198)$ = 6.75, p = .01). There was no significant difference in perceived competence ($M_{indulgent}$ = 4.74 vs. $M_{healthy}$ = 4.59; $F(1, 198)$ = .63, p = .43). The blogger's enjoyment was perceived as more authentic in the indulgent-consumption condition ($M_{indulgent}$ = 5.18) than in the healthy-consumption condition ($M_{healthy}$ = 4.57; $F(1, 198)$ = 10.03, p = .002). A mediation analysis with 5,000 bootstrap samples revealed a significant mediation effect of perceived authenticity of enjoyment (indirect effect = .31, 95% CI = [.12, .54]).

Study 4 provided further support for our proposed underlying mechanism. We predicted that posting indulgent consumption no longer boosts warmth if the content was sponsored by the company, as it would not be considered authentic. Study 4 followed a 2 (consumption type: indulgent vs. healthy) × 2 (sponsorship: control vs. sponsored) design. In the indulgent (healthy) consumption condition, the tweet mentioned "I spent whole day watching movies and having fun (doing exercises and working out) in The Halifax Movie (Fitness) Week," and the picture depicted a group of people watching movies (doing exercises). An additional sentence of "Thanks @Halifax for inviting me. #ad #sponsored" was added for the sponsored conditions. In the control conditions, such information was not provided. In the control conditions, we replicated the results observed in previous studies. However, there was no difference in perceived warmth when participants knew the content was sponsored.

Study 5 sought to provide field evidence for our proposed effect. Engagement rate measures the average number of interactions (e.g., likes, comments, and sharing) per follower has with a social media account. As people tend to approach and interact with interpersonally warm others (Cuddy et al. 2007), an account's engagement rate should be positively correlated with the indulgence level of its contents. Our target influencers are the 155 most-followed Instagram food influencers listed on Feedspot.com. We extracted the engagement rate data of these influencers from Starngage.com. Engagement rate information from 60 influencers was not available, leaving 95 influencers in our analysis. We collected the screenshots of the 12 pictures on each account's first page and recruited 302 US participants to rate their perceived indulgence of the contents (1 = very healthy, 7 = very indulgent) of 10 randomly-selected screenshots. Our result revealed a significant positive correlation between the indulgence level of the content and engagement rate (r = .22, p = .03).

Our research offers important theoretical contributions and relevant practical implications. Theoretically, despite the prevailing negative view on indulgent consumption, our research shows a positive signaling effect of indulgent consumption. In terms of practical implications, our findings suggest that marketers can share contents about indulgent consumption on social media platforms if they want to establish a warm brand image.

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The Impact of Societal Conditions on Migrants' Consumer Acculturation Prospects

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EXTENDED ABSTRACT

In contrast to the variety of consumer identity positions and acculturation outcomes in extant research (e.g., Askegaard, Arnould, and Kjeldgaard 2005; Peñaloza 1994), scholars have recently started to focus on macro-conditions of consumer acculturation (Veresiu and Giesler 2018), but have in total painted a rather one-sided theoretical picture of the societal conditions in which consumer acculturation takes place. First, these conditions appear predominantly oppressive, as positively oriented or welcoming settings are less frequent. Researchers report outright oppression due to ethnicity or race (Oswald 1999; Peñaloza 1994), religion (Jafari and Goulding 2008) or social status (Üstüner and Holt 2007), open conflict due to a crumbling majority domination (Luedicke 2015), symbolic domination (Veresiu and Giesler 2018), or discrimination (Askegaard, Arnould, and Kjeldgaard 2005). Second, in many articles, this majority domination implies a lack of migrants' agency to counter this domination and to reach recognition (Chytkova 2011; Üstüner and Holt 2007; Veresiu and Giesler 2018). Third, the societal conditions in extant research seem temporally stable, as most theorizations resemble a temporal snapshot and do not address changes in the macro environment (Oswald 1999; Veresiu and Giesler 2018).

Taken together, prior consumer acculturation research paints a rather dire picture of immigrant consumer acculturation conditions, i.e., a picture where broader society dominates most migrant groups, where individuals almost inevitably fail to fulfil their dreams of market integration. Therefore, we seek to answer the following research questions: which broad conditions shape migrants' consumer acculturation prospects? Are there conditions in which migrants have better chances at successful consumer acculturation? Which societal spheres consitute these conditions?

In order to look for different societal conditions for consumer acculturation, we conduct a historical ethnographic analysis of ethnic German repatriate consumers from the former Soviet Union over 70 years. The ancestors of these migrants emigrated from Germany to Russia from the 18th century on, and their descendants have repatriated to Germany after World War II until today. This context suits our theoretical goals well, since on the one hand, these repatriates are similar enough to indigenes to resemble them in their appearance, names, legal status, and religion, but different enough in their consumer culture and language proficiency to be identified as a distinct migrant group which may encourage stigmatization in the form of labeling or discrimination. This context ist thus different from most researched contexts, in which globalization accounts for mostly labor-related migratory flows. Instead, it is based on an imagined community (Anderson 1983) and historic-ethnic path dependencies.

In line with process theorization (Giesler and Thompson 2016), we collected a macro-, meso- and micro-level data set which is rich and comprehensive enough to support our theorization of changing societal conditions for consumer acculturation. Our data set comprises 57 interviews (with repatriates, indigenes, and institutional representatives), 651 pieces of archival data (e.g., parliamentary proceedings, newspaper articles,), field data (e.g., 553 photographs and videos, 190 pieces of print field material such as advertising flyers, field notes from repatriate-related events), and netnographic data (e.g., 125 pictures and videos from Facebook, Instagram, Twitter, and YouTube). We conduct a social representations analysis with our data (Moscovici 1984). Social representations are "ways of world making" (Moscovici 1988, 231) which make something unfamiliar familiar by recreating reality (Moscovici 1984).

Our study reveals how societal representations of a migrant group change over time, producing four theoretically distinct consumer acculturation conditions for migrant consumers. Over our 70-year analytical period, our focal migrant group was welcomed by the receiving society (a condition we call *interest*), discriminated against and stigmatized (*inharmony*), fell into oblivion (*indifference*), and was recognized as making a societal contribution (*influence*). Three societal spheres are involved in constituting these conditions: the political sphere, the market sphere, and the public opinion sphere (comprised of mass media and indgenous consumers). We argue that most migrant groups face either of these four conditions at a time of study and may experience a switch from one condition to another in the wake of, for instance, political shifts, disruptive events such as terrorist attacks, changing hierarchies among migrant groups, or the public visibility of migrant celebrities.

As just argued, these conditions might be transferable to other migration contexts, but we are cautious about whether the dynamics of this case apply to others without caveat. Future research should examine this. Also, it might be that there are more societal conditions beyond the four that we find. Besides, future research may look at individual-level acculturation in the case of repatriate migrants, as literature has not looked this migration pattern yet. Several non-academic stakeholders find value in our research, too. First of all, it provides local policy-makers a complete picture of the dynamics at work in terms of repatriates' acculturation, which helps them to consider migrants adequately in terms of legislation, assistance programs, and so on. Second, as findings show indigenes' knowledge on repatriates' background is low, we suggest to include it in history lessons in school. On a bigger scale, our study is relevant also for policy-makers in other countries who are currently in the process of inviting their emigrants back or will do so in the future. Our insights shall serve as a reminder not to have too high expectations and to frame their communications accordingly. Furthermore, the research informs marketers active within the repatriate marketplace how this marketplace is viewed by indigenous consumers and thus allows them to reflect upon their offerings.

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A Natural Fit: Exposure to Nature Influences Regulatory Focus

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EXTENDED ABSTRACT

Rapidly growing modern cities, provide limited contact with natural environments (Shanahan et al., 2015). Decades of research suggest that exposure to nature—whether in the form of hiking in a forest, strolling through a neighborhood park, or merely looking at pictures of nature—can influence people's physical and psychological health (Berto, 2005; Hartig et al., 2003; Berman et al. 2008). While much is known about how exposure to nature can benefit individuals' psychological and physical health, relatively little is known about how exposure to nature can influence psychological states such as motivational state, i.e., regulatory focus (Higgins, 1997).

Nature creates an opportunity for individuals to think outside the box of their day-to-day responsibilities, routines and social obligations, which are typically associated with prevention-focused motivational states (Kaplan, 1995; Lee et al., 2000; Kaplan & Kaplan, 1989). Simultaneously, sensing the presence of something greater than self, exposure to nature encourages individuals to think beyond themselves, their possessions, and their familiar local environment and experience more cognitive creativity, flexibility and abstract thinking (Basu et al., 2019; Joye et al., 2020; Shiota et al., 2007; Friedman & Forster, 2002; Forster & Higgins, 2005). Accordingly, we posit that being in nature reduces prevention-oriented focus and improves promotion-oriented focus. We argue that the feeling of being away and distancing oneself from daily life is the mechanism for to the decrease in prevention focus, whereby people can shed the need to vigilantly monitor their surroundings and concern themselves with their obligations. Concurrently, exposure to nature would lead to an increase in promotion focus, whereby people are able to focus on something beyond their own lives and their self-centric view.

The results of four studies provided support for our predictions. In studies 1a and 1b, we examined the main effect of exposure to nature on the regulatory focus of individuals. In study 1a, the participants either searched for nature-related words (e.g., river, sun, flower) or non-nature related words (e.g., machine, tools, factory) in a word-puzzle. As a measure of regulatory focus, participants were requested to indicate how concerned they would be about avoiding negative outcomes and achieving positive outcomes if they were invited to talk in a meeting (task adapted from Pennington & Roese, 2003). We found a significantly lower relative level of concerns for avoiding negative outcomes versus achieving positive outcomes in the nature condition (M_{Nature}=.44, SD= 1.45, $M_{Control}$=.04, SD= 1.43, $F_{(1,210)}$ =3.96, p=.04). In Study 1b, participants saw either nature pictures (e.g., mountains, lakes, trees; adapted from Berman et al., 2008) or screen-filled images of solid colors. As a measure of regulatory focus, participants were asked to write about one of their goals in life and indicate if they were focusing more on achieving positive outcomes or avoiding negative outcomes regarding that goal (task adapted from Bullard & Manchanda, 2017). Our results showed that the participants in the nature condition were significantly less concerned about avoiding negative outcomes and more concerned about achieving positive outcomes in pursuing their life goals (M_{Nature}= 2.36, SD=1.66, $M_{Control}$= 2.82, SD=1.91, $F_{(1,270)}$ =4.57, p=.033), suggesting a shift toward relatively stronger promotion-focus and weaker prevention-focus.

Study 2 examined the mechanism behind the effect of exposure to nature on regulatory focus. Additionally, we used more mundane images of nature (e.g., foliage, front lawn, blades of grass) versus solid colors. As a measure of how removed participants felt from their daily life, we adapted scale items from the measure of "being away", a subcomponent of attention restoration (Payne & Guastavino, 2018). We found (using the same measure as in Study1b) that the participants who watched the nature video were significantly less focused on avoiding negative outcomes and more focused on achieving positive outcomes (M_{Nature}=1.38, SD= 1.82, $M_{Control}$=2.56, SD= 1.87; $F_{(1,98)}$ =3.17, p=.049). As expected, participants felt more removed from their daily life after watching the nature video compared to the color videos (M_{Nature}= 4.95, SD= 1.46, $M_{Control}$= 4.05, SD= 1.67, $F_{(1,98)}$ = 8.06, p=.005) and this feeling mediated the impact of the conditions on regulatory focus (indirect effect=-.098, SE=.05, $LLCI$=-.23, $ULCI$=-.007, with 95% confidence interval).

Study 3 tested the boundary condition of reminders of daily routines. Participants viewed a series of nature pictures (similar to study 2) or pictures of everyday household products (e.g., table, coffee maker). They were instructed to either look at the images or to imagine maintaining what was depicted in the picture (e.g., maintaining the lawn vs. maintaining a kitchen appliance). As a measure of regulatory fit, we adapted a task from Mogilner et al., 2008 and asked participants to evaluate an either promotion or prevention-focused message. In the no-maintenance condition, the participants in the nature condition showed less favorable attitudes towards the prevention-focused message compared to the participants in the everyday products condition ($M_{Prevention-Nature}$=6.06, $M_{Promotion-Nature}$=6.82, $F_{(1,203)}$ =5.32, p=.022). However, the difference between the attitudes of participants in the nature and the everyday products conditions towards the promotion-focused message was only marginally significant ($M_{Prevention-Everyday}$=6.86, $M_{Promotion-Everyday}$=6.24, $F_{(1,203)}$ =2.75, p=.098). In the responsibility condition, we found no difference between the attitudes of participants towards the prevention and promotion-focused messages across two conditions ($M_{Prevention-Nature}$=6.46, $M_{Prevention-Everyday}$=6.15, $M_{Promotion-Nature}$=6.26, $M_{Promotion-Everyday}$=6.51, $F_{(1,205)}$ =1.26, p=.26). These results suggest the decrease in fit with the prevention-focused message and the increase in fit with the promotion-focused message was due to nature drawing people away from their daily responsibilities and obligations. When the reminder of daily routines was salient, the effect of nature on regulatory focus was attenuated.

Our research is the first, to our knowledge, to identify the impact that exposure to nature has on consumers' motivational orientation, and we provide evidence for the mechanism behind this effect. The findings of this research contribute to the current literature on situational regulatory focus (e.g., Higgins, 2002; Mourali & Pons, 2009; Bullard & Manchanda, 2017) by identifying a novel context in which situational regulatory focus may be cued—namely, natural settings.

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Mask Colors and Trustworthiness

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EXTENDED ABSTRACT

Due to the rapid spread of COVID-19 throughout the world, many of the Centers for Disease Control asked citizens to wear face coverings (masks) to prevent the spread of the virus and protect themselves. Therefore, wearing a mask (in particular, a medical mask) has become the new normal since the outbreak of COVID-19 will probably last for a longer period than previously expected (Kissler et al., 2020).

People wear a mask when going out. Service providers like salespeople and flight attendants also wear masks when providing services. Imagine that you go to a supermarket for a bottle of wine. A supermarket employee wearing a yellow mask approaches you and offers you some suggestions. Will the color of the mask influence your perception of that employee?

Although masks have been used for a long time, the influence of the color of masks remains unknown. One possible assumption of mask color effects is that color itself can affect people's feelings. Previous studies have already found that colors affect individuals' emotions and behavior (Valdez and Mehrabian 1994). For example, longer wavelength colors (e.g., red) are perceived as arousing, while shorter wavelength colors (e.g., blue) are perceived as relaxing (Nakshian 1964).

An alternative explanation is that particular colors may trigger a process of feeling transfers. People often observe healthcare professionals wearing a mask in blue, white, and green. Therefore, they tend to associate trustworthiness with masks in these colors. Therefore, when people see somebody wearing a mask in regular colors, they may transfer the positive feeling from healthcare professionals to that person. As a consequence, they may perceive people whose masks are in regular colors as being more trustworthy. Hence, we examined how mask colors influence a person's trustworthiness and the rationale behind such effects.

Generally, researchers found that cool colors can increase positive feelings, credibility, and trust. In a shopping context, consumers exhibit a more positive feeling and higher purchase intention in blue (vs. red) retail environments (Bellizzi and Hite 1992). Cool colors have also been confirmed to have positive effects on trust in e-commerce (Lee and Rao 2010).

Based on the aforementioned literature, we may conclude that masks in cool colors may increase one's perceived trustworthiness. However, when the color is associated with masks, predictions simply built on the "cool-color effect" theory may seem to be too naïve. We expect particular mask colors to increase trust because of evaluative conditioning and trust transfer.

Based on the associative learning theory (Martin and Levey 1978), and trust transfer theory (Stewart 2003). We posited that the mask color will affect an individual's perceived trustworthiness toward a person. In this context, the third party are the masks in regular colors. People may trust others wearing a mask in regular colors, compared with those who wear a mask in irregular colors. The figure illustrates the trust flow from the trustworthy group to the trustee. Points A, B, and C indicate 3 important paths. The trust flow can proceed from the trustworthy group (i.e., doctors) to the trustee only when 3 prerequisites are met:

A) A person wears a mask in regular colors.
B) People trust healthcare professionals.
C) People associate masks in regular colors with healthcare professionals.

As such, we assume that a person wears a mask in regular colors (i.e., blue, white, and green) are perceived to be more trustworthy than in irregular colors (prerequisite A). However, this effect vanishes when the trustor shows a lower trust in healthcare professionals (prerequisite B) and when people associate masks in irregular colors with healthcare professionals (prerequisite C).

Through four studies, this research reveals that the color of masks has an effect on people's perception of trustworthiness based on the evaluative conditioning theory and trust transfer theory. Wearing masks in regular colors can increase one's perceived trustworthiness. However, this main effect is moderated by the degree of trust in healthcare professionals an consumers' association of particular mask colors and healthcare professionals. The mask color effect disappears when one shows a lower trust in healthcare professionals and when participants were primed that healthcare professionals are associated with irregular colors. Furthermore, the effect of mask colors is not influenced by the similarity between the trustee's profession and the trust group's profession. In other words, similarity does not assist the process of trust transfer.

This study makes several contributions to the literature. First, this research uncovers the underlying mechanism of how the mask colors affect one's perceived trustworthiness. We proposed and confirmed a detailed model of the trust flow based on the evaluative conditioning theory and trust transfer theory (Martin and Levey 1978; Förderer and Unkelbach 2011). If people trust a certain group of people, they tend to associate trust with particular symbols possessed by the group. Individuals who display those symbols are also perceived as more trustworthy. We further confirmed the three prerequisites of the trust flow. Only when these three prerequisites are met can the trust flow proceed from the original group to the trustee.

Second, the current research explores whether the trust transfer process is easier when the trustee (service providers) possesses similar features with a trustworthy group (healthcare professionals). However, the similarity does not enhance the trust transfer process. This implies the proposed trust flow model is valid across two service types, which increases the generalizability of the trust transfer theory. Previously, the trust transfer theory was mainly applied to the e-commerce context (Stewart 2003; Stewart 2006; Lu et al. 2011).

These research findings also provide insightful managerial implications. For the service sector where service providers are required to wear masks, instead of using consumers' service evaluation. For government or other organizations, officers should be advised to wear a mask in regular colors in public. This can increase their trustworthiness. For example, a spokesperson from the local municipal who advocates a certain social distancing policy may put on a mask in white or blue to increase the persuasive power of his/her initiative.

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Delivery of Material Aid: Effects of Aid Restrictiveness on Perception of Justice and Satisfaction Among Consumers of Varying Power Levels

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EXTENDED ABSTRACT

Sudden, traumatic events can cause individuals to temporarily face resource scarcity — a discrepancy between current resource levels and more favorable levels (Cannon et al., 2018). In fact, within months of the COVID-19 pandemic, 40 million+ unemployment-benefit claims were filed in the U.S. (Morath, 2020) turning a health crisis into an economic crisis. Furthermore, about 23% of U.S. households lacked the resources necessary to get enough food compared to 16% during the Great Recession (DeParle, 2020).

To help individuals facing scarcity, government (e.g., Food Stamps) and charity programs (e.g., Feeding America) have been built to provide security. However, it remains unclear how the type of aid provided can be optimized to improve the program's impacts on beneficiaries. Researchers have investigated the advantages and disadvantages of delivering different forms of aid on outcomes like program costs and goals (Sabates-Wheeler and Devereux, 2010; Margolies and Hoddinott, 2014), but little research has examined perceptions or satisfaction of the beneficiaries. Yet, regulatory strategies often impose restrictions on the beneficiaries of the aid, and these may have an impact on beneficiaries.

Thus, this research proposes that offering restrictive aid that reduces recipients' ability to select a preferred course of action (Inesi et al., 2011), such as giving them less freedom of choice in the items received, will negatively impact their perception of justice — perceived impartiality in the procedures and processes used to arrive at distribution outcomes (Namasivayam and Mount, 2006), and aid satisfaction — when a product meets the individual's desires and expectations (Spreng et al., 1996). Moreover, when there is a state of powerlessness due to an imbalance in the marketplace, consumers become vulnerable (Baker et al., 2005). Thus, we propose these effects will only occur for the most vulnerable consumers in low power positions, either financially (e.g., unable to pay bills) or interpersonally (e.g., subservient in an exchange).

We examined three forms of aid: in-kind meaning goods or services, cash transfers meaning cash or pre-paid cards, and near-cash transfers meaning vouchers to purchase specific products, and we find support for these propositions in controlled lab experiments, including one involving COVID-19, and a field experiment at a food pantry, which are discussed below. In total, six studies were conducted to test our Hypothesis. In all our studies, individuals were in a resource scarce context where they faced material hardship.

The first two studies focused on examining the effects of aid restrictiveness on satisfaction. Study 1a manipulated the restrictiveness of the aid offered with two levels: more restricted versus less restricted in-kind aid. Study 1b manipulated aid restrictiveness using cash versus voucher aid. Study 2 was our field experiment in a food pantry, and it manipulated aid restrictiveness. The final three studies examined consumers' level of power as a moderator while continuing to examine the impact of aid restrictiveness on satisfaction. Study 3 introduced measured financial power as a moderator. Study 4 examined those financially impacted by COVID-19 and introduced the perception of justice as a mediator. Lastly, Study 5 manipulated interpersonal power as a moderator with the perception of justice as a mediator

Together, this research finds that increasing aid restrictions decreases an individual's perception of justice and satisfaction, and the perception of justice mediates satisfaction, with beneficiary power as a key moderator. We studied both financial and interpersonal power and find consistent moderating effects. For vulnerable individuals, offering aid that is more restrictive decreases satisfaction, and this is mediated through the perception of justice.

Our research has important implications for the consumer power, justice, and satisfaction literatures, and it adds to the research on the advantages and disadvantages of different forms of aid delivery. This research also provides meaningful managerial insights for organizations by illustrating the benefits of providing vulnerable individuals with less restrictive aid that allows them to make their own consumption choices and empowers them. Overall, our work sheds light on how organizations can be more effective in holistically helping individuals in need.

Based on our findings, a number of programs need to examine their current process for delivering aid. For example, charity programs should examine their aid restrictions and also closely look at the exchange relationships between employees with aid beneficiaries. Ultimately, organizations need to consider this: If aid restrictiveness makes people perceive less justice and reduces satisfaction, is the aid truly holistically helping those in need?

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Is Older Brand More Moral? The Impact of Brand Age on Consumers' Perception of Brand Moral Identity

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EXTENDED ABSTRACT

Although many brands attempt to enhance their brand image by engaging in corporate socially responsible (CSR) behaviors, not all brands can receive positive response from consumers. Since CSR context is a business context involving morality, in which consumers' perception of brand morality will have important impact on their brand attitude. Studies have shown that some inherent attributes of a brand, such as brand image, reputation, or brand personality affect consumers' perception of brand morality. In this research we theorize and demonstrate a new brand attribute that influence consumers' perception of brand morality: brand age. Specifically, we argue that brand age would affect consumers' perception of brand moral identity (BMI), and we show that this effect is mediated by consumers' perception of brand long-term orientation (LTO). We also examined the impact of brand age and BMI on consumer brand attitudes in CSR context

Brand age is the duration of the brand's existence from its establishment. As an inherent attribute, brand age represents the position in its life cycle, which plays an important role in the formation of consumers' brand recognition and attitude (Zhang, Kashmiri, & Cinelli, 2019). Although brand age may often be associated with aging, obsolescence or outdating (Lehu, 2004), many old brands take their age as an advantage, emphasizing their age in brand introductions and stories to make consumers feel that the brand is strong, enduring and trustworthy (Guillory, 2013; Zhang et al., 2019). For example, Tissot includes "Since 1853" in its brand logo.

To explore the influence of brand age on consumers' perception of brand, we introduced the moral identity theory to explore the relationship between brand age and brand moral identity (BMI). According to the research on personal moral identity (Aquino & Reed, 2002; Reed, Aquino, & Levy, 2007) and organizational moral identity (Matherne, Ring, & Farmer, 2018), we define BMI as consumers' perception of brand's moral characteristics. Consumers tend to infer that brands with stronger BMI will engage in more moral behaviors.

We argue that consumers' perception of BMI will be affected by brand age. First, older brands have formed steadier market foundation for a long time, indicating that their behaviors, concepts and moral standards are accepted by consumers to a greater extent (Erdem & Swait, 1998). Second, the long-term development of a brand relies on its good moral reputation and image (Bendixen & Abratt, 2007; Brunk, 2012; Sierra, Iglesias, Markovic, & Singh, 2017). From this perspective, older brands are more likely to maintain a consistently good brand image in terms of morality.

In addition, we argue that the above effect of brand age on BMI is mediated by consumers' perception of the brand's long-term orientation. Long-term orientation (LTO) is defined as a cultural value that views time holistically (Bearden, Money, & Nevins, 2006). Individuals with LTO will value both the past and the future, respect tradition, value the long-term development, care less about the immediate interests, work hard for future interests and perseverance (Bearden et al., 2006). LTO can be used as one of the brand's strategic orientations (Wang & Bansal, 2012), which can be perceived by consumers through brand behaviors and concepts.

We propose that brand age would affect consumers' perception of brand's LTO. First, consumers may tend to perceive that older brands with longer brand history are more tradition-conscious (Urde, Greyser, & Balmer, 2007). Second, the values of older brands would be perceived by consumers as more continuity and inheritance (Hudson & Balmer, 2013; Urde et al., 2007). Consumers tend to believe that older brands would pay more attention to their long-term development and long-term goals in the future. Third, older brands could survive in the fierce market competition, which means that they have stronger survivability and long-term perseverance (Guillory, 2013; Zhang et al., 2019). Hence, consumers may perceive that older brands have stronger LTO.

Previous studies have shown that individuals with stronger LTO will pay more attention to the long-term impact of current behaviors (Bearden et al., 2006), value future interests and social responsibility (Singhapakdi, Karande, Rao, & Vitell, 2001), and less engage in behaviors that violate morals and ethics (Nevins, Bearden, & Money, 2007). Therefore, consumers tend to think that a brand with stronger LTO will engage in more moral behaviors, and have stronger BMI.

In addition, we argue that brand age, as an important factor affecting BMI, would also affect consumers' brand attitude in the CSR context. According to our theory, consumers perceive that older brands have stronger BMI and engage in more moral behaviors, older brands' CSR activities are consistent with consumers' expectations. Consumers will enhance the altruistic attribution of the brands' behaviors (Rifon, Choi, Trimble, & Li, 2004), and therefore enhance brand attitudes. On the contrary, younger brands with weaker BMI engaging in CSR behavior may cause consumers to question their motives (Barone, Miyazaki, & Taylor, 2000; Chang & Cheng, 2015; Elving, 2013), which is not conducive to improving consumers' attitudes towards the brand.

In order to verify the hypothesis proposed, we conducted a total of three experimental studies and one second-hand data study. Specifically, studies 1 test the influence of brand age on consumers' perception of brand moral identity. Study 2 examined the mediating role of brand long-term orientation. Study 3a and 3b tested the downstream effects of brand age and BMI on consumers' brand attitudes in the context of CSR through experiment and second-hand data, respectively.

The theoretical model and empirical results of the current research enrich the existing research and literature in the related fields. Moreover, this research also provides guidance for the work of brand managers and marketers.

Our research has some limitations. We did not explore boundary conditions of the brand age effect in moral context, leaving gaps for future research. In addition, future research can expand research context (i.e. field experiment) further.

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The Effect of Powerlessness on Preferences for Free-From-Products

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EXTENDED ABSTRACT

Going gluten-free and dairy-free are popular nowadays. Such products are often categorized into free-from-products (FFP), which refer to products that are purposely made to remove ingredients or materials that include allergens (Priven et al. 2015). Interestingly, the increasing demand for FFP is largely driven by tolerant consumers who do not have known allergic reactions (Volta et al. 2013). This research intends to identify one psychological factor—power that drives tolerant consumers' demand for FFP. Power is defined as "asymmetric control over valued resources in social relationships" (Magee and Galinsky 2008). According to approach/inhibition theory, the powerful pay attention to rewards in the environment and adopt approach strategies (Keltner, Gruenfeld, and Anderson 2003). In contrast, the powerless are sensitive to possible threats in the environment and adopt inhibition strategies (Anderson and Berdahl 2002). This sensitivity to threats in the environment is particularly relevant to FFP, because FFP are to reduce the potential risk of allergic reaction. We propose that as the powerless (vs. powerful) are generally more sensitive to threat, they might also perceive greater health threats posed by allergens, which drives their preference to FFP. Formally:

Hypothesis 1: *Feeling of powerlessness increases consumers' preferences towards FFP.*

Hypothesis 2: *The effect of powerlessness on the preference for FFP is mediated by the heightened perceived health threats.*

To provide support to our Hypothesis, we conducted six studies. Study 1 aimed to test H1. Participants (N=170, MTurk) were asked to imagine being either a team leader (*high power*) or a team member (*low power*). Participants then indicated their preference between a classic (1) and a gluten-free (7) muffin. As predicted, results showed that the powerless (*M*=2.49) preferred the gluten-free muffin more than the powerful (*M*=1.92; $F(1,168)$=4.49, *p*=.04). Study 2 aimed to rule out the status signaling account as the powerless might use the more expensive FFP to compensate for their lack of power (Rucker et al. 2012). This study (N=178, Mturk) used the same design as in study 1 except that the consumption setting was in private (i.e., alone at home). Results again showed the powerless' preference for FFP ($M_{low-power}$=2.98 vs. $M_{high-power}$=2.28; $F(1,176)$=5.10, *p*=.03), suggesting that signaling is less likely to drive our effect.

Study 3 tested the alternative account that the powerless prefer FFP because they perceive FFP to be healthier. In this study (N=221, MTurk), participants imagined being a boss (*high power*) vs. an employee (*low power*). Next, they were asked to choose between a *whole-wheat* blueberry muffin and a *gluten-free* blueberry muffin. The whole-wheat muffin was pretested to be healthier than the gluten-free muffin. Despite being a less healthy option, results found that the powerless (24.8%) were more likely to choose the gluten-free muffin (vs. whole-wheat muffin) than the powerful (14%; β=.71, Wald-χ^2 (1)=3.91, *p*=.04). Hence, our results are less likely to be driven by the powerless' preference for healthy food.

Study 4 included a control condition (without any power manipulation) to demonstrate whether the powerful or the powerless is driving the effect (N=369, MTurk). We manipulated power by a scrambled words task (Smith and Bargh 2008). Participants were then asked to choose between a classic and a gluten-free pretzel and answer questions about perceived health threats. Results revealed that participants in the low power condition (29.6%) were more likely to choose the gluten-free pretzel than those in the control (16.2%) and high power condition (18.1%; $\chi^2(2)$=7.66, *p*=.02), suggesting that our effect was driven by the powerless' preference for FFP. Further, in support to H2, our effect was mediated by perceived health threats.

Studies 5 and 6 aimed to test our mechanism. We argue that the powerless perceive more health threats and hence adopt an inhibition strategy by consuming FFP. However, prior research has shown that powerless individuals shift their attention to potential rewards and no longer pursue inhibition strategy when the power is perceived to be unstable (i.e., when the power position can be changed, Kim, Shin, and Lee 2017) or illegitimate (i.e., when the power is acquired unfairly, Lammers et al. 2008). As such, their preference for FFP should also be attenuated. We examined these boundary conditions in studies 5 (unstable power) and 6 (illegitimate power).

Study 5 used a 2 (high vs. low power) × 2 (stable vs. unstable) design (N=281, students). Participant were assigned to be a superviosr (*high power*) or a subordiante (*low power*) in a business simulation task. We manipulated stability in a practice trial. Participants were told that their role would remain unchanged regardless of their performance in the practice trial in the *stable condition* (vs. might change depending on their performance in *unstable condition*). Next, they indicated their preference between a cucumber fragrance (1) and a fragrance-free (7) facial wash. We found a significant interaction between power and stability ($F(1, 263)$=5.60, *p*=.01). When power was stable, the powerless preferred the fragrance-free facial wash more than the powerful ($M_{low-power}$=5.24 vs. $M_{high-power}$=4.61; *p*=.04). In contrast, power did not influence their preference in unstable condition (*p*=.17).

Study 6 used a 2 (high vs. low power) × 2 (legitimate vs. illegitimate) design (N=271, students). Participants imagined being a group leader (*high power*) or member (*low power*) in a class project. They were told that the leader was assigned because the person was the most capable in the *legitimate condition* (vs. because the person's surname ranked first in an alphabetical order in the *illegitimate condition*). The dependent measure was the same as in study 5. Results revealed a significant interaction between power and legitimacy ($F(1, 266)$=6.68, *p*=.01). When power was legitimate, we replicated our earlier findings ($M_{low-power}$=5.19 vs. $M_{high-power}$=4.59; *p*=.04). However, the effect was attenuated when power was illegitimate (*p*=.10).

Taken together, we obtained consistent evidence that the feeling of powerlessness increases consumers' preference towards FFP. This research sheds light to food consumption literature by demonstrating experimentally what drives people to purchase FFP besides medical requirements. We also extend our understanding of powerlessness, which is often understudied in the literature. Finally, we provide practical implications to both policy makers and marketers on what drives the increasing demand of FFP.

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Fresh Start Cues Increase Consumer Preferences for Formal Stimuli

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EXTENDED ABSTRACT

Consumers often experience fresh start occasions (e.g., the outset of a new week/month/ year, changing jobs, moving to a new city), making them want to "make a new start, get a new beginning, and chart a new course in life, regardless of their past or present circumstances" (Price et al. 2018, 21). Moreover, fresh start cues (e.g., ads, pictures, quotes) are omnipresent in consumers' day-to-day lives. For example, universities (e.g., Harvard University 2018) remind their students about "a new semester, a fresh start" at the beginning of semesters; brands and firms encourage consumers to make a fresh start by purchasing their updated arrivals (e.g., the email campaign "Start Fresh with Winter Neutrals" by *Le Creuset*, Milled 2021). Due to the frequency of fresh start cues that people may encounter, we examine and find that fresh start cues can influence consumers' subsequent preference for objects that elicit different styles. Specifically, drawing from the literature on fresh start (Price et al. 2018), meaning in life (Rudd, Catapano, and Aaker 2019), and perceptions of formality (Hannover and Kühnen 2002), we propose that fresh start cues activate consumers' meaning-seeking motives, which in turn lead them to seek out products or activities that elicit formal (vs. casual) styles.

In Study 1, we first asked participants to evaluate either ten fresh start quotes (e.g., "Whatever their past, people can look forward to a fresh start;" the fresh start condition) or ten quotes selected at random (e.g., "Color is a power which directly influences the soul;" the control condition). Secondly, in a seemingly unrelated part, we asked participants to help us pretest some reading materials by choosing their interested article from two alternative topics: one was about "formal lifestyle," and the other was about "casual lifestyle." Afterward, participants read their selected article to complete the survey. The results showed that participants in the fresh start condition chose greater proportion of the article about formal (vs. casual) lifestyles to read than those in the control condition.

Study 2 provides additional evidence that fresh start cues increase consumer preferences for formal stimuli. In the fresh start manipulation, we provided participants with a paragraph which framed Monday as either a fresh start of the week (the fresh start condition) or an ordinary day of the week (the control condition). Afterward, we asked participants to make decisions in three scenarios, each of which included a pair of product alternatives—one was more formal, and the other was more casual (e.g., "Imagine that you are shopping in an outfit store and deciding on which shirt to buy: a dress shirt vs. a button-down shirt."). The results showed that participants in the fresh start condition chose greater proportion of formal (vs. casual) clothing than those in the control condition, replicating our previous findings.

Employing a more conservative fresh start manipulation (fresh start vs. start) and a different choice scenario, Study 3 provides evidence that the observed effect is mediated by consumers' meaning-seeking motives. Specifically, in the fresh start (vs. start) condition, we provided participants with a set of visual ads containing reminders of fresh start (vs. start). For example, one of the visual ads showed in the fresh start condition advertised a financial program: "*Fresh Start* Program. Apply Now and Begin Your *Fresh Start*;" such an ad presented in the start condition became "*Let's Start* Program. Apply Now and Begin Your Program." Next, in a seemingly unrelated part, we asked participants to imagine that they were making up their minds to choose a virtual book club to join—one was a more casual book club, and the other was a more formal book club. Afterward, we measured participants' meaning-seeking motive by asking them to rate on a four-item, seven-point Likert scale (e.g., "I want to do something that gives me a sense of meaningfulness/ importance/significance/ seriousness;" adapted from Crumbaugh and Maholick 1964; Park and Folkman 1997). The results replicated our previous findings by showing that participants in the fresh start condition chose greater proportion of the formal book club than those in the start condition. More important, the mediation analyses (Hayes 2017) yielded a significant indirect effect, indicating that meaning-seeking mediated our proposed effects.

Study 4 examines consumers' behavioral intentions after being exposed to fresh start cues. We demonstrated that there was a matching effect between fresh start cues exposure and formal stimuli. That is, when consumers encounter fresh start cues and evaluate formal stimuli (the matching situation), their subsequent reaction was affected in a positive way (e.g., showing more favorable attitude toward the stimuli); however, when consumers are exposed to fresh start cues and evaluate casual stimuli (the mismatching situation), their downstream responses are affected in a negative direction.

Our research contributes to the fresh start literature by demonstrating that reminding consumers about fresh start can systematically increase their preferences for formal (vs. casual) stimuli. Moreover, this research adds to the research on consumer lifestyles (Holt 1997) and aesthetics (Patrick and Peracchio 2010) by examining the frequently-encountered yet hitherto-untested dominion—formalness versus casualness—that consumer often weight up in decision-makings. Additionally, providing an empirical examination showing that consumers' meaning-seeking motive can be activated via simple situational cues and can further impact consumers' subsequent consumption preference, our work contributes to the literature on meaning in life (Baumeister and Vohs 2002), which is considered facilitative in consumer self-transcendence, thereby enriching the transformative consumer research (Mick 2006).

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Attribute Conditioning in Brand Image Creation: Single versus Multiple Attributes

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EXTENDED ABSTRACT

Brand associations and brand attitude are critical components of a brand image which in turn is a crucial determinant of brand equity (Aaker 1996). While a body of research has examined how brand attitude can be positively influenced to create a favorable brand image (e.g., Sweldens, Van Osselaer, and Janiszewski 2010), the examination of the formation of concrete brand associations has received less scholarly attention in the brand management literature. In particular, the current brand management literature does not offer a comprehensive empirical framework that allows to systematically investigate the formation of brand associations, which inhibits research on how to create a distinct and unique brand image effectively.

Recent work in psychology has offered attribute conditioning as a potential mechanism to explain how semantic associations are transferred from one stimulus to another, and thus an approach for the formation of brand associations (Förderer and Unkelbach 2014). Attribute conditioning refers to the change in a stimuli's (conditioned stimulus; CS) assessment regarding a specific attribute after having been repeatedly paired with another stimulus (unconditioned stimulus; US) that possesses this attribute (Förderer and Unkelbach 2015). Attribute conditioning has been shown to be robust across a variety of stimuli (Förderer and Unkelbach 2011, 2014, 2015). Similar to the related evaluative conditioning paradigm (Sweldens et al. 2010), the underlying learning mechanism of attribute conditioning is associative in that an enduring referential link between the CS and the US is formed in memory (stimulus-stimulus learning; Förderer and Unkelbach 2016; Unkelbach and Förderer 2018).

Empirical research on attribute conditioning in a multi-attribute context where the US simultaneously possessed several attributes showed that only the attribute that was primed to be more accessible was conditioned (Förderer and Unkelbach 2014). Extending this finding, we examine attribute conditioning when CSs are paired with multiple USs that possess only one salient attribute each without imposing any attribute dominance. In particular, we hypothesize that pairing a CS with multiple USs that differ in their salient attributes versus one US with a single salient attribute should weaken the associative link between the CS and each US such that the assessment of the CS regarding each attribute will be weaker compared to the single-attribute case (H1). Additionally, we expect this effect to be more pronounced for uncorrelated (athletic and smart; pretested correlation $r = .05$) than for correlated attributes (athletic and healthy; pretested correlation $r = .58$; H2).

In study 1, 185 participants from MTurk completed an online study with a 2 (CS paired with athletic USs: yes vs. no) by 2 (CS paired with smart USs: yes vs. no) within-subjects design with two stimulus replicates per condition. As CSs, eight of 14 neutral brand logos from Henderson and Cote (1998) were randomly chosen for each participant. As USs served four images showing individuals engaging in sport and four images showing individuals in a laboratory or educational context. Participants watched a slideshow in which two CSs each were individually paired four times with an athletic US, with a smart US, alternately with an athletic and smart US (four times per attribute), or shown without a US. Participants then evaluated the eight CSs regarding athleticism (1 = not at all athletic, 101 = very athletic; participants only saw the verbal anchors of the scale) and smartness (1 = not at all smart, 101 = very smart) in counterbalanced order, and then regarding liking (1 = not at all likable, 101 = very likable). Linear mixed models (West, Welch, and Galecki 2015) indicated significant main effects for both attribute ratings and a significant interaction effect for the athleticism rating. Post hoc tests indicated that logos paired only with athletic (smart) USs had significantly higher athleticism (smartness) ratings compared to logos paired with both attributes, which supports H1.

In study 2, the experimental setup was identical to study 1 except that the logos paired with multiple attributes were now shown only four times instead of eight times (i.e., twice with an athletic US and twice with a smart US) to hold the number of CS presentations constant across conditions. The same pattern of results as in study 1 emerged.

In study 3, we again used the experimental setup from study 1 but substituted the attribute smart with the attribute healthy (the USs were images of vegetables) and the smartness rating with a healthiness rating (1 = not at all healthy, 101 = very healthy). For the athleticism rating, the pattern of results from studies 1–2 replicated. For the healthiness rating, we found significant main effects and a significant interaction. Post hoc tests indicated no significant difference in the means of logos paired with the attribute healthy only and logos paired with both attributes, which supports H2.

In sum, our findings provide evidence that attribute conditioning is a robust and powerful mechanism for establishing brand associations. Importantly, we demonstrate that its effectiveness in a multi-attribute context depends on the relationship between attributes. For marketers, this implies that investing in a marketing campaign that features one attribute in all advertisements is likely to generate stronger brand associations than alternating between two uncorrelated attributes. Likewise, doubling the advertising budget to include two uncorrelated attributes does not proportionally increase brand assessments and it seems to be a more efficient budget allocation to focus on a single attribute instead. If attributes are correlated, however, a campaign featuring a mix of two attributes may increase in efficiency.

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The Potential Downside of Being Dubbed "Insta-worthy"

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EXTENDED ABSTRACT

As the customer journey becomes more social (Hamilton et al. 2021), influencers occupy an increasingly important part of many consumers' decision processes. However, no research to our knowledge has investigated how influencers' descriptions of a brand can affect customer response. While the social-media savvy influencers often focus on the Insta-worthiness of the places, brands, and events they post about (e.g., using hashtags like #instagramhub), our work examines when and why such explicit description of a brand as Insta-worthy may backfire.

Three studies demonstrate that consumers respond negatively to descriptions of a brand as Insta-worthy (vs. good or beautiful), resulting in reduced purchase intentions because of the inference that the typical customer of the brands is driven by misrepresentation motives, which are generally judged negatively (Samper, Yang, and Daniels 2018; Sengupta, Dahl, and Gorn 2002; Smith, Vandellen, and Ton 2021). As a result, average consumers distance themselves from the brand in order to avoid sending the signal that they too have misrepresentation motives, consistent with research on dissociative reference groups (White and Dahl 2006).

Study 1 (n = 307) demonstrates the proposed effect and its underlying process by comparing purchase intentions for a brand described as Instagrammable versus good. Participants saw a mock-up Instagram post from an Influencer promoting a restaurant called The Morning, which was either described as an "Instagram-worthy" or "good" place to have brunch in the city. Participants then indicated their visit intentions, inference about the misrepresentation motives of the brands' customers (e.g., "The customers who go to The Morning are trying to put forth an image of someone they are not"), and desire for dissociation (e.g., "I do not want to be associated with the kinds of the customers The Morning attracts"). As expected, visit intentions were significantly lower when the influencer described it as Insta-worthy (M = 5.21, SD = 1.54) versus good (M = 5.72, SD = 1.23; $F(1, 305)$ = 10.22, p = .002). Further, participants in the Instagram-worthy (vs. good) condition inferred stronger misrepresentation motives ($M_{\text{Instagram-worthy}}$ = 3.03, SD = 1.62 vs. M_{good} = 2.33, SD = 1.40; $F(1, 305)$ = 16.12, p < .001) and indicated greater desire for dissociation ($M_{\text{Instagram-worthy}}$ = 2.75, SD = 1.59 vs. M_{good} = 2.18, SD = 1.43; $F(1, 305)$ = 10.86, p = .001). A serial mediation analysis (PROCESS MODEL 6; Hayes 2017) revealed that the indirect effect of brand description on visit intentions through the two mediators was significant and negative (index = -.24, 95% CI [-.39; -.11]).

In study 2 (n = 305) we conceptually replicate study 1 using a different control condition, type of influencer, and retail establishment. Notably, study 2 rules out two alternative explanations: impression management motives (i.e., presenting oneself in a positive way) and quality perception. All participants were shown a page from a blog called Coffeespots.com which introduced a coffee shop called The Roastery. In the Instagrammable (vs. beautiful) condition, The Roastery was described as "one of the 10 most Instagrammable (vs. beautiful) coffee spots in the city." To hold quality constant, in both conditions, it was mentioned that The Roastery had won the best local coffee-of-the-year award for two consecutive years. Participants first indicated their visit intentions, and then their inferences about misrepresentation and impression management motives (e.g., "The customers go to The Roastery because they want to present

themselves in a positive way") of The Roastery's customers (order counter-balanced). Finally, they rated the quality of the coffee shop ("Compared to other coffee shops, how would you rate the quality of the drinks at The Roastery?" 1 = much better; 7 = much worse). Consistent with the findings of study 1, visit intentions were significantly lower when The Roastery was described as Instagrammable (M = 5.76, SD = 1.27) versus beautiful (M = 6.05, SD = 1.19; $F(1, 303)$ = 4.32, p = .04). Further, participants in the Instagrammable (vs. beautiful) condition inferred stronger misrepresentation motives ($M_{\text{Instagrammable}}$ = 3.22, SD = 1.65 vs. $M_{\text{Beautiful}}$ = 2.82, SD = 1.75; $F(1, 303)$ = 4.88, p = .04). However, there was no significant difference across conditions for impression management (p = .32) or quality (p = .16). A mediation analysis (PROCESS MODEL 4; Hayes 2017) revealed that the indirect effect of brand description on visit intentions through misrepresentation motives was significant and negative (index = -.03, 95% CI [-.08; -.00]). Neither impression management nor quality were significant mediators.

If consumers avoid brands described as Instagrammable because patronizing these brands sends a signal that they have misrepresentation motives, when the signal becomes less indicative of misrepresentation motives, the negative response to the brand should be attenuated. We test this prediction in study 3 (n = 300) using a 2 (Brand description: Instagramable vs. Beautiful) X 2 (Cause marketing: Absent vs. Present) between-subjects design. The cause marketing absent conditions were identical to study 2. In the cause marketing present condition, the blogger mentioned that "The Roastery donates 10% of every sale to local charities in need." Thus, it was possible for participants in this condition to infer that customers who visit The Roastery are not necessarily driven by misrepresentation motives but instead a desire to donate to a cause with their purchase. Analysis yielded the predicted interaction ($F(1, 296)$ = 4.20, p = .04), such that in the cause marketing absent conditions, we replicated the earlier findings ($M_{\text{Instagrammable}}$ = 5.54, SD = .16 vs. $M_{\text{beautiful}}$ = 6.24, SD = .17; $F(1, 296)$ = 9.32, p = .01). However, when cause marketing was present, there was no difference in visit intentions across the two conditions (p = .81). A moderated mediation analysis using PROCESS MODEL 7 (Hayes 2017) demonstrated that the indirect effect of instagramability on visit intentions through misrepresentation motives was only significant in the cause-marketing-absent condition (index = .13, 95% CI [.01, .29]).

Together, our findings contribute to the emerging literature investigating factors that drive the effectiveness of influencer marketing and provide implications for brands interested in understanding how to guide influencers in creating content relevant to the brand.

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The Role of Social Virtual World in Increasing Psychological Resilience During the On-Going COVID-19 Pandemic

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EXTENDED ABSTRACT

In March 2020, the novel coronavirus disease known as CO-VID-19, was labeled a pandemic by the World Health Organization. The fear and threat of contagion with COVID-19 is leading to enduring psychological problems among people which can be more detrimental in the long run than the virus itself (Depoux et al. 2020). Given this background, it is imperative that intervention tools are identified quickly to help assuage the mental stress associated with the fear of contracting the disease. To this end, this research offers a potential intervention tool and proposes a novel yet simple coping strategy to mitigate anxiety and fear of contracting COVID-19: becoming members of social virtual worlds (SVWs) via avatars. We propose that the disembodied experience stimulated by being a member of an SVW via an avatar increases the psychological resilience towards the fear of contracting COVID-19. Drawing on and extending the "Proteus Effect" (a phenomenon in which the behavior and attitude of an individual is influenced by the characteristics of their avatar, both in online and offline environment; Yee and Bailenson 2007), we argue that the disembodied experience stimulated by transitioning to an avatar in an SVW enables the user to envision living in an immune body in a parallel life away from the constraints and limitations of the human body which in turn increases the psychological resilience towards the fear of contracting COVID-19.

Study 1 examined our main proposition. Participants (N = 210; Mage = 34.32, 43.8% female) were randomly assigned to one of two conditions (new identity: SVW vs. work) in which they either adopted a new identity of an SVW member or a new work identity. Before introducing the condition specific stimuli, participants were presented with an article excerpt about COVID-19 to prime them with COVID-19-related thoughts. Next, in the SVW condition, participants were asked to imagine that they became members of an SVW and create a customized avatar to represent themselves in the platform. They then completed a series of interactive questions to increase their sense of involvement with their new SVW. In the work condition, the participants were asked to imagine that they started a new job and were asked to pick one of two generic user-profile icons to represent themselves in their new company. They then completed a series of interactive questions similar to SVW condition. Following the interaction process, participants were asked to indicate their agreement to the four-item dependent-variable measure capturing their level of psychological resilience towards the fear of contracting COVID-19 and hence their confidence in coping with COVID-19-related anxiety. All measures used 9-point, Likert-type scales (1 = strongly disagree, 9 = strongly agree). An ANCOVA on the COVID-19 psychological resilience dependent variable (α = .87) with new identity as a categorical predictor, gender as a categorical covariate, and age as a continuous covariate revealed a significant main effect of new identity ($F(1, 206)$ = 4.10, p = .044). Consistent with our prediction, participants felt greater psychological resilience regarding coping with COVID-19 when they adopted a new SVW member identity (MSVW = 5.27, SD = 2.26) compared to when they adopted a new work identity (Mwork = 4.60, SD = 2.36).

Study 2 used mediation-by-measurement design to directly investigate the role of disembodied transition as the mechanism underlying the above effect. After the COVID-19 priming tasks, participants (N = 93; Mage = 36.37, 44.1% female) were randomly assigned to one of two conditions (digital platform: SVW vs. social media). The SVW condition was identical to that in Study 1. In the social media condition, participants were asked to imagine they had decided to become a member of a social-media platform and create a customized avatar as a profile picture. Similar to SVW condition, participants then encountered a multistep process to create their customized avatar, followed by series of condition-specific involvement questions.

Following the interaction process, participants in both the conditions were exposed to the four COVID-19 psychological resilience items from Study 1. Afterward, they completed a two-item process measure for disembodied transition adapted from Holsapple and Wu (2007). All measures used 9-point Likert-type scales (1 = strongly disagree, 9 = strongly agree). An ANCOVA similar to Study 1 resulted in a significant main effect of digital platform ($F(1, 89)$ = 3.97, p = .049); participants who became members of the SVW indicated higher COVID-19 psychological resilience (MSVW = 5.47, SD = 2.35) than those who became members of the social-media platform (Msocialmedia = 4.44, SD = 2.38). Next, we tested the mediation using Hayes's (2017) PROCESS macro (Model 4; 95% confidence interval; 5,000 bootstrap samples). Consistent with the prediction, the results revealed a significant overall mediation effect (b = 1.48, SE = .37, 95% CI [.82, 2.26]) of the composite disembodied transition (α = .91).

The present research makes theoretical contributions to the literature on Proteus Effect (Yee and Bailenson 2007). Extant literature considers the implications of the physical attributes of digital self-representation (i.e., avatars) on an individual's real self. Extending this, the present research reveals the influence of a more innate feature of graphical avatars, that is their imperviousness from the limitations of a corporeal body. The results show that individuals experience disembodiment when they represent themselves through avatars. This enables them to envision themselves as similar entities immune to limitations of the human body, in this case, the CO-VID-19 virus.

In addition to making theoretical contributions, this research also has important implications for marketing efforts in responding to the COVID-19 mental health crisis. The results show that by small intervention tools like encouraging people to become users of SVWs can provide a remedial solution for the mental health crisis arising as an aftermath of the COVID-19 pandemic. Therefore, we expect the current findings to be of interest to health policy experts and consumers as an intervention tool that is simple, has a short turnaround and can be used in conjunction with another tools. Additionally, the findings of this research will also be of interest to designers and developers of SVWs. We believe the benefit examined in our investigation will accelerate the adoption of SVWs and help this technology reach its full potential. Many real-world businesses (e.g., IBM, Levi's jeans, Reebok, and Toyota) are increasingly developing a presence in SVWs to build their brands or grow their revenues (Arakji and Lang 2008). We believe that the rise of SVWs now offers a unique opportunity for marketers to take their quest for brand superiority to the next frontier.

The Effect of Anticipated Embarrassment on Preference for Using Chatbots

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EXTENDED ABSTRACT

In recent times, chatbots have become the fastest growing digital communication trend and one of the strongest tools that marketers have at their disposal. Chatbots interact with users, respond to their questions, and address their concerns. In addition to these interactive abilities, design features like visual appearance, speech synthesis, discourse structure, and reasoning increasingly make these chatbots seem humanlike which enable the human users to anthropomorphize them (Epley, Waytz, and Cacioppo 2007). Although chatbots afford many opportunities (e.g., convenience, automation, and interactivity), they also have potential negative impacts on their users, such as a perceived loss of decision autonomy and free will, a perceived lack of transparency and privacy concerns (André et al 2018; Carmon et al. 2019; Ng et al. 2020). Contributing to the research on the negative consequences of anthropomorphizing chatbots, the current research examines the effect of anticipated embarrassment on the willingness to use them. Drawing on the literature on chatbots, social presence and embarrassment, we argue that, when conducting an online search, consumers will be less likely to use a chatbot when they anticipate feeling embarrassed about the search than when they do not. This results from a sense of perceived social presence while interacting with a chatbot. Since embarrassed individuals are motivated to avoid social contact (Chen and Pham 2019), they tend to avoid using chatbots that beget the sense of social presence.

Four studies tested the basic proposition and the underlying process for the effect. In study 1, participants (N=245) were presented with a list of products and asked to select a product which they would be (i) not embarrassed, (ii) mildly embarrassed or (iii) extremely embarrassed to buy for themselves. Next, participants were asked to imagine that they were shopping online for their chosen product and that they could look for the options either by manually browsing the website or by using a chatbot. Participants rated how likely they would be to ask the chatbot for help (1 = not likely at all; 9 = very likely). The likelihood of using the chatbot differed significantly across the three conditions ($F(2, 242) = 4.23, p = .016$). Participants in the highly-embarrassing condition ($M_{high} = 4.44$, SD = 2.72) were significantly less likely to use the chatbot than those in the mildly-embarrassing condition ($M_{mild} = 5.65$, SD = 2.74, $F(2, 242) = 8.32$, $p = .004$), and marginally significantly less likely than those in the not-embarrassing condition ($M_{no} = 5.26$, SD = 2.59, $F(2, 242) = 3.49$, $p = .06$). No significant difference was found between the not- and mildly-embarrassing conditions ($F(2, 242) = 0.93, p = .342$).

Study 2 tested the basic effect by measuring participants' relative degrees of anticipated embarrassment within an information search context and examined the moderating role of self-esteem. Participants (N=89) were asked to imagine that they had been experiencing involuntary incidents of flatulence. They were then asked to indicate their likelihood of using the chatbot to conduct an online the search for more information on involuntary flatulence. Next, partici-

pants responded to a nine-item self-esteem scale adapted from Song et al. (2017). A linear regression revealed that likelihood of using a chatbot was negatively related to anticipated embarrassment (b = -.33, $t(85) = -1.89, p = .06, f^2 = .04$). Additionally, a marginally significant interaction between anticipated embarrassment and self-esteem (b = .23, $t(85) = 1.86, p = .06, f^2 = .039$) was found. A subsequent spotlight analysis showed a significant negative effect of anticipated embarrassment on the likelihood of using the chatbot to conduct the search (b = -.75, $t(85) = -2.53, p = .01$) among participants with low self-esteem (-1 SD = 4.73) but no effect among participants with high self-esteem (+1 SD = 8.28: b = .08, $t(85) = .29, p = .77$).

Study 3 utilized a 2 (search aid: chatbot vs. search bar) × 2 (scenario: sexually transmitted disease [STD] vs. furniture assembly [FA]) mixed design with search aid manipulated between subjects and scenario randomized within subject. Participants (N = 398), in STD (FA) scenario were asked to imagine that they are looking for *a new product to prevent STD (DIY instructions to assemble furniture)*. They were then asked how likely they were to complete the search using a chatbot (vs. search bar). Participants were also asked to rate the extent to which they felt (1) embarrassed while searching for the information (1=not at all, 9=very). Participants expected to experience more *embarrassment* in the *STD* scenario than in the *FA* scenario ($M_{STD}=4.90$, $M_{FA}=2.36$, $p<.001$). A mixed-design ANOVA revealed a significant interaction ($F(1, 395)=9.40, p=.002$) between search aid and scenario. Participants were significantly more likely to use the search bar than the chatbot in the *STD* scenario ($M_{searchbar}=6.32$, $M_{chatbot}=5.22$, $p<.001$), while no significant difference arose in the furniture scenario ($M_{searchbar}=6.99$, $M_{chatbot}=6.63, p=.093$).

In study 4, participants (N = 453) were randomly assigned to one of four conditions in a 2 (scenario: incontinence [embarrassment] vs. donation [pride]) × 2 (search aid: chatbot vs. search bar) between-subjects design. Participants in the embarrassment (pride) condition were asked to imagine that they had been *experiencing public incontinence* (*thinking of donating to a cause*) and were looking for related information online. They were asked how likely they were to complete the search using either a chatbot or a search bar (1=not likely at all to 9=very likely). Participants also completed a 10-item perceived humanness measure adopted from (Watyz et al. 2010) for their respective search aid ($α=.98$). The chatbot was perceived as significantly more humanlike than the search bar ($M_{chatbot}=4.50$ vs. $M_{searchbar}=2.76$, $p<.001$). A two-way ANOVA, revealed a significant interaction between scenario and search aid ($F(1, 390)=7.05, p=.008$). Participants were less likely to use a chatbot (vs. search bar) to search for embarrassing questions ($M_{chatbot}=5.53$ vs $M_{searchbar}=7.49, p<.001$). Conversely, no significant difference was observed for *pride* condition ($M_{chatbot}=5.68$ vs $M_{searchbar}=6.33, p=.28$).

Together, the results provide support for the negative influence of anthropomorphizing chatbots on users' preference for interacting with them.

How Do Influencers Monetize their Audiences?

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EXTENDED ABSTRACT

Current work on social media influencers overwhelmingly focuses on how they acquire their influence (e.g., McQuarrie et al. 2013) or understanding their persuasive effect and role in brand communications (e.g., Hughes et al. 2019). Yet, how people and professionals use social media to develop and exploit an audience has transformed in recent years. Influencers now compete against brands with brands of their own (e.g., Chiara Ferragni), and many professionals have turned to social media to advance their careers or practice (e.g., therapists, fitness coaches, and dieticians).

Although we know much about the opinion leadership dimension of influencers, we know much less about their entrepreneurial dimension. Importantly, and of central interest for this research, we know little about how influencers monetize their audience and influence. This gap is important because of the increased variance in monetization strategies deployed by influencers and its relevance to an important stakeholder of digital marketing. In this conference paper, we ask the question: What roles can influencers take to create value for themselves and monetize their audience and influence? In our analysis, we concentrate on explaining how these roles inform monetization activities. Answering this research question should support not only influencers' work but also brands that want to hire or collaborate with them.

Method

We explore this question through an extensive qualitative dataset of more than 150 influencers. Our dataset is composed of archival and interview data. For archival data, we collected data for different purposes. To inform the phenomenon generally, we collected more than 150 articles around the general phenomenon of monetization by influencers from various outlets (455 pages). To better understand how influencers monetize, we collected data on 33 influencers through secondary interviews and media articles covering specific influencers (656 pages). We also reviewed their social media presence. To understand monetization activities better, we collected one year of Instagram posts from 110 influencers. We also collected 90 podcasts where an influencer was interviewed about their monetization activities. Last, for interview data, we collected 20 interviews with influencers, most with more than 100,000 followers.

Findings

We find that influencers inhabit three types of roles as they create value for themselves and monetize their audience and influence. In the rest of the findings, we expand on these three roles: the persuader, the founder, and the professional.

Persuader Role

When acting as a persuader, an influencer monetizes their audience and influence by participating in persuasion campaigns with third parties (e.g., sponsored post on Instagram) or by directly monetizing their attention (e.g., by deriving revenue from YouTube views). Their ability to monetize is rooted in their capacity to build and engage audiences on social media platforms.

Influencers enacting the persuader role use these strategies through a variety of tactics. Among other things, they produce sponsored posts, host affiliate links that earn commissions, and collect advertising revenue from platforms that display advertising along with the influencer's original content. Although prior research identifies that influencers engage in such behaviors as a part of their work for brands (e.g., Hughes, Swaminathan, and Brooks 2019), it does not recognize it as existing in a wider nexus of activities and roles that explain how influencers monetize their labor.

Founder Role

When acting as a founder, an influencer monetizes their position by identifying and exploiting business opportunities associated with their brand, audience, and influence (e.g., creating and marketing their own brand of products). In contrast to the persuader role, the basis of monetization for the founder role lies in an influencer's ability to identify and exploit opportunities in the market rather than monetize attention more directly.

The strategy of founders is to commercialize brands, products, or services rather than add credibility to another brand's messaging as an influencer would do in a persuader role. Social media may serve as one sales channel for influencers inhabiting the founder role. Still, many successfully diversify and support their commercialization through multiple means, such as massive online paid courses. The range of items marketed and sold by entrepreneurial influencers in the founder role is truly extensive (e.g., Jeffree Starr and cosmetics; Jordan Ferney and party supplies; Grumpy Cat and virtually anything).

Professional Role

When acting as a professional, an influencer monetizes their position by selling professional services (e.g., a therapist that uses Instagram to promote and sell their services as a professional therapist). The basis of their monetization is rooted in their ability to develop a public appreciation for their professional skills and knowledge. In contrast to persuaders, they are less dependent on building and engaging large audiences that advertisers seek to access. Nor are they as bound to exploiting business opportunities, distinguishing them from founders. For professionals, social media signals popularity and credibility, which can become marketable resources.

The monetization strategy for influencers in a professional role entails expanding their paid employment opportunities or client base, which they generally serve outside social media. Social media may enable professionals to acquire new clients, as therapists, designers, financial advisors, or trainers might do (see also Gandini 2016). Alternatively, it may allow them to showcase their value as employees.

Discussion

Our study contributes to our understanding of influencers by identifying three distinct roles they can take when monetizing. By doing so, we first shed light on the monetization activities of influencers, which is empirically central to their endeavors but has been undertheorized in existing work. Second, our typology provides an organizing framework to map existing literature on people with influence. Namely, we suggest that persuaders mostly align with work on opinion leadership, professionals tie closely with work on person-branding, and founders align with work from entrepreneurship. We see three distinct but related streams of literature as providing potential theoretical insights for future studies on influencers.

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COVID-19 Stress and the Performance of Gender Counter-Stereotypical Behavior (GCSB): Market Opportunities From an Overlooked Segment During the Pandemic

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EXTENDED ABSTRACT

"Feminine" and "Masculine" behaviors are stemming from gender stereotypes that manifest in different life domains (Ellemers, 2018), including consumption behaviors (Carroll et al., 2017). Individuals perceive these behaviors as appropriate or inappropriate to perform according to gendered expectations (Avery, 2012). Consumption choices constitute a performative act that expresses beliefs about gender and identity and are aligned with gender-stereotypical behavior (Palan, 2001). However, this stereotypical behavioral tendency might be altered in atypical situations, such as the COVID-19 pandemic, where cognitive resources are less available. This paper explores a different behavioral tendency in which gender counter-stereotypical behavior (GCSB) increases due to stress-induced resource depletion.

We suggest that gender norms (GSB – gender-stereotypical behavior, prescriptive behaviors) and prohibitions (GCSB, proscriptive behaviors) pose two qualitatively different cognitive demands on an individual, as claims for negation require more cognitive resources than claims without negation (Mayo et al., 2004). We expect:

Hypothesis 1:   Individuals will require more cognitive resources to judge GCSB than GSB or gender-neutral behaviors (GNB).

Utilizing fMRI (N=28) in our first study, we found that multiple brain regions related to effort-based decision-making (Botvinick & Braver, 2015) were associated with increased activity for GCSB judgments. These include: the bilateral insula, dorsal anterior cingulate cortex and right temporal-parietal junction, suggesting that GCSB judgments trigger increased information processing.

GCSB judgments that negate the gender stereotypical behavioral scheme require many cognitive resources. However, what happens when these resources are depleted? Low cognitive resource availability can be caused by stressful situations (Hobfoll et al., 2016) and accompanied by negative emotional experiences (Plessow et al., 2012). To confirm the effect of stress on cognitive resources, we will ensure that the two are negatively associated and that we expect that:

Hypothesis 2   High stress is associated with lower cognitive resources availability.

Low cognitive resources availability is known to affect stereotype associations and effectively increase GSB (Gilbert & Hixon, 1991; Keinan et al., 2000). We suggest a parallel process for GCSB when there are insufficient resources available to enact the costly prohibitions for behaving in a counter-stereotypical fashion, and behaviors identified with the opposite gender will also increase:

Hypothesis 3   Individuals will increase GCSB tendencies in stressful (compared to non-stressful) situations.

In the second study (n=20), we implemented a between-subjects (stress vs. non-stress) lab experiment using bio-psychological sensors to examine if stress decreases cognitive resources and increases GCSB. The findings confirm that participants who were exposed to COVID-19 stress experienced higher cognitive load followed by GCSB increase.

Since resistance to performing GCSB requires more cognitive resources, any depletion of these resources in stressful situations increases such behavior. However, the underlying mechanism is not clear. Self-regulatory cognitive demanding processes alter responses (e.g., physiological and emotional) to fit the demands of the situation (Calkins & Fox, 2002) are known to be hampered under stress (Baumeister, 2014). Emotional regulation allows individuals to interpret experiences of the world, and classify them based on their viewpoint (Baumeister, 2014), and enables them to deal with CGSB (Kaldewaij et al., 2019; Pechtel & Pizzagalli, 2011; Raio et al. 2013) Therefore:

Hypothesis 4   Emotional regulation mediates the effect of stress on GCSB.

We suggest that stress, in addition to increasing gender-stereotypical behavior (Margittai et al., 2016), might lead to reduced inhibitions to performing GCSB due to lower emotional regulation, and therefore it will result in a conditional indirect effect (IE) of stress on GCSB via emotional regulation.

To examine the underline mechanism we implemented a between-subjects (stress vs. non-stress) online experiment (n=196), and a within-subjects online survey (n=115). The online experiment showed low ER was associated with an increase in feminine behavior only for men ($\beta_{ER \times male}$=-0.94, SE=0.32, $p<0.01$), the interaction term of ER by gender was significant: $\beta_{ER \times gender}$=0.86, SE=0.37, $p<0.05$). The model's moderated-mediation index was significant only for the treatment condition (index=-0.16 (0.09); $CI_{0.95}$=[-0.38, -0.01]). Similarly, low ER was associated with an increase in masculine behavior only for women ($\beta_{ER \times female}$=-0.95, SE=0.22, $p<0.01$), the interaction term of ER by gender was indeed significant: $\beta_{ER \times gender}$=-0.72, SE=0.26, $p<0.01$), The model's moderated-mediation index was significant only in the treatment condition (index=0.13 (0.06); $CI_{0.95}$=[0.01, 0.28]. The online survey revealed the same mechanism within participants measuring GCSB (sweets-feminine category and alcohol consumption-masculine category) before and during the pandemic outburst: low ER was associated with an increase in sweets consumption only for men ($\beta_{ER \times male}$=-0.43, SE=0.18, $p<0.03$. The indirect effect of stress on sweets consumption was significant only for men (IE=0.39 (0.17), $CI_{0.95}$ [0.04, 0.73]). The index of moderated-mediation was significant=-0.47(0.18); $CI_{0.95}$ [-0.83, -0.13]. Furthermore, low ER was associated with an alcohol consumption increase only for women ($\beta_{ER \times female}$=-1.41, SE=0.58, $p<0.02$). The IE of stress on alcohol consumption was significant only for women (IE=1.28 (0.56), $CI_{0.95}$ [0.24, 2.47]). The index of moderated mediation was significant=1.32 (0.70); $CI_{0.95}$ [0.04, 2.77].

GENERAL DISCUSSION

This paper builds on previous research demonstrating the effect of stress on gender-stereotypical behavior. Past literature has focused on the effect of stress on GSB, while the effect on GCSB has been somewhat neglected. We found that in times of stress, alongside an increase in gender-congruent GSB, individuals also tend to increase

their GCSB. The effect of stress on GCSB is important to explore, especially since gender is a complex scheme composed of two distinct and interdependent sub-schemes that influence behavior: "do" (prescriptive behaviors) and "do not" (GCSB; proscriptive behaviors). Understanding gender-related behaviors require additional exploration of the complementary sub-scheme: GCSB. Our study provided an explanation for the GCSB increase under stress: emotional regulation serves as an underlying mechanism that activates GCSB. Normally, when cognitive resources are available, adjustments to emotions and behaviors are feasible. Under stress, emotional regulation can be damaged and trigger an increase in CGSB. These findings add to the marketing literature by showing the effect of stress from COVID-19 on GCSB. These results are also theoretically informative, as they emphasize the role of cognitive resources in maintaining gender-proscriptive behaviors. Practically, marketers can also target men for traditional feminine categories and women for masculine categories or use CGSB behaviors in their advertising appeal.

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An Ecofeminist Understanding of "Emotion Work" in Market Delegitimization.

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EXTENDED ABSTRACT

In consumer research, emotions are gradually examined, but research is rather fragmented, and sociocultural treatments undertheorized (Gopaldas, 2014). The work of Gopaldas (2014), however, has been central in illuminating the role of "marketplace sentiments," collectively shared emotions that are produced strategically as tools for activism (see Valor et al. 2020). In neo-institutional theory-oriented research, emotions are considered as tools to gain agency in creating, transforming, and disrupting institutions (Lawrence, 2008) such as markets. However, when examining Animal Rights Organizations, Jarvis et al. (2019) suggest that *suppression* of emotions might also play a role in institutional work. Due to a 'reactive-affective conflict,' Animal Rights Organizations advocates are encouraged to suppress their emotions while still attempting to elicit them via visuals. However, it does not question why emotions are considered legitimate or not, depending on the context, to contribute to strategies of institutional works.

This paper argues that this strategic understanding of emotions omits power issues related to their expression. This tension between "emotions" and "rationality" in institutional work has not been examined as a result of meta-discourses and power relations reproduction. Therefore, we ask in this paper: what are the power relations involved in this strategic (non)use of emotions, and what are their impacts on activists' strategy? Drawing on ecofeminist theory, we wish to question the epistemic foundations of this "emotions/reason" dualism and its impact on the process of market (de)legitimization.

An ecofeminist perspective on emotions

Ecofeminist framework is crucial to illuminate long-held dualisms such as "reason vs. emotion" and their impacts on power relations. Emerging in the 1970s (D'Eaubonne, 1974), ecofeminism encompasses both academics and activists' works. Differences among ecofeminists are vast (Merchant, 1992), and we align with the critical analysis of modern dualisms offered by Plumwood (1993). In her work, she points out how masculine values are privileged in western societies, leading to a set of unquestioned dualisms. Among these dualisms, the "reason-emotion" dualism is central. According to her, 'reason is not a gender-neutral aspect of human cognition, but instead, it is a tool men have used to silence the voices of women, the value of non-human animals, and the larger ecosystem.' (Littlefield, 2010, p.). Following continental and post-modern work, modern rationality would be the hidden core of western ideological systems.

Identities are thus constructed according to this process of dualism. The masculine, the reasonable, the cultural would be dominant. The feminine is constructed as lacking rationality, superiority, in the same way as nature and non-humans. In this process, emotions are constructed as 'essentially unreliable, untrustworthy and morally irrelevant, an inferior domain to be dominated by a superior, disinterested (and of course masculine) reason' (Plumwood, 1994, p. 167).

We can find connections with Derrida's thinking and his notion of the 'phallogocentric' structuring of Western subjectivities (Derrida, 1989, 2006). *Phallogocentrism* means the privilege of logos, inherited from classical Greek metaphysics, in Western culture: reason over emotion, the signified over the signifier, and the masculine basis of subjectivity. Since masculinity is linked to reason, women and non-humans have inferior status. Thus, in this paper, we will consider the meta-discourse leading to such dualism as a *phallogocentric* one.

Animal Rights Activism against Meat Market

To study phallogocentric meta-discourse impact on the use of emotions in delegitimization strategies, we focus on the context of French Animal Rights Activism against meat market. French food culture and livestock economics being significant, there has been intensive discursive struggles around meat consumption for few years. This resulted in the development of rivalries between Animal Rights Organizations, particularly on differing modes of consumer awareness.

The strategic use of emotions by Animal Rights Organizations has been well documented in management and political literature. Generating emotional responses through "moral shocks" (pictures of animal suffering) or suppress them (Jarvis et al. 2019) plays a central role in motivating and recruiting activists (Jasper and Poulsen, 1995). This focus on strategic and instrumental use of emotions might, we argue, overlook power issues related to emotions and gender.

Methodology

We collected two data sources to examine phallogocentric discursive construction of emotions and the resulting impact on activists' institutional work: semi-structured interviews with vegan, vegetarians, and meat-eaters (30) and newspapers archival data on Animal Rights Activists' actions (530 articles). We analyzed data by engaging with a discursive and deconstructive analysis strategy.

Findings and discussion

We make two contributions to the emergent consumer research literature on emotions and institutional work.

First, rather than considering emotions merely as instruments for conveying counter-hegemonic discourse, findings suggest that emotions have a "dislocative" power: they are fundamental in constructing individual senses of ethics. Therefore, following care ethics, we can consider emotions as "upheavals of thought" with their intelligence (Nussbaum, 2007). In this, we extend the work of Valor et al. (2020) by considering a performative approach to Marketplace Sentiments in suspending the distinction between emotions and discourse.

Second, we found out that a phallogocentric framing of emotions conditioned the power to change institutions. While emotions are central in the interpellation of vegan subjects, we show how they are rejected, a rejection supported by a philosophical discourse, and the use of a pragmatic and depoliticized approach. Valor et al. (2020) suggested the creation of a "pathic stigma" as the result of emotional prototyping to delegitimize consumer practices. Here, we suggest, in return, the construction of a "phallogic stigma" that delegitimizes activists' institutional work based on emotions. Vegan activists are, thus, constructed as being irrational. To counter such stigma, we observed a necessary alignment with a dualist framing of emotions. We point out the risk of such a strategy: by denigrating emotions as feminine and hysterical, activists contribute to the stigma they are fighting against.

Conclusion

We conclude by advancing how a "rational conception of emotions" (Mumby & Putnam, 1992), that is, a recognition of "the

knowledge-producing dimension of emotions" (p. 480), can help us to question both hierarchies of knowledge in marketing and consumer research and current theorizations of emotions. Such perspective allows an understanding of power relations behind dynamics of emotions and discursive work in (de)legitimization.

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The Rise of a Nudge: Field Experiment and Machine Learning on Minimum and Full Credit Card Payments

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EXTENDED ABSTRACT

There are 2.8 billion credit cards in the world (Shift, 2021). While this payment method has offered convenience, it had also brought financial distress to people who cannot manage their debt payment (Hodson, Dwyer, & Neilson, 2014). As a partial solution, policy regulations in several countries have included a mandatory minimum payment warning in credit card statements. However, several studies using administrative data or laboratory-based experiments have shown that highlighting the minimum payment may cause lower full balance payments (e.g., Navarro-Martinez et al., 2011; Salisbury, 2014). For this reason, the minimum payment policy has been described as a perverse nudge due to the anchoring bias (The Economist, 2008; Wang & Keys, 2014; Stewart, 2009). This paper introduces a novel statement balance warning to answer whether and why a minimum and/or a statement balance warning can change credit card payment behavior. In addition, research from psychology distinguishes that when there is a hierarchy of goals, one is prioritized, and non-prioritized goals are ignored (Unsworth, Yeo, & Beck, 2014). For that, this paper uses a randomized preregistered field experiment with credit card debtors who received email payment reminders before their credit card payment was due.

Debtors (N=179,706) were randomly assigned to four experimental conditions. The Minimum Payment Warning condition included the sentence: "If you at least pay the minimum ([$]) before the due date, you will pay additional interest charges but avoid late fees." The Statement Balance Warning condition included the sentence: "If you pay the statement balance ([$]) before the due date, you will avoid additional interest charges." The Both Warnings condition included the statement balance and minimum payment warnings. Finally, the Control condition was a simple reminder that included neither the statement balance nor minimum payment warnings.

Results. All warning messages decreased the likelihood of paying less than the minimum compared to a simple payment reminder without warning messages. On average, debtors decreased their less-than-the-minimum payments by 7.9% more than debtors who received a simple payment reminder (an absolute difference of 0.77 percentage points; ps < 0.01). However, this masks a significant change in payment distribution depending upon the specific warning message. Debtors who received the statement balance warning were 1% more likely to pay in full than debtors who received the simple payment reminder (a difference of 0.64 percentage points; ps < 0.01). In contrast, debtors who received the minimum payment warning increased their minimum payment by 5.9% compared to the simple reminder (a difference of 0.52 percentage points; p < 0.01), and there was no sizable change in the likelihood of paying in full despite the precise estimate. This means that debtors who received the minimum-payment warning shifted their payment mostly toward the minimum amount (63% of the shift), and debtors who received a message including the statement-balance warning shifted their low payments almost entirely toward paying in full (87%).

Even though debtors who received both warning messages behave very similarly to those who received only the statement balance warning, their effect on the interests charged on the following billing cycle after the experiment is not the same. Debtors who received a message including both warning or the only minimum warning saw their delinquent interest (i.e., the interest generated by not paying at least the minimum) being reduced by 3.9% and 3.4% (ps < 0.05),

respectively, more than those who received the message with only the statement balance warning, and 8.0 and 7.5% (ps < 0.01), respectively, compared to debtors who received the simple reminder. Also, consequent to the changes in payment distribution, there is a difference in the revolving interest charged (i.e., the interest generated by paying less than the statement balance). Debtors who received both warnings or only the statement balance warning saw a reduction of 6.0 and 3.8% (ps < 0.06), respectively, more than debtors who received only the minimum warning message, and 9.0 and 6.9% than those who received the simple reminder (ps < 0.01).

In order to explore heterogeneous effects, the field experiment was combined with a recently developed machine learning technique, causal random forests (Wager & Athey, 2018). Although a large fraction of debtors increases the portion they paid of their statement balance because of receiving a message with both warnings, a small fraction reduces this outcome. Different factors explain a positive and large treatment effect in this regard: debtors with previous payments closer to the statement balance, a small distance between the minimum and statement balance amounts, and a considerable variation on previous percent payments. These factors are consistent with debtors prioritizing one warning depending on which becomes more relevant and reachable to them.

In conclusion, results show that a statement balance warning not only increases payments in full, but also decreases delinquency and revolving interest. This paper contributes to the literature on nudges and financial decision-making by testing in the field the role of the minimum payment warning and, more importantly, its interaction with a new statement balance warning.

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When Brands Get Disemvoweled: Challenging the Conventional Wisdom behind Unconventional Brand Names

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EXTENDED ABSTRACT

An increasingly common "outside the box" strategy amongst brands is to select a brand name that relies on an unconventional spelling of an existing word (e.g. "UrthBox" rather than the conventional "EarthBox"). Research in linguistics and consumer behavior has documented several common forms of unconventional brand spelling (Wong 2013), but little is known about how the use of this strategy impacts consumers' inferences about the brand and, ultimately, their likelihood to support it. We propose that consumers believe that brands primarily use an unconventional naming strategy in an effort to persuade, which activates consumers' persuasion knowledge (Friestad and Wright 1994) and undermines the extent to which consumers view the brand as sincere (Aaker 1997). This decrease in perceived sincerity is likely to reduce support for the firm (Eisend and Stockburger- Sauer 2013). Hence we predict:

Hypothesis 1:   *Use of an unconventionally spelled brand name leads to significantly lower support of the brand as compared to the equivalent conventionally spelled brand name.*

Hypothesis 2:   *The effect predicted in H1 will be mediated by a decrease in the perceived sincerity of the brand.*

Importantly, we theorize that this decrease in sincerity is based on consumers' inferred motive about why the brand decided to employ an unconventional spelling. However, if consumers attribute a brand's naming intentions to a sincere motive that does not involve an overt persuasion attempt, we predict that the backfire effect predicted in hypothesis 1 will be attenuated.

Hypothesis 3:   *If consumers are aware that the brand had sincere naming intentions (i.e., using unconventional spelling for reasons other than the motive to persuade) the effect predicted in H1 will be attenuated.*

We test our predictions across seven studies, using both incentive-compatible and hypothetical measures of brand support. We use a variety of brand names across studies, both real and fictional, and employ all three unconventional naming strategies previously established in the linguistics literature (Wong 2013).

In study 1 (301 Prolific participants), we tested hypothesis 1 by asking people to choose which of two real brands they preferred based solely on the name of the brand. Using lists of "brands to watch" we identified five brands with unconventional names, and 40 brands with conventional names. A pre-registered, a multi-level linear model with choice of the target brand as the dependent variable, conventionality as an independent variable, and participant as a random factor revealed that conventionality was a significant predictor of preference ($p < .001$).

In study 2, we again tested hypothesis 1 using an incentive-compatible pre-registered design. Participants were assigned to one of two conditions in which they read about a clothing brand that had a name which was spelled conventionally or unconventionally and reported their incentive compatible WTP for a prize pack from that brand. As predicted, participants were willing to pay significantly less for the prize pack from the unconventionally-spelled brand than the conventionally-spelled brand ($p = .002$).

In study 3a, we tested hypothesis 2. In a preregistered study, participants (304 MTurk workers) were assigned to one of two conditions (Conventional vs. Unconventional) in which they read a short description of a drink brand. Participants indicated their purchase intentions and rated the extent to which they perceived this brand as sincere using the eleven sincere trait measures taken from Aaker's (1997) brand personality scale. A one-way ANOVA revealed that participants were significantly less likely to buy from the unconventionally-spelled brand than the equivalent conventionally-spelled brand ($p < .0001$) and mediation analysis revealed that the indirect effect of appeal type on purchase intentions through sincerity was significant.

In study 3b, we once again tested Hypothesis 1 and 2 and measured several other potential mediators (e.g., fluency, excitement, novelty) to rule out alternative explanations. Participants (183 undergraduates) were assigned to one of two conditions (Conventional vs. Unconventional) in which they read a short description of a clothing brand. As in study 3a, participants indicated their purchase intentions answered Aaker's sincerity measures, as well as measures for other alternative accounts. A one-way ANOVA revealed that participants were significantly less likely to buy from the unconventionally-spelled brand than the equivalent conventionally-spelled brand ($p < .0001$). Parallel mediation analysis also provides evidence of mediation via sincerity but not the alternative accounts.

In study 4a we tested hypothesis 3. Participants (302 Mturkers) were assigned to one of three conditions (Conventional vs. Unconventional vs. Unconventional Sincere Intentions). In the *Unconventional sincere intentions* condition, participants read that the restaurant had to change its name to the unconventional version for intellectual property reasons and to minimize customer confusion. Orthogonal contrasts revealed that purchase intentions were significantly lower in the *unconventional* condition than in the *conventional* and *unconventional sincere intentions* conditions ($p = .004$), which did not significantly differ from each other.

In study 4b (194 undergraduates) again tested hypothesis 3 using a similar design to study 4a but a different operationalization of sincere intentions. Specifically, participants in the *unconventional sincere intentions* read that the brand's name was not an unconventional spelling but actually the last name of the family that started the brand, which, we predicted, would lead participants to attribute the brand's name choice to sincere intentions. Contrasts revealed that purchase intentions were significantly lower in the *unconventional* condition than in the *conventional* and *unconventional sincere intentions* conditions ($p = .022$), which did not differ from each other.

Study 5 (403 MTurkers) employed a 2 (Brand name: Conventional vs. Unconventional) by 2 (Naming intentions: Sincere vs. Control) study design that used the same brand as study 3a. Participants in the *sincere* condition were told that the brand's name was selected by the public, which we expected would be viewed as sincerer. We observed our predicted significant a two-way interaction between brand name and naming intentions on purchase intentions ($p = .0003$). Planned contrasts revealed that participants in the *control* condition

were significantly more likely to purchase from the brand when its name had a conventional rather than an unconventional spelling (*p* <.0001) but that purchase intentions did not differ when the brand had sincere naming intentions. Moderated mediation analysis further provided evidence for our proposed conceptual model.

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The Language That Drives Engagement: A Systematic Large-Scale Analysis of Headline Experiments

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EXTENDED ABSTRACT

What motivates people to consume information? A broad range of theories in social and cognitive psychology have identified relevant characteristics, including, linguistic structure, fluency, affect, construal, personalization and many other factors. We take an ecologically valid and general approach to identifying causal effects of language on engagement decisions, using a large-scale database of field experiments.

Online journalism increasingly relies on catchy "click-bait" language in headlines to optimize engagement (Frampton 2015). In particular, Upworthy has used emotional appeals to promote popular and uplifting content to become one of the most successful purveyors of engagement-optimizing content online (Karabell 2017; O'Donovan 2013). We investigate what makes messages effective at driving engagement, using Natural Language Processing tools to bridge the gap between the numerous specific but atheoretical results from a database of thousands of experiments conducted by Upworthy, and academic behavioral theories of how people generally interact with messages and textual cues.

The Upworthy experiments each varied the language used in headlines for a given piece of content to identify the most effective version. The dependent variable in our analysis was the click-through rate on a given headline, relative to the click-through rate for the other headlines tested for the same article, in the same experiment. The experiments run by Upworthy were not designed to isolate specific factors, but instead to test between different approaches that often differed from each other in multiple ways. We extracted theoretically relevant measures from the content of the headlines themselves, using both existing tools (LIWC2015; Pennebaker et al. 2015; Berger et al. 2020) and custom-defined scoring. Factor analyses were then used to extract underlying constructs from the measures. After testing for sufficient identifying variation across treatments, we identified 35 testable psychological constructs that mapped to informational, cognitive, linguistic and affective research literatures, for 20 (57%) of which the literature provided directional predictions.

Informational: Consistent with prior research on informational factors, using forward reference language (such as using unresolved pronouns) in headlines, increased engagement with the headlines (ß=.0007084, t(3345)=8.97, p<.001). Using language that focuses on the present rather than the past reduced click-through (ß=-.0005007, t(3345)=-6.85, p<.001), potentially consistent with some prior research but inconsistent with the general idea of present bias in decision-making. Contrary to prior research, headlines that incorporated information-seeking cues (e.g., content that would answer a question or teach something) performed more poorly (ß=-.0005351, t(3345)=-6.41, p<.001).

Cognitive: Among the cognitive factors tested, three were significant. Consistent with prior research, particularly the Elaboration Likelihood Model, including deliberation-related language increased engagement, on average (ß=.0004757, t(3345)=6.24, p<.001). The impact of sensory cues was more mixed. Consistent with the literature in sensory marketing, highlighting the senses of perception and sight in headlines increased reader engagement with the content (ß=.0005764, t(3345)=8.94, p<.001). However, contrary to the same literature, references to senses other than sight or hearing, such as touch, reduced click-through rates (ß=-.0001633, t(3345)=-3.14, p=.002).

Linguistic: Five constructs with significant effects were identified, two of which were predicted by the prior literature. Surprisingly, given the generally positive effects of syntactic and semantic fluency in the prior literature, greater disfluency in language increased click-through rates (ß=.0004811, t(3345)=6.01, p<.001). Headlines with longer sentences, more difficult readability, and higher word count were clicked on more. The presence of numbers in headlines increased click-through rates (ß=.000336, t(3345)=5.75, p<.001), while other aspects of fluency did not have significant effects. Consistent with prior literature, however, making headlines more concrete improved engagement (ß=.0003257, t(3345)=3.87, p<.001). While most linguistic elements of narrative style did not have a significant effect, headlines implying social stories about individuals were more effective (ß=.0009515, t(3345)=9.58, p<.001), but writing headlines directed to the reader backfired (ß=-.0004716, t(3345)=-5.62, p<.001).

Affective: The effects of affective cues were somewhat limited and mixed. Using more emotionally intense language increased engagement (ß=.0004502, t(3345)=5.45, p<.001). However, including more positive emotion words in headlines reduced engagement (ß=-.0004867, t(3345)=-5.66, p<.001), a somewhat ironic finding given Upworthy's mission of providing positively oriented content.

Overall, after correcting for multiple comparisons, out of the constructs for which the literature provided predictions, the results were as predicted for about 20%, non-significant for 60% and the opposite of what had been predicted for 20% of constructs. Our findings provide a unique test of a wide range of persuasion-relevant theories, in an important real-world context, and illustrate how to use large-scale atheoretical experimentation to test theories of behavior.

Impact of Foreign Language labeling on Food Valuation and Choice

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EXTENDED ABSTRACT

Marketers often use textual prompts to grab consumer attention and create value from intangible experiences, which in turn can affect the consumers' choices (*Wakefield & Blodgett, 1999; Ellis & Rossman, 2008*). When consumers read textual cues, they not only consumer literal information but engage in a psycholinguistic "guessing game" about interpretation (*Goodman, 2014*). To study consumer choice, we investigate mixed language cues, in which one part is in an unknown (and hence, unreadable and non-informative) foreign language, and the other is in the consumers' native language. Prior research (*Piron, 2000; Chattalas et al., 2008*) has documented that "country of origin" labels can provide both informational and intangible benefits, affecting consumer preference. We use the domain of food, holding country of origin constant, and test for intangible benefits from the use of foreign language on restaurant menus and product labels, where such language cues are commonly used.

In Study 1 (N=501, pre-registered) we elicited participants' willingness-to-pay (WTP) for items on a hypothetical menu, in a 2 (language: English only vs. bilingual) x3 (cuisine: French, Korean or Turkish) between subjects design. Participants were shown a single menu and asked to provide their (WTP) for each item. WTP was higher for the items on the bilingual menus (with text in both English and the language of the cuisine) than the items on the English-only menus (Mean = $9.97 vs. $7.37, p < 0.001) overall (Fig. 1), as well as for two out of the three cuisine types. Furthermore, the bilingual menus were perceived as more authentic and hence of higher quality, which in turn predicted the higher WTP, yielding a marginally significant indirect mediation effect (p =0.068). In Study 2 (N=364, pre-registered), we replicated Study 1 across location types (urban vs. rural).

In Study 3 (N=685, pre-registered) we looked at choices between two menus. In a 2 (language, within) X 3 (cuisine, between) mixed design. Participants in this study were shown two menus (one bilingual and one English only, order counterbalanced) for a given cuisine type. Then they were asked to choose between the two, or to indicate indifference (to avoid tie-breaker effects). Only 13% of the participants were indifferent. Among the remaining 87%, the majority of consumers (66%) chose the bilingual menu (Fig 2). This preference occurred because the bilingual menu was seen as more authentic and of higher quality, significantly mediating the effect of menu language (indirect mediation effect, p<0.001).

In Study 4 (N=720, pre-registered), we used a 2 (language) X 3 (cuisine) between-subjects design to test the effect of bilingual cues on packaged goods choices (types of soup) involving price differences. We showed participants images of two canned soups. The target soup's label was either bilingual or English only for the assigned cuisine. The control soup was a standard chicken noodle soup with an English-only label. After participants viewed both options, they completed a series of choices between the control soup for $2.50 and the target soup (with prices varied between $0.50 and $5). Nearly half (48%) of the participants chose the target soup when both were the same price. However, among those people who preferred the target soup, the indifference price for the bilingual label ($3.61) was higher than the indifference price for the English only label ($3.43, p=0.043) (Fig 3). As in the prior studies, the bilingual-label soup was seen as more authentic and unique, and hence of higher quality.

In Study 5 (N=689, pre-registered, 2X3 between subjects), we tested the robustness of the bilingual menu effect to the presence of another available authenticity cue in a 2 (language) x 3 (chef bio: control vs. American vs. Turkish) between-subjects design. Participants saw an English-only or bilingual Turkish restaurant menu, with the biography of a chef who either was born in and studied in Turkey (authentic), born and studied in the US (inauthentic), or an uninformative control (no country mentioned), and measured WTP and visit intention. We replicated our previous finding of higher WTP for the bilingual men in the control condition (M=$8.99 vs. $10.57, p=0.019) and US chef (M=$8.62 vs. $10.79, p<0.001). However, when the chef was born and raised in Turkey, the WTP did not differ significantly by language of menu (p=0.176), although the interaction was not significant (Fig 4). The higher WTPs were mediated by perceptions of authenticity, uniqueness, and quality (indirect effect p<0.006 for both control and US biographies).

Participants were significantly more willing to go to the restaurant with the bilingual than English-only menu for both the inauthentic (92% vs 63%, p<0.001) and control (90% vs 68%, p=0.007) biographies. For the authentic biography, the menu language had no effect on visit intentions, but intentions were significantly lower for the bilingual authentic biography menu than the other two bilingual biography menus (76% vs. 88%, p=0.0077).Thus, not all indicators of authenticity have the same effect on choice, and bilingual menus may be a more effective signal of authenticity than other signals (e.g., chef bio) when other signals have negative associations.

Finally, in study 6 (N=612; pre-registered, 2X3 mixed design), we confirmed that the effect of language holds across tiers of restaurant in a 2 (language, within) X 3 (tier, between = high: fine dining, middle: casual dining, or low: local takeout; pre-tested) mixed design. Only 15% of participants were indifferent between the two menus. In each tier, participants preferred the bilingual menu over the English only (70% vs 39% for fine dining, 59% vs 25% for casual dining, 68% vs 48% for local takeout; all p's<0.008) (Fig. 5). Overall, choice was significantly mediated by perceptions of authenticity, uniqueness, and quality (indirect effect p<0.001).

These six studies show, through multiples scenarios, that non-evaluable cues of foreign origin can signal authenticity and quality, increasing valuation and choice.

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The Experience Impinging Effect: How Contagion Affects Consumer Choice in Sharing-Based Consumption

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EXTENDED ABSTRACT

Prior research has documented a consumer contagion effect, which holds that consumers devalue products that others have touched due to the fear of physical contamination, and prefer untouched alternatives (e.g., Argo, Dahl, and Morales 2006). Specifically, consumers perceive products that have been touched by others as disgusting (Rozin and Fallon 1987), thanks to the belief that offensive substances (e.g., germs) are transferred through physical contact (Rozin, Markwith, and McCauley 1994).

Despite being well-established in various contexts where consumers evaluate products for purchase decisions (Huang, Ackerman, and Newman 2017), this effect appears understudied in sharing-based consumption, in which consumers pay for temporal access to a product to gain consumption experiences (e.g., access to a restaurant table or gym equipment; Bardhi and Eckhardt 2012; Chen 2009). Given that rights to access the product transfer frequently among consumers, all consumption options in such contexts have been touched previously. This raises an interesting question of whether the documented contagion effect still holds when there is no untouched alternative. As sharing-based consumption becomes increasingly popular and important (Bardhi and Eckhardt 2012), our research aims to answer this question by examining whether, how, and when prior contacts with others affect consumer choices in sharing-based consumption.

We argue that contagion persists in sharing-based consumption, although driven by a different mechanism. In sharing-based consumption, oftentimes, all options are physically contaminated, often, to undistinguishable degrees (e.g., all tables in a restaurant). Thus, the physical contamination account would predict all choices as equally unfavorable and no difference in consumer preferences. However, considering that consumers engage in sharing-based consumption to acquire consumption experiences rather than product ownership, they tend to be particularly sensitive to factors that may impinge their experiences (Bardhi and Eckhardt 2012; Chen 2009). Specifically, since consumers are well aware that all options have been contacted with, a vivid mental imagery of a prior contact between a consumption option and another consumer, such as resulted from witnessing the contact, may serve as a distraction and dampen consumers' own experience. Consequently, fear of such psychological contagion may shift consumers to other options. Thus, we propose the psychological contagion effect, which is activated by imagery of a prior contact and reduces consumer choice of the option in sharing-based consumption.

Following our logic, disgust, the underlying mechanism of physical contamination, also cannot fully explain the psychological contagion effect, because all consumption options have been touched, and therefore, are "disgusting." Instead, we propose that the psychological contagion effect is driven by experience impinging, defined as the extent to which one's consumption experience is infringed by unwanted distractions. After witnessing a consumption option being used, the mental images and subsequently aroused feelings of disgust would interfere with and tarnish the consumer's own experience (Kirk, Peck, and Swain 2018). To avoid the potential impinging to their own consumption experiences, consumers would be motivated to shift their choices toward other alternatives.

Finally, we propose a boundary condition of the psychological contagion effect, perceived risk, which refers to the probability of negative consequences associated with a consumption option choice (Campbell and Goodstein 2001). When perceived risk in using a consumption option (e.g., product failure) is high, witnessing a consumption option being used signals adequate functionality and performance and would positively influence consumer choices, resulting in the positive risk-reducing effect offsetting the negative psychological contagion effect. Hence, we anticipate witnessing a prior contact only reduces choice when perceived risk is low.

Studies 1 and 2 examine the psychological contagion effect and its underlying mechanism by adopting a one-way (imagery: a prior contact vs. control) between-subjects design. In different contexts (a public swimming pool and a restaurant), participants were presented with sketches showing either a consumption option being used by another customer (imagery) or none of the consumption options being used (control). To rule out the recency of the witnessed contact as an alternative explanation, study 2 specifies that the witness occurred one week prior to the choice. In both studies, participants were significantly less likely to choose the consumption option after witnessing it being used. More importantly, this effect is serially mediated by disgust and experience impinging, but not solely by disgust. Study 3 directly manipulates the degree of physical contamination to seek further evidence that the proposed effect is driven by psychological impinging rather than physical contamination. With a 2 (physical contamination) × 2 (imagery) between-subjects design, we found that only imagery significantly impacted consumer choices, suggesting that psychological impinging overpowers physical contamination. Finally, study 4 explores the moderating role of perceived risk using a 2 (imagery: a prior contact vs. control) × 2 (perceived risk: low vs. high) between-subjects design. As expected, the psychological contagion effect occurs only when the perceived risk is low.

Across four studies, we found convergent evidence for the psychological contagion effect and showed that contagion indeed matters in sharing-based consumption. Although consumers are aware that all consumption options have been contacted by others, witnessing an image of a prior contact makes feelings of disgust salient and subsequently, shifts consumer choice to other options. Importantly, this effect occurs because consumers do not want their own consumption experiences to be impinged by the imagery of another consumer using the product.

Our research contributes to the relevant literature by introducing the psychological contagion effect, which is distinct from previously established physical contagion effects (Fedotova and Rozin 2018; Huang et al. 2017). The psychological contagion effect targets consumers' experiences and drives their choice regardless of the degrees of physical contamination. Moreover, our findings offer pertinent practical implications to marketers in the sharing-based consumption industry. With the proliferation of sharing-based consumption in the current marketplace, consumers frequently choose product options for temporal access (Eckhardt and Bardhi 2016; Eckhardt et al. 2019). While it is a common marketing strategy to showcase other consumers using the product, we caution such a strategy may negatively impact consumer choices in sharing-based consumption contexts.

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Self-Other Differences in Perceptions of Debt

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EXTENDED ABSTRACT

This project examines how people think about debt when it is their own versus another's. We provide evidence that, holding net worth constant and providing complete information about debt and assets, people tend to focus on different sides of the balance sheet when thinking of themselves versus others. Across five experiments, we find that people tend to focus more on debt when thinking of themselves versus others. We discuss implications for conspicuous consumption.

In Experiment 1, we examine expectations for the future while holding wealth constant for self and others. 495 participants were randomly assigned to one of four conditions in a 2 (Self; Other) by 2 (Positive; Negative Net Worth), between-subjects design. Participants were told that they would be shown 20 financial profiles - either another individual's or, hypothetically, their own - and that their task would be to predict what the financial situation would look like in one year. For example, a participant might have been asked to "Imagine that [you have / Mr. G has] $2,500 in assets and $1,300 in debt." For each profile, participants were then asked to predict how much they (or this other person) would have in assets and in debt in one year; specifically, "In 1 year, what do you estimate [your / Mr. G's] assets will be?" and "In 1 year, what do you estimate [your / Mr. G's] debt will be?" Participants tended to be more optimistic about their own future wealth relative to their expectations of others'. Specifically, this increased optimism appeared to be driven by participants' beliefs that their own debt would shrink more than other people's over the course of one year ($t = 3.7$, $p < .001$); there were no self-other differences in predictions about assets.

In Experiment 2, we borrow from the Experiment 1 design to investigate the origins of these expectations, by eliciting written explanations for each response. We code each response as either reducing debt or growing assets. We find that participants focused more on repaying debts when thinking about themselves, but focused more on growing assets when thinking about others ($\chi^2 = 15.67$, $p < .001$).

Experiments 3a and 3b then explored how focus on debt might shape perceptions of overall wealth for self and others when provided with full information about a large purchase; in this case, a car or a house. We varied the price of the house and car as well as the amount of debt used to finance the purchase. Others were seen as more financially well-off (Exp 3a: $b = .22$, $p < .001$, 95% CI [.15, .29]; Exp 3b: $b = .24$, $p < .001$, 95% CI [.18, .30]). Importantly, this effect was larger for others with higher priced homes (Exp 3a: $b = .20$, $p < .001$, 95% CI [.10, .30]) and higher priced cars (Exp 3b: $b = .34$, $p < .001$, 95% CI [.25, .44]). That is, at higher levels of debt, the price of the asset affected perceptions of wealth more for others than for the self. This suggests perceptions of wealth for the self are shaped by the relative amount of debt with little weight placed on the asset's price. In contrast, for others, wealth is seen as a function of debt and the price of the asset.

Experiment 4 replicated the findings of Experiment 3a and 3b while adding a third condition which asks participants to consider how others might see them. We find that perceptions of wealth differ when considering how you would evaluate others versus how they would evaluate you. To the extent that people care about how others come to judge them, these differences introduce a conflict between one's self-image and their social image. Beliefs about one's social image appear to be an exaggerated version of their self-image - people believe others will see them as *less* wealthy (than they see themselves) when buying cheaper products (Car: $b = -.45$, $p < .001$, 95% CI [-.55, -.36]; House: $b = -.27$, $p < .001$, 95% CI [-.37, -.17], and as *more* wealthy when buying more expensive products (Car: $b = .78$, $p < .001$, 95% CI [.65, .91]; House: $b = .81$, $p < .001$, 95% CI [.67, .95]). Interestingly, people see others' differently from how they imagine others' seeing them.

Together, this evidence suggests that when looking to the future, people are more optimistic about their own financial outlook than they are about others'. This effect is driven, at least in part, by a differential focus on shrinking debt for oneself. Consistent with this differential focus, participants' perceptions of their own wealth are shaped more by the relative amount borrowed than the total value of the product. When thinking about others, however, assets and debt play a more equivalent role. These findings suggest that people may engage in conspicuous consumption to preserve a positive social image despite the negative consequences for their own financial state and their self-image.

Distribution Builder vs. Slider Scales: What Is the Best Way To Elicit Belief Distributions?

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EXTENDED ABSTRACT

How should researchers assess consumers' beliefs? By far, the most common approach is to simply ask consumers to make a simple judgment or choice (e.g., "What do you think Company X's stock price is going to be one year from today?"; "Which product is most likely to provide the best value?"). But such elicitations omit a great deal of information. Most notably, they fail to capture consumers' beliefs about all possible options or outcomes (e.g., "How likely is Company X's stock to go up 0-2%, 2-4%, 4-6%, etc.?"). To remedy this, researchers have recently embraced the practice of eliciting consumers' entire subjective belief distributions. Our research compares two common ways of eliciting such belief distributions and indicates that one of those ways is probably better.

To elicit consumers' subjective belief distributions, researchers typically provide a graphical interface that (1) divides the entire range of options into several mutually exclusive and collectively exhaustive categories, and (2) asks participants to estimate the frequency of each category (if the task asks them to do their best to reproduce an existing distribution) or the probability that the true outcome will fall into each category (if the task asks them how likely each outcome is to materialize).

Two variants of this approach have been most frequently used: the *Subjective Probability Interval Estimates (SPIES)* method proposed by Haran, Moore, and Morewedge (2010) and the *Distribution Builder* proposed by Goldstein and Rothschild (2014; see also Sharpe, Goldstein & Blythe, 2000; Goldstein, Johnson & Sharpe, 2008). Both methods allow participants to create a visual histogram that best represents their subjective distribution. The key difference between the two methods is the interface. The SPIES interface (Haran et al., 2010) contains an ordered array of horizontal slider scales, each representing one category. Participants assign probabilities to each category by sliding the bars from left to right. The Distribution Builder (Goldstein & Rothschild, 2014; Andre, 2016) contains a graphical interface that allows participants to allocate a fixed number of balls into vertically displayed bins, each representing one category.

Both methods have been adopted to study a wide range of consumer research topics, such as financial decision making (Sharpe et al., 2000; Goldstein et al., 2008; Long, Fernbach, & De Langhe, 2018; Camilleri, Cam, & Hoffmann, 2019; Reinholtz, Fernbach, & De Langhe, 2021), consumers' perceptions of income distributions (Page & Goldstein, 2016), statistical intuitions (Hofman, Goldstein, & Hullman, 2020; Andre, Reinholtz & De Langhe, 2021), and overconfidence (Ren & Croson, 2013; Moore, Carter, & Yang, 2015; Moore et al., 2017; Prims & Moore, 2017; Soll et al., 2019). There is currently no research investigating how these two methods might induce different response patterns or whether one of them might be superior.

In this paper, we report the results of seven pre-registered experiments (N = 10,815) that investigate whether SPIES vs. Distribution Builders yield different response patterns and, specifically, whether one method leads to more accurate distributions. We examined accuracy using three different paradigms. In the first paradigm, participants were instructed first to observe a set of numbers as frequencies and then to do their best to reproduce the distribution of the numbers they saw. We recorded the absolute deviation of individual responses from the normative answer across all categories to derive a measure of individual-level accuracy. In the second paradigm, we moved away from memory tasks and instead assessed the accuracy of participants' subjective probability distributions for general knowledge questions. We operationalized accuracy as the probability allocated to the category containing the correct answer. Finally, we used an incentive-compatible design to examine which elicitation method more accurately reflects people's true beliefs. Participants made predictions by providing their entire belief distribution. They also indicated confidence in their predictions using a self-report measure and decided how much to wager on their predictions. We derived participants' confidence in their prediction implied by the belief distribution and computed the absolute difference between that and self-reported confidence.

In every study, we manipulated whether participants used SPIES or Distribution Builder to indicate their belief distributions, and in most studies, we also manipulated the shape of the correct distribution (i.e., right-skewed, symmetric, left-skewed).

Our findings reveal that Distribution Builder elicits more accurate belief distributions than SPIES whenever the true distribution is not right-skewed. This was directionally true in 10 of 10 head-to-head comparisons, and significantly so in 5 of them. The average effect size for those 10 comparisons was $d = 0.16$. When the true distribution was right-skewed, the findings are more mixed. SPIES directionally, but non-significantly, outperformed Distribution Builder in 4 of 8 comparisons (average effect size: $d = 0.07$). In the other 4 right-skewed comparisons, Distribution Builder yielded directionally superior results, of which 2 were significant (average effect size: $d = 0.10$).

These somewhat complex results can be at least partially explained by a simple mechanism. Compared to participants who use Distribution Builder, participants who use horizontal slider scales (i.e., SPIES) tend to (1) start with the first and lowest categories of outcomes, and (2) subsequently assign higher frequencies and probabilities to those low categories. When the true distributions are right-skewed, containing more mass in the lowest categories, this form of biased responding can sometimes yield more accurate distributions. But when the true distributions are not right-skewed, this form of biased responding proves harmful, and accuracy suffers relative to Distribution Builder. On balance, these results suggest that, all else equal, it is probably best to assess subjective belief distributions using Distribution Builders rather than horizontal slider scales.

Given the rising popularity of both the Distribution Builder and the SPIES, our research affords a practical recommendation for future consumer research. All else equal, the Distribution Builder is the preferred method to elicit belief distributions. Furthermore, whereas a large prior literature shows that discrete subjective estimates can be influenced by elicitation methods (Juslin, Wennerholm, & Olsson, 1999; Klayman et al., 1999; Teigen & Jorgensen, 2005; Funke, 2016; Thomas & Kyung, 2019), our research shows that the same is true of subjective belief distributions.

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Authentically Creative? Identifying and Reconciling the Tension between Authenticity and Creativity

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EXTENDED ABSTRACT

Perceptions of authenticity are associated with a number of positive market outcomes, such as product appeal and customers' willingness to pay (Frake 2017; Kovács, Carroll, and Lehman 2014). Consequently, many marketers are in pursuit of products and services that are experienced as authentic.

Yet, given the complexity of the marketplace, it is unlikely that authenticity is the only objective that an organization might pursue (Smith and Besharov 2019). Indeed, even as the call for authenticity has grown in strength, there has been an increasing demand for creativity – the production of solutions that are both novel and useful (Amabile 1996). It remains to be seen whether it is possible to successfully achieve both objectives at the same time. In this paper, we investigate the possible tension between authenticity and creativity.

Although various literatures differ in their specific definitions of authenticity, generally they refer to authenticity as that which is "real" or "genuine" or "true" (Dutton 2003). To make an authenticity judgement, observers conduct a verification process in which they test an entity against a relevant referent (Dutton 2003; Lehman et al. 2019). When the referent is a market category, an entity is perceived as authentic to the extent that it is a typical representative of the given category (Lehman et al. 2019). When the referent is a point of origin, an entity is perceived as authentic to the extent it adheres to traditions and maintains a connection with its past (Frazier et al. 2009; Smith, Newman, and Dhar 2017).

Because creative insights likely emerge when individuals combine knowledge in atypical ways, generate new categories of ideas, and depart from the point of origin to a novel frontier, it seems that a salient concern with maintaining the authenticity of an entity might be at odds with suggesting creative ways to modify that entity. Authenticity requires fidelity to a referent while creativity often requires the willingness to break from a referent. Hence, authenticity concerns, defined as concerns with preserving, maintaining, or increasing a given entity's authenticity, might place constraints on the categories, features, functions, components, or resources that might be allowed to be modified to reach creative solutions.

Hypothesis 1:   Individuals concerned with preserving the authenticity of an entity will be less likely to suggest creative ways to modify that entity.

We predict that the suppressing effect will generally hold, but for one important exception—when the referent itself is based on creativity. For example, a referent for the "true" craft microbrewery is a market category that constantly comes up with new beer flavors and experiments with wide variety of styles (Verhaal, Khessina, and Dobrev 2015). As a result, a brewery that exercises creativity in its products is *more* likely to be seen as authentic compared to a brewery that does not undertake such creative changes. If a referent is based on creativity, the desire to preserve the entity's authenticity will motivate individuals to share rather than suppress their most creative ideas directed to this entity.

Hypothesis 2. Individuals concerned with preserving the authenticity of an entity will be more likely to suggest creative ways to modify that entity when creativity is itself the referent upon which authenticity is based.

We conducted four studies to test the predictions. Using a cross-sectional dataset with 3,323,861 reviews from 46,453 restaurants, Study 1 found a significant negative relationship between restaurant authenticity and creativity in customer reviews. Next, Study 2 recruited 199 participants to generate either "an authentic burger recipe" or "a high-quality burger recipe". Results showed that the authenticity condition generated recipes that were less creative than the high-quality condition. Mediation analysis confirmed that participants' increased concerns with preserving a burger's authenticity mediated the negative effect. Study 3 built upon Study 2 by examining self-brand identification (Escalas 2004) as a boundary condition. 122 participants performed on a logo design task for Starbucks. Participants assigned to the authenticity condition read that authenticity is the top priority at Starbucks. Participants in the control condition proceeded with the drawing task without seeing the cues of authenticity. Results revealed a significant moderated mediation effect, such that among participants who identify strongly with Starbucks, authenticity condition led to increased concerns with preserving the brand's authenticity, which in turn decreased their creativity in the logo design task. However, this effect was absent among participants with low self-brand identification.

The results of previous studies support H1. To test H2, we chose the context of the beer brewing market. Research has shown that audiences use a brewery's creativity in products as a key criterion in making authenticity judgments about the brewery (Verhaal et al. 2015). The craft breweries' genuine passion to make the best beers possible in a great variety of styles and flavors is what makes audiences see microbreweries as highly authentic. Therefore, craft breweries are expected to be more inventive and experimental in their beer offerings compared to mass producers (Verhaal et al. 2015). In this context, being creative and being authentic are congruent demands, making the context appropriate for testing H2. In Study 4, 203 beer consumers were randomly assigned to generate product ideas for a well-known microbrewery called *Flying Dog Brewery* (authenticity condition) or for the mass beer producer *Budweiser* (control condition). Participants in the authentic brewery condition generated beer flavors that were more creative than participants in the control condition. Results also revealed that authenticity concerns positively predicted creativity for the authentic brewery, but not for the mass brewery.

To conclude, we develop a theoretical perspective pointing to a potential cost of pursuing authenticity. Because authenticity demands adherence to tradition, conformity to a category, and/or connection to a point of origin, the desire to maintain authenticity may stifle the pursuit of creative ideas. Using experimental and archival methods, we find converging evidence that authenticity dampens creativity. Importantly, we also identify the context in which this effect could be reversed. When being creative is within the scope of what

authenticity connotes, authenticity becomes a facilitator rather than an inhibitor of creativity.

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Happy Workers are "Rich" Consumers: Enjoyable Earnings Inflates Subjective Income

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EXTENDED ABSTRACT

Earning and spending are closely related: the former enables the latter, and the latter motivates the former. Yet, these two sides of the consumer's financial equation are often regarded as separate, rather than connected processes. Drawing upon prior work in both labor economics and consumer psychology, I consider how the experience of earning impacts how consumers perceive and use their income. This research suggests consumers with enjoyable work perceive their income to be larger and their costs to be relatively cheaper and less painful.

Prior research on compensating wage differentials in labor economics demonstrates nonpecuniary job attributes impact market-clearing wages (Rosen 1986). For example, hazardous, risky, or effortful work may require a wage premium (Cousineu, Lacroix, and Girard 1992), while meaningful and purposeful work may attract labor at lower wages (Ariely, Kamenica, and Prelec 2008; Leete 2001). Applying this theory of wage differentials, consumers with more enjoyable work should have lower reservation wages (H1a). If consumers compare their actual salary against their required salary, this difference will grow as reservation wages drop. Prior work on the perceived value of money (Wertenbroch, Soman, and Chattopadhyay 2007) suggests this type of difference assessment may cause enjoyable income to feel larger (H1b). Because consumers assess costs by comparing against salient financial quantities (Morewedge, Holtzman, and Epley 2007), enjoyable work should decrease subjective cost judgments (H2a) because expenses are compared against a larger subjective income (H2b). As a result, enjoyable work may increase spending (H3).

S1 ($N = 200$) tests the links from work enjoyment to reservation wages and subjective income. Participants read a job description for enjoyable or unenjoyable work. After indicating their reservation salary, participants learned the job paid $65,000 and indicated how large this amount felt (0-100 slider). Consistent with H1a, participants required a lower salary for the enjoyable job ($M = \$45,899$, $SD = \$16,589$) than the unenjoyable job ($M = \$53,168$, $SD = \$17,985$; $t(198) = 2.97$, $p = .003$). As predicted by H1b, $65,000 felt larger in the enjoyable condition ($M = 70.8$, $SD = 26.0$) than in the unenjoyable condition ($M = 60.2$, $SD = 28.0$; $t(198) = 2.78$, $p = .006$).

S2 ($N = 400$) surveys participants about their work and financial experiences. Subjective income was measured as perceptions of financial slack (Zauberman and Lynch 2005) and subjective costs were measured using the pain of paying for various items with specified prices (see Morewedge et al., 2007). Participants subsequently indicated their work enjoyment and actual income (binned). Controlling for income, work enjoyment was positively associated with slack ($b = 0.31$, $se = 0.05$, $t(388) = 6.00$, $p < .001$) and negatively associated with the pain of paying ($b = -0.18$, $se = 0.04$, $t(388) = -4.72$, $p < .001$).

S3a-S3b experimentally manipulate imagined work enjoyment. Participants first provided various baseline pain of paying ratings. Next, they recalled a past or present full-time job and imagined the most (least) enjoyable aspects of the job. Finally, they estimated their pain of paying for a focal item using wages from the imagined job; this was used to create a within-subject reduction of pain difference score. In S3a ($N = 250$), the enjoyment condition did not affect actual income expectations ($p = .258$); however, it did affect (i) how large the income felt and (ii) the reduction in pain of paying with wages from the imagined job (ps < .05). Consistent with H2a and H2b, sub-jective income mediated the effect of condition on the reduction of pain ($ab = 0.30$, $CI_{95\%} = [0.07, 0.55]$) in a model with a significant total effect ($c = 0.52$, $p = .013$) and no direct effect ($c' = 0.22$, $p = .323$).

S3b ($N = 601$) rules out an alternative explanation for these results: mood. Using a 2 (enjoyment: enjoyable, unenjoyable) x 3 (situation: work, volunteer, watch TV) between-subjects version of S3a, I predict the effect of enjoyment should operate through imagining work (as in S3a) and not through imagining a volunteer or TV-watching situation. This pattern would suggest the process operates through financial comparisons, as opposed to incidental changes in mood. As expected, the enjoyment manipulation affects perceptions of slack in the work condition ($b = 0.46$, $se = 0.09$, $t(595) = 5.22$, $p < .001$). This effect was attenuated in both the volunteer and TV conditions, as indicated by the two negative interactions ($b_{VxE} = -0.28$, $se = 0.12$, $t(595) = -2.27$, $p = .023$; $b_{TVxE} = -0.37$, $se = 0.12$, $t(595) = -3.02$, $p = .002$). The same pattern emerges for the reduction in pain of paying (interactions below $p < .01$).

S4 ($N = 399$) replicates S3a in a real-effort setting. Participants sorted through pairs of images. The images were either food photos (enjoyable) or shades of the color gray (unenjoyable). Using the 0-100 slider, the fixed earnings felt larger in the enjoyable condition ($M = 69.7$, $SD = 23.2$) than in the unenjoyable condition ($M = 64.1$, $SD = 26.3$; $t(397) = 2.26$, $p = .024$). Again, subjective income mediated the relationship between condition and pain of paying ($ab = -0.13$, $CI_{95\%} = [-0.26, -0.02]$).

S5 tests the effect of enjoyable earnings on spending (H3). Workers on Prolific read a memo about some possible changes to the platform and were reminded of their projected future earnings, calculated from prior hours on the site. Following enjoyable changes, participants anticipated a greater likelihood of using projected earnings to purchase a $35 meal delivery ($M = 2.88$, $SD = 1.88$) compared to unenjoyable changes ($M = 2.16$, $SD = 1.38$; $t(198) = 3.09$, $p = .002$).

This research makes four contributions. First, it establishes a link between work enjoyment and reservation wages. Second, it presents a novel theory connecting the experience of earning to the consumer's judgments of income size. Third, this extends prior work on perceived costs (Morewedge et al. 2007) by demonstrating that subjective—as well as objective—quantities may be used as financial referents. Fourth, this paper suggests nonpecuniary work attributes may affect consumer spending.

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Give a Little Help for My Business: How a 'Vulnerability Appeal' Fosters Consumers' Prosocial Behavior Towards For-Profit Companies

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EXTENDED ABSTRACT

Past research has extensively studied *who*, *why*, and *when* people help others. However, for *whom* assistance is given has been limited to non-profit organizations or for-profit firms engaged in social marketing and people. Helping a distressed for-profit generate revenue has never been the target of academic research, perhaps due to common-sense assumptions that for-profit firms are unlikely targets of helping behavior. Indeed, research has demonstrated that people express anti-profit beliefs, perceiving for-profit businesses as immoral and harmful (Bhattacharjee et al. 2017), cold (Aaker et al. 2010), and elicit anger when they are perpetrators of transgressions, but no empathy when they are victims (Rai & Diermeier 2015). Notwithstanding, we argue that, in specific circumstances, for-profit companies might elicit empathy when they become victims, and the company's vulnerability may sensibilize consumers to help them.

In this paper, we propose a novel type of message, the 'vulnerability appeal,' which makes salient an organization's vulnerability under difficult circumstances and asks consumers to help them survive by purchasing from them. We argue that by overtly exposing the firm's susceptibility to hardships and, at the same time, maintaining its expected market function by requesting consumers to purchase, instead of donating, such an appeal is likely to be successful. In this research, we investigate the effectiveness of the 'vulnerability appeal' in the risky situation of the COVID-19 pandemic. As a result of social isolation and lockdowns, a significant number of businesses found themselves closed and became vulnerable, representing an appropriate context to test the effectiveness of the proposed appeal. In five studies, we show that consumers are more willing to purchase products to help companies, responding to a vulnerability appeal, than a conventional appeal. Our findings show that this effect is mediated by empathy and personal norms.

In study 1, participants (n =355) were randomly allocated to one of three conditions (type of message: vulnerability appeal to a for-profit business vs. vulnerability appeal to an entrepreneur vs. control). The vulnerability appeal message emphasized that companies were at risk of going bankrupt due to lock-down measures that forced them to close during the COVID-19 pandemic. Participants were requested to think of a restaurant they liked. Following, they read a message urging them to join a campaign to help the restaurant survive the crisis by purchasing a voucher from a restaurant to use later. The control message did not mention that the restaurant was in trouble and was framed as a conventional campaign ('buy today, enjoy later'). As predicted, participants' intentions to purchase and willingness to spend on the voucher were higher when exposed to the vulnerability appeal (both business and entrepreneur conditions, which did not differ) than in the control condition.

In study 2, we conducted a field experiment in partnership with a coffee shop located at a university campus, used the same message appeals as in Study 1. Students and staff from the university (*n* =252) received one of two messages (vulnerability appeal vs. control) to purchase a voucher from the coffee shop up front and consume later by clicking on a link provided. Replicating Study 1, more participants clicked on the link in the vulnerability appeal condition than in the control condition. Study 3 tested whether the effect was due

to perceptions of the company's vulnerability. Participants (n =397) were randomly assigned to one of four conditions: 2 (message type: vulnerability appeal x control) x 2 (firm's vulnerability: high x low). We used the same manipulation of the type of message as in Study 1. The vulnerability was manipulated by making participants think of either a small (high vulnerability) or a big restaurant (low vulnerability). Indeed, results showed that participants were more likely to purchase the voucher in the vulnerability appeal condition than in the control condition when the vulnerability was high, but not when the vulnerability was low.

In study 4, we tested the mediating effects of empathy and personal norms. Participants (n = 231) were asked to read either of the two scenarios in Study 2. Results replicate previous studies. Purchase intentions were higher in the vulnerability appeal than in the control condition. Also, the vulnerability appeal elicited more feelings of empathy and moral obligations to participate in the campaign than the control condition. A mediation analysis using PROCESS model 6 (Hayes, 2018) supported our model: vulnerability appeal elicited more empathy, which elicited personal norms, which in turn increased willingness to purchase.

Finally, in study 5, we ran a survey to investigate whether consumers' motivation to purchase vouchers during the pandemic was to help a for-profit business. Respondents (n =314) answered which (if any) products they had purchased during the quarantine. Participants were then requested to rank their primary motivation for this purchase. 16.6% of respondents reported having bought a voucher, 40.4% of which did it to help a firm. Interestingly, consumers who purchased the voucher (n = 52) were mainly motivated to help (59.6%), either the firm (40.4%) or its owner (19.2%). Conversely, consumers who had not purchased vouchers (n =217) were mainly interested in the product itself (70.5%). Thus, many consumers reported purchasing with the primary purpose of helping a for-profit business.

Overall, the findings from our studies provide evidence that consumers can be moved by for-profit firms in risk if their vulnerability is explicitly made salient by a direct appeal, a vulnerability appeal. Specially if companies are in danger that are caused by traumatic events beyond their control (e.g., COVID-19 pandemic), consumers may be motivated to support the firm by committing to purchase its products. Understanding that consumers care about vulnerable firms to the point of purchasing products to avoid them going out of business is not only novel and interesting per se, but it also has relevant theoretical and practical implications. We have shown that, despite negative general anti-profit beliefs, for-profit companies can elicit empathy and sensitize consumers to help them in specific circumstances.

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Should a Luxury Brand's Chatbot Use Emoticons?

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EXTENDED ABSTRACT

The luxury industry constantly faces new challenges due to changing market dynamics. The recent global pandemic has been a major setback for luxury brands and makes online sales important. AI powered chatbots, as virtual agents, have allowed luxury brands to interact online with customers (Luo et al. 2019). Though chatbots are adopted by many luxury practitioners, empirical evidence on how luxury brands need to leverage their AI chatbot application remains limited.

As research interest in AI has grown, scholars have explored various ways to make chatbot communication resemble human interactions. One such way is through the use of emoticons, the textual or pictorial icons that are used in digital communications to express emotion (Derks et al. 2008). Most existing research focuses on human-to-human interactions. Little is known about customer reactions toward the chatbot's emoticon usage in the luxury brand context. Therefore, this research aims to examine the efficacy of a chatbot's use of emoticons by luxury brands on the status perception of the brand. We propose chatbot emoticon usage in luxury brand communications leads to a lower luxury status perception because it reduces the appropriateness perception. Such negative effect only exists for aspiration luxury brands but not for masstige brands.

There are three theoretical accounts we've drawn from the literature to support our propositions. First, the effects of emoticons in brand communication are mixed. Some studies demonstrate that emoticons elicit positive affect, strengthen consumer engagement, and increase purchase intention (Das et al., 2019; Lee and Hsieh, 2019), while others point out that the use of emoticons can backfire. For example, service employees who use emoticons are seen as low in competence but high in warmth (Li *et al*., 2019).

Secondly, practices deemed appropriate for the mainstream may not apply to luxury brands (Moreau et al. 2020; Park, Im, and Kim 2018). Luxury brand communication focuses on catering to privileged customers by highlighting the high status of the luxury brand (Kapferer and Valette-Florence 2018). When luxury brands use emoticons in their chatbot communication, it may violate customers' expectations about the brand's communication. Thus, a luxury brand chatbot's use of emoticons may be perceived as inappropriate and lower the brand status perception.

Third, luxury evolves into a multidimensional construct including both high-end aspirant brands and masstige brands (Banister, Roper, and Potavanich 2020; Kauppinen-Räisänen et al. 2019). Masstige creates a fusion of mass and class (Silverstein & Fiske, 2003). Since masstige brands are primarily targeted toward the masses, the use of emoticons in chatbot communication for masstige brands should not affect the status perception of the brand via perceived appropriateness as much as it does for aspirational brands.

Three studies were designed to test our proposition. Study 1 was a between subject design with 131 undergraduate students. They imagined having a conversation with a luxury hotel's chatbot and viewed one of the two screenshots of the conversation, one with emoticons, the other without emotions. They then rated the status perception for the hotel and whether they perceived the chatbot communication as appropriate following previous literature (Youn, Park, and Eom 2019; Li, Chan, and Kim 2019). Consistent with our hypothesis, results show that the luxury chatbot interaction using emoticon lowers the status perception compared to the ones without emoticons. It also showed the underlying role of perceived appropriateness.

Study 2 extends study 1 by testing perceived unexpectedness as an additional mediator. With a between subject design, study 2 recruited 99 customers from Prolific. All participants imagined that they were shopping online at Rolex and were interacting with Rolex's virtual assistant chatbot. Participants were shown one of the two screenshots of a live chat between a shopper and a chatbot: one with emoticons, the other without emoticons. Participants answered the same questions as study 1 with additional evaluation on unexpectedness (Li, Chan, and Kim 2019). Results replicated a similar finding as study 1. It also supported the mediating roles of perceived unexpectedness and perceived appropriateness.

Study 3 sought to test the important moderating role of the luxury brand type in a fashion brand context. One hundred and seventy-six undergraduate students were randomly assigned to a 2 (emoticon: yes vs. no) × 2 (luxury brand type: aspirational vs. masstige) between-subjects design. Prada and Coach were chosen to represent an aspirational luxury brand and a masstige brand respectively. Study 3 also measured chatbot reuse intention (Venkatesh *et al*. 2003). Study 3's results replicated previous findings and showed that chatbot interaction using emoticons led to a lower reuse intention compared to chatbot interaction without emoticons for luxury brands. However, these effects didn't hold for masstige brands.

Our work makes three theoretical contributions. First of all, this study contributes to the understanding of the role of chatbots in the context of luxury brands. Second, this research explores the effect of emoticons in the context of human-chatbot interaction. Lastly, our findings contribute to knowledge about luxury brand communication. For marketing managers, aspiration brands need to be cautious of the potential risk of lowered status perception when emoticons are used in their chatbot communications.

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Nature Human and Machine: Awe for Nature Elevates Preference for Artificial Intelligence through Humanness

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EXTENDED ABSTRACT

While interaction with artificial intelligence (AI), e.g., Alexa, is widespread, a recent poll of more than 6,000 adults (Pegasystems, 2018) found that 38% of participants indicated humans deliver superior customer services than AIs do. Hence, we investigate a solution to embrace interactions with AIs that are, by nature, short in human qualities.

We argue that *awe for nature* can diminish human-centered perspectives since the feeling alleviates hubristic, self-centered perspectives by experiencing "vastness" and "self-diminishment" through nature (Keltner & Haidt, 2003). Machines are often considered as having deficient humanness: emotionality, warmth, flexibility, animation, higher cognition, morality, and sophistication (Bastian et al., 2013). Hence, feeling awe for nature, by reducing the sense that humans are superior and distinct from other beings (Shiota et al., 2007), may alter AI preference.

Hypothesis 1:   *Nature-induced awe reduces humanness.*

Hypothesis 2:   *Nature-induced awe increases AI preference via diminished humanness.*

Study 1 predicts that nature-induced awe (vs. pride) diminishes humanness (H1). Since awe and pride view the self in an opposing manner (Rudd, Vohs, & Aaker, 2012), nature-induced awe (vs. pride) may diminish (vs. enhance) the self (Piff et al., 2015).

Participants (190, 92 women, M_{age} = 40.82) in nature-induced awe and pride wrote about when they felt nature-induced awe and pride through personal accomplishments (Piff et al., 2015) respectively and reported (7 = very likely, 1 = very unlikely) humanness (*alpha* = .90; Bastian et al., 2013), sense (7 = very likely, 1 = very unlikely) of awe, pride, negative, and positive affects.

Participants feeling nature-induced awe (*M* = 5.43, *SD* = 1.14) experienced greater awe than those feeling pride (*M* = 4.23, *SD* = 1.53, $F(1, 159)$ = 32.43, *p* < .001). Yet, participants feeling pride (M = 6.36, SD = 1.01) reported greater pride than those feeling awe for nature (*M* = 4.57, *SD* = 1.9, $F(1, 159)$ = 47.74, *p* < .001). Positive (*p* > .1) and negative affect (*p* > .1) did not vary. Participants feeling awe for nature (*M* = 5.1, *SD* = 1.32) had significantly lower humanness than those feeling pride (*M* = 5.57, *SD* = 1.24; $t(159)$ = -2.26, *p* = .03; H1).

Study 2 anticipates that people with conflicting appraisal processes through in-situ awe for nature (vs. a neutral state) will exhibit less humanness and, in turn, favor AIs as supporters of humans (H2). Participants (104, 48 women; M_{age} = 37.72) in awe for nature watched an extensive outer space scene while those in neutral state watched a clear sky (Zhao et al., 2018). They then reported preference for Artificial Intelligence (AI) as assistants (7 = AI, 1 = human) of financial customer services: banking, finance, and insurance (*alpha* = .85). Then, reported humanness (*alpha* = .91) and affects (see study 1).

Participants in awe for nature (*M* = 5.45, *SD* = 1.21) experienced greater awe than those in neutral state (*M* = 4.1, *SD* = 1.75; $F(1, 94)$ = 19.32, *p* < .001). Positive (*p* > .1) and negative (*p* > .1) affects did not vary. Humanness fully mediated the effect of the awe

for nature on AI assistant preference (PROCESS Model 4; .02, .28; 95% CI; H2).

Study 3 examined whether self-reported awe for nature (vs. pride) affects humanness and alleviates people's disinclination for AIs as self-governing agents in an access-based consumption context that consumers have low concern for outright purchase (H2; Morewedge et al., 2021).

Participants (330, 174 women, M_{age} = 39.95) were randomly assigned to one of 2 (emotion: awe for nature vs. pride) x 2 (favorability: AI vs. human) mixed-subject design conditions. They read about a mock ride-hailing company and reported favorability towards the AI (7 = excellent/favorable/good, 1 = poor/unfavorable/bad; *alpha* = .98) versus human driver (*alpha* = .93). Then, reported humanness (*alpha* = .92) and affects (see study 1).

Participants feeling awe for nature (*M* = 5.58, *SD* = .97) experienced greater awe than those feeling pride (*M* = 3.43, *SD* = 1.6, $F(1, 245)$ = 171.83, *p* < .001). Yet, participants feeling pride (M = 6.19, SD = 1.19) reported greater pride than those feeling awe for nature (*M* = 4.54, *SD* = 1.72, $F(1, 245)$ = 73.15, *p* < .001). Feelings of positive (*p* > .1) and negative affect (*p* > .1) did not vary.

We subtracted favorability of AI driver from that of human driver (i.e., 6 = favor human driver more than AI driver, 0 = no difference in favorability) to test the influence of awe for nature on the preference for humans over AIs. Humanness mediated the effect of awe for nature on preference for humans over AIs (PROCESS Model 4; -.25, -.01; 95% CI; H2).

Extending study 3, study 4 tests people's preference for a real brand with AI service when in threat-based awe for nature; awe for nature may diminish humanness and elevates preference for AI regardless of valence.

Students (329; 163 women, M_{age} = 20.4) were randomly assigned to one of 2 (emotion: threat-based awe for nature vs. neutral) between-subject conditions. They wrote essays for either threat-based awe for nature or about something recently done (Gordon et al., 2017), watched Tesla Self Driving, and reported purchase likelihood (1 = very unlikely, 7 = very likely), humanness (*alpha* = .89), and affects (study 1).

Participants in threat-based awe (*M* = 5.23, *SD* = 1.23) experienced stronger awe than did participants in neutral state (*M* = 3.49, *SD* = 1.58, $F(1, 302)$ = 113.63, *p* < .001). Since threat-based awe was considered as a negative affect (Gordon et al., 2017), participants in awe (*M* = 3.66, *SD* = 1.62) experienced stronger negative affect than did participants in neutral state (*M* = 2.4, *SD* = 1.12, $F(1, 302)$ = 63.3, *p* < .001) and reported weaker positive affect (*M* = 3.59, *SD* = 2.11) than did participants in neutral state (*M* = 4.65, *SD* = 1.73, $F(1, 302)$ = 22.87, *p* < .001). Controlling for willingness to drive/ride in the future, humanness mediated the effect of threat-based awe for nature on purchase likelihood (PROCESS Model 4; .12, 4.3; 95% CI; H2).

Consumption Context on the Big Screen: Context Differences Predict Food Healthiness and Branding in Top-Grossing American Films

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EXTENDED ABSTRACT

Consumption behaviors are subject to a host of social, situational, and informational influences in the consumption context. Context effects on consumption are studied broadly across marketing, psychology, behavioral science, economics, and public health (Higgs and Thomas 2016; Rozin and Tuorila 1993; Thomadsen et al. 2018; White, Habib, and Hardisty 2019). The domain of food consumption has garnered particular interest for understanding context effects that promote healthier consumption. From the types of foods available, to which goals are activated, the presence of social others, portion sizes and rituals–context shapes many aspects of healthy food consumption.

While we know that context effects impact consumption in real life, we know little about whether context effects are modeled in popular media. Movies are a central channel of normative influence and can particularly influence viewers' memory, attitudes, preferences, and behavior when integrating products with audiovisual character interaction and plot connection (Russell 2002; Balasubramanian, Karrh, and Patwardhan 2006; Kamleitner and Khair Jyote; Naderer, Matthes, and Zeller 2017). Given the demonstrated impact of food depictions in movies on consumer behavior and the importance of context in shaping food consumption, this research aimed to quantify all aspects of the consumption contexts in which healthier versus unhealthy foods are depicted in movies.

This preregistered study content-coded the consumption context across 9,093 foods from 29,707 minutes of film in the 244 top-grossing American movies released between 1994–2018. The central goal was to test whether the contexts in which foods are depicted, character behaviors, and character demographics differ as a function of a food's healthiness and branding. We define the consumption context broadly to include macro- and micro- levels of the setting (country or culture, urban versus rural, grocery store versus in the home), presence of social others or social rituals (e.g., celebrations, social bonding), identity-relevant factors of the people present in the situation (e.g., age, race, gender, body type) and the verbal and non-verbal behaviors that they display towards the foods. Because American movies reflect cultural norms, our core Hypothesis were that healthy foods would be depicted in ways that mirrored stereotypical American eating patterns, attitudes about healthy foods, and social consumption rituals.

Using the Nutrient Profile Index, a robust nutrition classification system used in advertising law in the United Kingdom and prior research on food advertising (Bragg et al. 2020; Harris et al. 2013), our results show that top-grossing American movies more commonly depict unhealthy foods in contexts that prior research shows are more impactful to viewers. Compared to unhealthy foods, healthier foods were less likely to be actually consumed by characters (p < .001), evaluated positively in characters' speech (p < .001), appear centrally on screen (p < .001), appear in American contexts (versus other countries; p < .001), and be part of social connection events like celebrations (p < .001) and social bonding (p < .001). The most striking differences among character demographic groups were that child characters consumed less healthy foods than adult characters (p = .001) and that, when talking about foods, child characters had a stronger negative relationship between evaluation valence and food healthiness (i.e., evaluated healthy foods more negatively and unhealthy foods more positively) than adult characters (p$_{interaction}$ = .041).

Furthermore, our detailed nutritional analyses show that compared to the average American diet per 2000 kcal (Rehm et al. 2016; Turnwald et al. 2021; U.S. Department of Agriculture 2016), the foods that movie characters consumed were 39.8% higher in sugar, 5.6% higher in saturated fat, 24.8% lower in sodium, and 3.8% lower in fiber. The foods that movie characters evaluated positively also contained much more sugar (38.5% more) and less sodium (26.8% less), but contained even more saturated fat (25.1% more) and even less fiber (30.0% less) compared to the average American diet.

We also demonstrate surprising findings regarding food brands in context. Compared with non-branded foods, branded foods are less likely to be in the foreground, consumed, and depicted as part of social connection events like celebrations and characters eating together. These findings call for a shift in thinking about the prevalence and efficacy of brand appearances in media from reliance on memorable anecdotes (e.g., Reese's Pieces in *E.T. The Extra-Terrestrial*, which were followed by spikes in Reese's sales; Newell, Salmon, and Chang 2006) to systematic analyses of how effective brand placements truly are (Karniouchina, Uslay, and Erenburg 2011) and how brand integrations compare with the high frequency of non-branded foods. It also suggests that depicting unhealthy foods in more influential contexts may better reflect cultural rather than market (i.e., paid product placements) influences.

Our large data set and innovative methodologies add to the robustness of these findings and can be applied broadly to answer questions about the vast food images in the online marketplace (e.g., food delivery, food review, and recipe-sharing platforms). We used precise nutrition information from government databases, nested mixed-effects models for analysis that account for the non-independence of foods that co-occur within scenes and within movies, linguistic analyses of character speech when talking about foods, pre-registration of Hypothesis and analytic strategy, and comparison to nationally-representative data regarding Americans' actual consumption and federal nutritional guidelines. Taken together, this research demonstrates that the power of the situation in dictating consumption behaviors is not limited to real life. The patterns that consumers observe in everyday life are reinforced by depictions in popular cultural media that reach hundreds of millions of viewers worldwide.

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The Days-Of-The-Week Effect in Temporal Judgments

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EXTENDED ABSTRACT

Many marketing activities entail information on the time they will take, e.g., the number of days it will take a packet to ship or the number of days a vacation will last. Depending on how temporal information is framed, consumers come to perceive objectively equivalent temporal intervals differently (Burson, Larrick, and Lynch 2009; Lembregts and Pandelaere 2013; Monga and Bagchi 2012; Pandelaere, Briers, and Lembregts 2011; Ülkümen and Thomas 2013). We show that merely including days of the week information in descriptions of temporal intervals (e.g. "ordered today, delivered on Thursday, February 4th" vs. "ordered today, delivered on February 4th") affects consumers' temporal judgments. This happens because the days-of-the-week framing prompts people to rely on more narrow-span temporal evaluation scales. As a result, the days-of-the-week framing elongates perceived temporal duration, making it undesirable in contexts where the company aims to reduce perceptions of temporal duration (e.g. delivery times and delays) and desirable in contexts where the company aims to increase them (e.g. vacation descriptions).

We base our predictions on the assumption that people will hold an implicit association between days-of-the-week framing and shorter temporal durations. This will happen because people use and see days-of-the-week framing more in descriptions of shorter temporal intervals (Golding, et al. 1995). The implicit association between days of the week and short temporal intervals, in turn, should prompt people to rely on more narrow-span implicit scales when assessing temporal intervals under the days-of-the-week framing (e.g. 0 to 14 days vs. 0 to 30 days).

Building on the range-frequency theory (Parducci 1965), we further propose that consumers' temporal judgments will depend on whether they rely on a narrow-span versus a wide-span implicit scale. Specifically, any two dates should be placed farther apart on the implicit scale when the scale span is narrow (e.g. 0 to 14) than when the scale span is wide (e.g. 0 to 30). Similarly, a given date should be placed farther from the lower end of the scale (i.e. 0) and closer to the upper end of the scale when the upper bound of the implicit scale is low rather than high (e.g. 14 vs. 30). As such, people should perceive the time between two dates (e.g. from Monday February 1st to Thursday February 4th) and the time from today until a given date (e.g. from today to Thursday February 4th) as longer under the days-of-the-week framing. Results from a pilot study and six experiments support this theorizing (N = 2,194, p-curve power at 76%).

Study 1 tested the days-of-the-week effect in the context of a hurricane description. Participants read about a tropical storm Karen. Half of the participants read that the storm "started on Monday September 23rd" and that it "moved to the open sea and weakened there on Thursday September 26th" (days-of-the-week condition). Another half of the participants read that the storm "started on September 23rd" and that it "moved to the open sea and weakened there on September 26th" (dates condition). Participants then rated the storm duration. As predicted, the hurricane was perceived to last longer under the days-of-the-week framing, than under the dates framing ($M_{days-of-the-week}$ = 4.09 vs. M_{dates} = 3.48; F(1, 197) = 8.40, p=.004, d=0.41).

Study 2 tested the effect in a product delivery context. Participants received information about delivery options for three products. They then rated the time difference between standard and express delivery options for those products. For half of the participants the dates were expressed in terms of days of the week and dates (e.g.,

Monday, July 8); and for another half of the participants the dates were expressed in terms of dates only (e.g., July 8). As predicted, the days-of-the-week framing increased the perceived difference between express and standard delivery options ($M_{days-of-the-week}$ = 3.99 vs. M_{dates} = 3.57, F(1, 198) = 8.12, p=.005, d=0.40).

Study 2 also compared the perceived discreteness, vividness, concreteness, familiarity, ease of visualizing and of evaluating the time periods across the two temporal frames to probe alternative explanations of the days-of-the-week effect (Lembregts and Van Den Bergh 2019). The analyses did not reveal significant differences for any of these measures (all F < 1).

Study 3 tested whether consumer satisfaction with a carrier delaying a product delivery would be lower when the delay information was presented under the days-of-the-week instead of the dates framing. To ensure that our results are driven by the days-of-the-week framing, rather than by the amount of information, in study 3 participants in the days-of-the-week condition only saw days-of-the-week information (e.g. expected on Wednesday, delivered on Friday) and participants in the dates condition only saw date information (e.g. expected on May 1st, delivered on May 3rd). The study showed that people were less satisfied with the carrier following a delivery delay under the days-of-the-week framing ($M_{days-of-the-week}$ = 2.77 vs. M_{dates} = 3.16, F(1, 296) = 6.71, p=.010, d=-0.30).

Study 4 tested whether the days-of-the-week effect is generalizable to periods spanning more than one week. Participants rated 16 product delivery periods lasting for 9, 10, 11 or 12 days under the days-of-the-week framing (e.g., from Monday, November 4th to Thursday November 14th); or under the dates framing (e.g., from November 4th to November 14th). As in studies 1-2, the-days-of-the-week framing elongated temporal duration perceptions ($M_{days-of-the-week}$ = 6.49 vs. M_{dates} = 5.87, F(1, 198) = 5.83, p=.017, d=0.34).

Studies 5A-B showed that the days-of-the-week framing also elongates perceptions of temporal duration when people consider the time from today until a given date (e.g. from today to Sunday, January 10th vs. from today until January 10th). Further, the studies provided process evidence for the days-of-the-week effect: consistent with the scale-span account, when people were prompted to rely on a wide-span temporal scale, by, for example, first rating (study 5A) or by first considering (study 5B) a relatively distant time point, temporal judgments became similar across the days-of-the-week and dates frames.

This work adds to research on the role of measurement scales in consumer judgments and sheds light on the link between consumers' implicit associations and magnitude evaluations.

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Don't Knock The Competition – Knock The Rival: Why Brand Rivalry Creates Message Virality

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EXTENDED ABSTRACT

Despite the existence of multiple competitors in most markets, certain brands seem to have special relationships with each other, typically resulting from a history of competition. These brands often engage in combative exchanges in the media and other communications channels (e.g., Apple-Samsung, Coke-Pepsi). Although the competitive networks brands are embedded in have been shown to be consequential for consumers' psychology and behavior (Paharia, Avery, and Keinan 2014), historic relationships between brands have received little attention. Building upon recent research in social psychology and management that distinguishes rivalry from normal competition, we connect rivalry theory with the storytelling literature, and extend it into marketing. We propose that targeting a rival (vs. a non-rival) competitor in brand communications increases message virality.

Rivalry has been described as a "subjective competitive relationship that an actor has with another actor that entails increased psychological involvement and perceived stakes of competition for the focal actor, independent of the objective characteristics of the situation" (Kilduff, Elfenbein, and Staw 2010, p. 945). The past history between rivals, regardless of the current intensity of competition, is the key characteristic that sets rivalry apart from normal competition (Converse & Reinhard 2016). We argue that repeated competitive interactions between two brands (e.g., advertising battles) will change the way consumers view the brands' relationship. A rival (vs. non-rival) brand relationship is characterized by a narrative, story-like, quality and can thus appeal to actors outside of the rivalry itself, as consumers are inherently attracted to stories and only need minimal information to identify them (Kamleitner, Thürridl, and Martin 2019). Brand rivalries have two key elements of good stories: 1) clearly identifiable and well-known characters (Van Laer et al. 2014) and 2) an interesting, simple plot that is inherent to human beings: conflict (Bohle 1986). Past work has shown that consumers are more likely to engage with content that is interesting, entertaining, and conflictual (Akpinar and Berger 2017; Berlyne 1960) Consumers are also more likely to share ads that contain plots and characters (Tellis et al. 2019). Hence, we expect a positive effect of rivalry on message virality (H1).

We propose that the theoretical mechanism underlying this effect is an increased perception that the brand message is embedded within an ongoing story, or "story embeddedness." Rivalry is an ongoing narrative with the expectation of future episodes. Thus, an interaction between rival brands will be perceived as the next episode of a familiar plot between well-known antagonists. In turn, since stories are easy to follow, entertaining and engaging, they generally produce positive affect and attitudes, and increase willingness to approach and engage (Escalas, Moore, and Britton 2004; Hansen and Kahnweiler 1993). Thus, we predict that the positive effect of targeting a rival (vs. non-rival) on message virality will be mediated by increased perceptions that the message is embedded within a story (H2).

We also propose a moderator of the effect of story embeddedness on message virality. Positive storytelling is more appealing than stories with a negative plot (McCarthy 2008), and negative advertising messages can violate fair play standards, leading to negative consumer perceptions (Jain 1993; Sorescu and Gelb 2000). Thus, perceived story embeddedness will be more likely to cause virality when the competitive message is positive and respectful, rather than purely negative or antagonistic (H3).

To test H1, we analyzed the tweets of six US brands that have a long-standing rivalry (McDonald's-Burger King, Coca Cola-Pepsi, and T-Mobile-Verizon; $N = 1{,}241{,}629$ tweets) during a five-year span. In our model-free analysis, we find that rivalry-related tweets (= those that mention the rival) generate 103.3 retweets on average, while competitive tweets (= those that mention a competitor) generate 16.6 retweets and standard tweets (= all other tweets) 2.95 retweets, respectively. An ANOVA shows that the differences across the type of tweets is strongly significant ($F = 88.03$). Bonferroni pairwise comparisons indicate that rivalry-related tweets generate significantly higher retweets than both competitive tweets (diff: 86.68, $p < .001$) and standard tweets (diff: 100.34, $p < .001$). A zero-inflated negative binomial regression confirms the positive effect of rivalry on virality as compared to standard or competitive tweets, supporting H1.

We next tested our model in an experimental study ($N = 398$). We used a 2 x 2 between-subjects design: brand relationship (rivalry vs. competition) x message framing (respectful vs. disrespectful). H1 was not supported, as there was no direct effect of rivalry (vs. competition) on virality ($M_{Rivalry} = 1.81$, $SD = 1.05$ vs. $M_{Competition} = 1.78$, $SD = 1.14$, $p = .81$). However, in support of H2, there was a positive indirect effect of rivalry on virality via story embeddedness ($b = .11$ [.0440; .1937]). Furthermore, in support of H3, there was a significant interaction effect between story embeddedness and message framing on virality ($b = .29$, $p < .01$). Story embeddedness had a positive effect only in the respectful ($b = .30$ [.1751; .4288]), but not the disrespectful condition ($b = .01$ [-.1146.; .1295]). Using Process model 14, the index of moderated mediation was significant ($b = .20$ [.0745; .1402]). The results hold when controlling for product category involvement, brand usage, brand affect and brand identification.

Our research reveals the value to incorporating rivalry theory into marketing. While past literature shows how small brands can benefit from positioning themselves against big brands (Paharia, Avery, and Keinan 2014), we point out how big brands can use their competitive network to enhance the virality of their communications. While any strong competitor represents a competitive threat, it is the compelling, story-like, nature of rivalry that offers even big brands the opportunity to use the long-time history with a rival to their advantage. Also, we contrast the notion that brands should generally avoid competition. Conventional wisdom suggests that managers prefer weak competitors in order to maximize profits. Our research builds upon a growing body of literature showing positive consequences of intense and longstanding competition for brands. We also reveal an important moderator of the indirect effect on virality via story embeddedness: a respectful (vs. disrespectful) message framing. This provides guidance to practitioners regarding how an attack on the competitor could be framed.

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The Impact of Single versus Multiple Narrating Voices in Persuasive Videos

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EXTENDED ABSTRACT

Broadcast videos often visually depict a product with one or more narrators providing the voice-over to discuss its features and benefits. Examples of broadcast videos include product videos and video advertising, which have become increasingly prevalent and important in consumer decision making in today's marketplace (Think with Google 2019). Despite the importance of sound and voice on people's behavior, existing research has placed relatively little emphasis on understanding the influence of narrator's voice in effective communications (cf. Dahl 2010).

In this research, we posit that in an initial exposure to a broadcast video, having more voices narrate (in succession) a persuasive message encourages consumers' attention and processing of the message, thereby facilitating persuasion. Having more narrating voices in a broadcast video involve changes in the voiceover. Not only are consumers naturally predisposed to the human voice (Belin et al. 2004), but stimulus change helps capture consumer attention. A change in voice can involuntarily capture attention, even when there are other visual or auditory tasks competing for attention (Cherry 1953; Morton, Crowder, and Prussin 1971). Moreover, as each new voice carries additional (nonverbal) information for the brain to process, the enriched representation of spoken content with more narrator voices should prompt listeners to process the spoken message in a more cognitively effortful manner. Therefore, a change in narrator voices in a broadcast video should help facilitate processing of the spoken message, which in turn boosts persuasion. We termed this "the voice numerosity effect."

We test the hypothesized effect in four studies—two large-scale, real-world datasets (with more than 11,000 crowdfunding videos and more than 1,600 broadcast ads) and two controlled experiments (plus a validation study and a replication)—using a range of consequential dependent measures, decision domains, product categories, and voice-based marcomm. We also examine the conceptualization through three theory-derived boundary conditions.

Study 1 is situated in the context of online crowdfunding (i.e., Kickstarter; Dhanani and Mukherjee 2019), where videos describe new products to potential consumers. We collected and analyzed data from over 11,000 products spanning 2.5 years across 31 categories (under 3 largest supra-categories) on Kickstarter. The dataset includes consequential dependent measures (funding pledged, number of customers, project success; see Fan, Gao, and Steinhart 2020), focal independent variable (number of narrating voices), moderating variable (speech rate), and a range of controls related to visual, audial, linguistic, and project characteristics. We parsed the videos and derived these measures using recent advances in machine learning methods and text mining. Building on prior studies showing that faster speech rate disrupts listeners' cognitive processing (Moore et al. 1986), results showed that having more voices narrate the project message significantly improves project outcomes (all $\alpha_1 > 0$, all ps $< .01$). The effect is both statistically significant and economically important—having an additional speaker, ceteris paribus, is associated with raising $12,795 in additional funds (a 39% increase), getting the support of 118 additional customers (a 38% increase), and a 1.6% increase in the probability of project success (a 6.5% increase). Moreover, the effect is consistently moderated by the rate at which the spoken content was delivered (all $\alpha_3 < 0$, all ps $< .05$), suggesting that cognitive processing is necessary for the hypothesized effect.

Study 2 extends our investigation of the effect to another real-world context of importance to marketing practice: advertising. This study related the voice numerosity effect to consumers' perceived efficacy of ads. We obtained a video ads dataset with human-coded measure of ad efficacy and augmented the dataset by measuring audial and visual characteristics of the ads. Results from over 1,600 ads replicated study 1: having more voices narrate an ad message significantly increases perceived ad efficacy (all $\alpha_1 s > 0$, all ps $< .001$). The effect is consistently moderated by the rate at which the spoken ad message was delivered (all $\alpha_3 < 0$, all ps $< .01$): having more voices narrate an ad message at faster rates relates to lower perceived ad efficacy.

To examine the causal role of voice numerosity, study 3 varied the number of narrator voices in a product video and consumers' processing resources through a distraction task. Results revealed a significant interaction between number-of-voices and distraction ($F(1, 353) = 4.90$, $p = .027$, $\eta^2 = .014$), such that the effect was more pronounced when participants have more processing capacity (low distraction; $M_{1\text{-}voice} = \$44.18$, $M_{5\text{-}voices} = \$47.98$; $F(1, 353) = 5.34$, $p = .021$, $\eta^2 = .015$) than when they have limited processing capacity (high distraction; $M_{1\text{-}voice} = \$44.81$, $M_{5\text{-}voices} = \$43.40$; $F < 1$). A separate pretest established the effectiveness of the number-of-voices manipulation.

Study 4 examined voice numerosity through a consumer characteristic that relates to their natural inclination to engage in effortful cognitive endeavors, known as need-for-cognition (NFC; Cacioppo, Petty, and Kao 1984). The interaction between NFC and number of voices was significant ($\beta = .04$, $t(344) = 2.19$, $p = .029$, $\eta^2 = .014$). A floodlight analysis (Spiller et al. 2013) showed that participants who do not enjoy effortful thinking (i.e., those with NFC scores less than 38) indicated lower WTP for the product in the 5-voice condition than in the 1-voice condition ($\beta_{JN} = -1.04$, SE $= .53$, $p = .05$); in contrast, participants who enjoy effortful thinking (i.e., those with NFC scores greater than 83) indicated higher WTP in the 5-voice condition than in the 1-voice condition ($\beta_{JN} = .72$, SE $= .41$, $p = .08$). A separate pretest provided support for the conceptual rationale that a spoken message narrated by five voices (vs. one voice) was more difficult to comprehend.

Voice-based marketing communications (marcomm) are becoming increasingly popular and important to consumers in the modern marketplace. Our research aims to contribute to extant literatures on sensory marketing and persuasive marketing communication. We identified and showed that number of voices narrating a marcomm message can affect consumer behavior. Our research also aims to offer practical suggestions for designing more effective broadcast videos.

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Finding "The One": Effects of Brand Dominance and Type Dominance on Condom Switching Behavior

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EXTENDED ABSTRACT

Consistent condom use can effectively prevent against HIV and other sexually transmitted diseases (Catania, Coates, and Stall 1991). However, only 23.8% (33.7%) of sexually active women (men) in the U.S. reported having used condoms the last time they had sex (National Health Statistics Reports 2017). This research takes an innovative perspective to investigate the prevalent lack of condom use —consumers' switching behaviors to find the right condom.

In a pilot study ($N = 495$), we found that (1) having found the right condom ("Have you found one or more condoms that you actually love?" Yes/No) was positively associated with reported condom usage: 61.3% of participants who indicated having found the right condom reported having used condoms at their most recent sexual intercourse, compared with only 27.1% who had not; (2) The pleasure of first-time experience using a condom positively influenced the number of brands (but not the number of types) participants had tried ($B = .10$; $t(493) = 2.96$, $p = .003$) which was positively associated with the likelihood of having found the right condom (Wald(1) = 29.93, $p < .001$). These results implied that a negative condom usage experience demotivated consumers from exploring other condom brands, and reduced the chance of finding the right condom. Without the right condom, they tended not to use a condom on subsequent occasions of sexual intercourse.

The above demotivating effect seems to contradict prior research findings that unpleasant consumption experiences prompt brand switching (Keaveney 1995). In the current research, we argue that consumers are highly risk-averse in using condoms. As condoms are used by a dyad during the highly experiential occasion of sexual intercourse, any uncomfortable feeling may hinder them from reaching climax, potentially ruining the experience for both, and harming the dyad-relationship (Yarber et al. 2004). To mitigate the potential risk of having another bad experience, consumers may switch to low-risk options. We therefore posit that consumers' switching processes for condoms are subject to the joint influences of *brand dominance* (e.g., Trojan vs. Durex) and *type dominance* (e.g., regular vs. dotted). The dominant brand/type, which reflects the majority's choice, signals lower risk than non-dominant counterparts, and this difference is assumed to be greater for brands than for types. Specifically, when a non-dominant brand is unpleasant to use, consumers would simply switch to the dominant brand regardless of the condom type. Contrastingly, when a dominant brand is unpleasant to use, type dominance comes into play: given a non-dominant type, consumers would switch to the dominant type of the dominant brand; whereas given a dominant type, implying that the lowest-risk option within the dominant brand has failed, consumers would switch to a non-dominant brand with a dominant type.

Three studies provided empirical support for the demotivating effect of a negative condom experience (Study 1) and the proposed switching processes (Study 2 & Study 3), and generated practical insights for both consumers and marketers (Study 3).

Study 1

In study 1, following a 2 (experience valence: positive vs. negative) x 2 (product: condom vs. general product) x 2 (type dominance: dominant vs. non-dominant) between-subjects design, we replicated previous research findings for general products – that a negative experience motivated consumers to try the same type of products but from other brands ($M_{positive} = 4.02$ vs. $M_{negative} = 4.37$; $F(1, 791) = 7.75$, $p = .006$). Contrastingly, for condoms, a significant experience valence by type dominance interaction ($F(1, 791) = 23.40$, $p < .001$) emerged, such that a negative experience with a non-dominant type reduced participants' willingness to explore the same type of condoms from other brands ($M_{positive} = 4.72$ vs. $M_{negative} = 3.18$; $F(1, 791) = 43.60$, $p < .001$). This demotivating effect, however, was not evident when the negative experience came from a dominant type ($M_{positive} = 4.41$ vs. $M_{negative} = 4.47$; $F(1, 791) = .08$, $p = .781$). An indirect effect analysis indicated that perceived risk of having another negative experience mediated this three-way interaction (5000 samples, 95% CI: [.46, 1.10]).

Study 2

Study 2 examined consumers' switching processes as a function of brand dominance and type dominance. In a 2 (brand: dominant vs. non-dominant) x 2 (type: dominant vs. non-dominant) between-subjects design, participants imagined that they had a negative condom usage experience, with either a dominant or non-dominant brand/type. Then they selected one condom to use for the next time from 12 combinations, of three brands and four types, that varied on dominance levels. Results revealed that most participants switched to the dominant brand's dominant type (lowest-risk option), except when the negative experience was from the lowest-risk option, whereby participants switched to the non-dominant brand's dominant type.

Study 3

Based on the probabilities calculated in the pilot study and the switching processes revealed in study 2, study 3 built an integrated model to simulate consumers' switching processes to find the right condom and to calculate the average needed switching times (a proxy for number of brands tried). A Monte Carlo Simulation (10,000 iterations) revealed that the average switching times to find the right condom was 3.05 (CI$_{95}$: 3.01, 3.11). This fit very well with the pilot study result that participants who found the right condom tried on average $M = 3.04$ brands, supporting our proposed switching processes. Next, we adjusted the satisfaction rates of dominant/non-dominant brands to see whether and how average switching times might respond. Results showed that the average switching times would drop to 2.00 if both dominant and non-dominant brands could achieve satisfaction rate of 50%, signaling ample room for product improvement. In the current state of affairs, the optimal strategy for consumers to find the right condom is to switch among brands rather than types, and preferably try more than 3 brands.

Discussion

This research contributes to safe sex promotion by identifying the importance of finding the right condom and uncovering the black-box of consumers' switching processes among brands and types. Practically, public health organizations should encourage consumers to try more (>=3) brands rather than types to maximize their chance of finding the right condom. Moreover, consumers may start

with the dominant type of the dominant brand, as consumers in such a situation are more willing to try other brands after a product failure.

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The Silver Lining to the Mushroom Cloud: A Netnographic Analysis of Consumers Enjoying Systemic and Existential Risks

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EXTENDED ABSTRACT

To theorize how consumers process systemic and existential risks to market society, this netnography studies doomsday preppers and survivalists, individuals preparing for the breakdown of society by stockpiling resources, acquiring knowledge, and practicing survival skills. While prior research on preppers and the literature on consumers' relationship to systemic and existential risks treats these risks in the intuitive way, as something to be managed and minimized, the paradoxical presence of doomsday optimism suggests the value of further theorization. Unlike previous characterizations, we illuminate how preppers libidinally enjoy systemic and existential risks because the fantasy, through its sacrifice of the relatively safe 'good life', provides them fertile grounds for imagining living exciting, risky lives of action outside the safe confines of modern market-mediated society.

Literature Review

In Beck's (1992) Risk Society, "consumers are forced to self-organize to manage risk, and this… rather than class struggle, becomes the central axiom of modernity" (Young 2010, pg. 261). Extant literature describes how consumers navigate this risk-laden world in diverse contexts (Dreton and Zeyer 2018; Barnhart et al. 2018; Farley 2018) and how factors like gender (Keller and Olson 2018) and political affiliation (Sheppard and Kay 2018) mediate risk perceptions. Moreover, in Risk Society, the status of science is contested, at the same as producing innovations as solutions to new risks themselves fostered by innovation (Ekstrom and Askegaard 2000; Thompson 2005; Wong and King 2007; Humphreys and Thompson 2014). While this research treats systemic risk as something to be managed and minimized, other research notes consumers intentionally seek out bounded market-mediated risks as a source of pleasure, path to self-fulfillment, and means of testing oneself (Celsi et al 1993; Arnould and Price 1993; Scott et al. 2017; Tumbat and Belk 2010).

Despite this attention to market-mediated risk-seeking, consumer researchers have largely ignored consumers who libidinally enjoy threats to the entire market-system itself– the focus of this paper. For some consumers, hyper mediated marketized culture is itself the barrier to living an exciting life of action (Le Breton 2018). Because these risks are not offered through markets and escape from markets is impossible (Kozinets 2002; Arnould 2007), consumers can only imagine them through fantasy. With this gap in mind, we question if prior characterizations of doomsday prepping as "a precautionary desire to be prepared" (Mills 2017, p.7), "an expression of generalized anxiety" (Campbell et al. 2019, p. 798), or an "anticipation of terror… stress and anxiety" (Aldousari 2015, p.33) capture the libidinal stance preppers take towards risk. Widespread presence of excited and optimistic doomsday preppers points to the need for further theorization.

Theory & Methodology

Rather than examining how preppers legitimate their behaviors (see Campbell et al. 2019), this hermeneutic netnography (Kozinets 2015) of a popular American doomsday prepping forum uses a psycho-social approach (Clarke 2002) grounded in Lacanian concepts (Lacan 1998) such as drive, desire, the Real, and Jouissance to uncover the unconscious, libidinal, and dark underside at work.

Findings

Findings part one describes how doomsday preppers construct enjoyable doomsday myths which conveniently promise the undoing of some form of alienation that bars them from unmediated experience and jouissance. In these scenarios, there is a propensity for doomsday optimism. The general narrative goes something like this – the modern age simply cannot go on, eventually something must falter economically, ecologically, legally, or otherwise. However, this is not all bad as society will somehow solve its dilemma through collapse, ushering in a new era, one that is more sustainable, authentic, and real. In this general doomsday mythic structure, America's hardworking, grievously alienated 'everyman,' finds his banal existence violently ruptured by catastrophe, and now has the opportunity to build the world anew which provides undiluted access to the Real and jouissance. Three variations of the general doomsday myth are presented: 1) fantasies of rebirth through violence 2) fantasies of communities and ecosystems of the Real and 3) fantasies of the reconciliation of economic and social life through economic collapse. Overall, part one argues that these doomsday myths follow a similar seductive structure which offers the impossible promise of achieving a non-lacking subjectivity and thus evidences the operation of desire at work (McGowan 2013).

Part two describes four counterintuitive sources of enjoyment produced by doomsday prepping. Specifically, finding 2.1 describes how consumers' doomsday myths produce 'surplus jouissance, or an excess of jouissance independent of use value, through fantasizing about the sacrifice of comparatively safe, comfortable lives today in favor of a risk-laden, post-disaster life. Finding 2.2 describes how a similar surplus jouissance associated with 'knowing' the future is arrived at through the sacrifice both of non-preppers' safety and collective efforts to mitigate risks. In a similar vein, finding 2.3 describes how bricolage and fetishism embed the power of the doomsday myth, representative of the sacred Real, in objects. This fetishism takes the form of an excessive jouissance arrived at through sacrifice of various practical considerations. Finally, finding 2.4 concludes by arguing that preppers' enjoyment stems from the repetition of drive, not the fulfillment of their spoken, conscious desire for risk reduction as prior research suggests (see Campbell et al 2019 and Mills 2017). Rather, we argue that risk reduction is merely an alibi that allows preppers to endure their counterintuitive source of enjoyment: the repetition of drive.

Contribution

We make four primary research contributions. First, we contribute to research on risk and consumption by demonstrating how some consumers libidinally enjoy systemic risks to market society. Second, we introduce and explicate a conceptual vocabulary which distinguishes between 'desire' and 'drive' to describe this paradoxical source of enjoyment. Third, we provide evidence that counterintuitively, it's not consumers' risk assessments which produce desire but desire itself guides the imaginative construction of risk. Finally, we contribute to prior research on the creation of the responsible consumer subject which theorizes responsibilization through governmentality and power (Geisler and Veresiu 2014) by accounting for the role of consumer desire in this process.

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Netflix and Cringe: Media Consumption as Transformative Identity-Work

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EXTENDED ABSTRACT

In this study, we articulate how consumers pursue internal conflict as it manifests in experiencing moments of "cringe" while watching television. We explore the phenomenon of "cringe-watching" as a companion/alternative experience to previously studied notions of binge-watching and interrupted escapism (Jones et al., 2020). In so doing, we uncover the transformative identity-work involved in consuming media artefacts in the global marketplace. Leveraging collaborative autoethnography (Ngunjiri et al., 2010) as our method, we challenge the traditional role of researcher as subject, and blur the boundaries between theoretical critique and lived experience. Here, collaborative autoethnography falls under the umbrella of subjective personal introspection (SPI) (Holbrook, 1995) within the consumer introspection theory paradigm (CIT) wherein introspection aids in generating consumer research data (Gould, 2012).

For this study, we watched the show the Netflix show *Indian Matchmaking* and maintained diaries where we individually documented our responses to episodes, which formed 69 pages of data. We then commented on each other's responses to produce collaborative, reflexive research data. Upon finishing our viewings, we conducted separate data interpretations and then together thematically analysed (Miles and Huberman, 1994) the initial findings. By building on non-Western feminist theories, we problematised dualities like researcher/viewer and subject/object, which perpetuate oppressive Western thought present in many media narratives (Davé, 2012). This approach makes visible and recognizable perspectives linked to gender, race, class, and geography that are often ignored in mainstream and scholarly narratives (Mishra, 2013).

Our data reveal an imperative not to abolish dualities but to allow each element to be recognised and understood in a context that often demands clarity. First, by locating and interrogating the past-present duality, we show how media consumption can incite transformative identity-work in multiple ways. Firstly, when cringe related to undesired past-selves emerges as a result of socio-temporal comparison with on-screen characters, acknowledging and accepting our past-selves reveals potential for empathy and self-compassion. Additionally, when publicised intimacies (i.e., media depictions of peoples' private lives) cause viewers conflict, these can simultaneously generate heightened understandings of the show, consumers' insecurities, and in our case, our roles as consumer researchers. For example, we relate to one of the show's contributors, Aparna, who was villainised for being too stubborn or picky on the dating market. We often referred to each other as "Aparna" while emailing about this study, with "Aparnas" representing a form of "sisterhood." By projecting our (subject) insecurities as well as "unfair" and "cringeworthy" treatments on to Aparna (object), we distanced ourselves from visceral experiences and managed self-esteem, or rationalised the validity of our experiences and eventually accepted our (undesired) past-selves as an act of self-compassion.

Secondly, the show blurs the boundaries between the sacred and profane by uncritically depicting instances of women-on-women symbolic violence or misogyny. We find that the cringe arising from these depictions can lead consumers to question the accountability of marketplace actors, like Netflix, who appear to profit from exploiting societal discriminations. Moreover, in *Indian Matchmaking,* religion is foregrounded, but for both non-religious authors, seeing religion in a market context was frustrating. Yet, as the second author writes in a diary entry, "A non-religious person critiquing a show's use of religion just feels too easy, and even wrong." Allowing space for both the sacred and profane allows each element of a duality to exist without a value judgment.

Our research began as a way of mobilising *Indian Matchmaking* as a media artefact for transformative identity-work as an end in itself. We centred conflict in the media consumption experience and demonstrated how cringe can prompt consumers' pursuit of understanding their positions in a globalised world, as well as decolonising ideas around customs such as matchmaking that have been often depicted through the lens of "third world difference" (Mohanty, 1988). By interrogating the subject-object divide, we showed that while such identity-work can be an end in itself, it additionally presents a novel way to understand critical media consumption and generate marketing theory. Thus, our first contribution is to show how consumers' experiences of cringe-watching and attempts at transformative identity-work can be understood as an alternative/companion marketplace phenomenon to previously studied notions like binge-watching.

Additionally, we illustrate the utility of collaborative autoethnography in dimensionalising the complexities, contradictions, and disappointments (Nicotera, 1999) arising from experiences of cringe as related to identity-work. We tease out unexpected outcomes of cringe such as empathy, frustration, self-compassion, and understand limits to our individual feminisms. Thus, as a second contribution, we offer researchers and marketers a novel avenue for studying media consumption while situating the researcher and the researched as epistemologically equal.

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Numbers Talk Louder When They are Larger: The Effect of Font Size of Numerical Stimuli on Advertisement Persuasion

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EXTENDED ABSTRACT

Numerical information plays a crucial role in marketing communication about product price, and product attributes such as volume, effectiveness, performance, etc. Communicating numerical information effectively is important to marketing practitioners. For instance, how to make a twelve-dollar lamp seem cheaper or a 500ml drink seem bigger? This research aims to investigate the effect of font size in displaying numbers on the persuasiveness of advertisements. Specifically, we are interested in examining whether displaying numbers in a larger or smaller font size in advertisements influences the effectiveness of persuasion.

Font size is one of the fundamental factors to be considered in ad design. Big font size of verbal information is believed to draw attention (Wogalter & Leonard, 1999), promotes readability (Rello, Pielot, & Marcos, 2016), and affect individuals' memory and cognition (Mueller, Dunlosky, Tauber, & Rhodes, 2014). Individuals give significantly higher judgments of learning (predictions about the likelihood of remembering recently seen information) to large words than small words, although their real recall performance was equivalent for different sized words (Rhodes & Castel, 2008). Besides, people believe that large word size represents important messages (Luna, Nogueira, & Albuquerque, 2019) and increases fluency perception (Yang, Huang, & Shanks, 2018). Therefore, individuals make biased judgments and inferences towards the content in different font sizes.

However, limited study has investigated the effect of font size of numerical information on marketing communication, except for Coulter and Coulter (2005) and Aggarwal and Vaidyanathan (2016), whose work showed that presenting regular price (a relatively high price) in large font size and sale price (a relatively low price) in small font size accords with the "size congruency effect" (Dehaene, 1989), and thus increase the purchase likelihood. However, these results are based on comparing the font size of different numbers and the numerical stimuli are limited on price information. The effect of font size of numerical stimuli about other product attributes such as attributes and performance on consumers' judgment remains unexplored.

Big font size has been empirically proved to attract attention (Aggarwal & Vaidyanathan, 2016). Then, what downstream outcomes can attention lead to? Information is commonly conveyed for a purpose, thus recipients of the information will go beyond the literal meaning of the message and guess what the information sender intends to express (Hilton, 1995; Kardes, Posavac, & Cronley, 2004). For written information, factors unrelated to message content such as boldface and italics are commonly used to point the emphasis. For example, a bigger font size increases the perceived urgency of warning labels (Adams & Edworthy, 1995). We propose that a bigger font size of numerical stimuli in the ad can raise attention, and consumers would attribute the marketer's motive to deliberately attract attention to their confidence in conveying the message. That is, consumers would surmise a marketer's use of a large font size of numbers in the ad as being confident and conveying strong opinions. Whereas a marketer's use of a small font size of numbers will be perceived as being less confident in his or her opinion.

Some anecdotal evidence proves this assumption. The price tag in the supermarket's promotion ad is always big and salient, while the price tag of luxury goods is normally small and never prominent-

ly displayed. In the former case, price information is advantageous to transmit to consumers. On the contrary, in the latter case, the price information is never a core competence for luxury goods. When consumers perceived strong confidence from the marketer, they are more likely persuaded by the marketing messages. Thus, we hypothesize that increased font size of the numerical stimuli in an advertisement would boost recipients' belief in its implication including the perception of inexpensive price and better product performance, depending on the meaning of the numerical stimuli. Besides, the font size effect on persuasion is mediated by a causal chain: the increased font size would attract more attention, and thus promotes the message strength perception, which in turn boosts persuasive effectiveness.

Three studies were conducted to test our Hypothesis. University students and participants from an online survey platform were recruited for the studies. Study 1A manipulated the font size of the price in a lamp advertisement (small font-size: 16 points; big font-size: 60 points) with the other elements being the same in two conditions. Participants evaluated the perceived inexpensiveness of the lamp and rated the lamp presented with a bigger font size of price less expensive than that was shown with a small font size of price. Study 1B manipulated the font size of the product performance ("Effectively inhibits 99% of bacteria") in a Dettol hand sanitizer advertisement. The font size of "99%" was either 24 points or 72 points. Participants perceived the product to be more effective when the font size of the number claiming the efficacy is big rather than small.

Study 2 used a mobile phone advertisement and manipulated the font size of numerical stimuli of the mobile's parameter (battery capacity, camera pixels, and memory). Participants rated the expected performance of the mobile phone better when the font size of the number is bigger, and the effect is serially mediated by attention and the message strength of the advertisement. We also measured and excluded the alternative explanations of involvement, fluency, and perceived message importance.

Our studies demonstrated that individuals are better persuaded by the advertisement displaying numerical information in larger font size because it can attract more attention, and thus increase message strength. Theoretically, this research extends the literature on font size by examining its effect on ad persuasion and product evaluation in the marketing context. Besides, while the visual marketing literature has examined the effect of light, shape, color, material, and location on consumers' perception (Sample, Hagtvedt, & Brasel, 2020), the font-size effect is an underdeveloped issue in visual design. Thus, the findings also complement visual marketing research. Managerially, our findings suggest that advertisers who aim to covey the advantage of product price and/or product attributes should increase the font size of the numerical stimuli in order the improve the persuasiveness of the advertisement.

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The World Needs Re-Balancing: How Consumers Re-Focus Consumption Communities

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EXTENDED ABSTRACT

There are many different forms of consumption community, but all share a focal brand, practice, or ideology (Thomas et al., 2013). This applies also to consumption collectives that are "noncommunitarian" in nature (Arvidsson and Caliandro, 2016: 730). Consumer researchers have shown how consumption collectives become more heterogeneous by legitimating the value of diversity (Thomas et al. 2013) and how they then demand other collectives become more inclusive also (Scaraboto and Fischer, 2013). Although heterogeneity can be destructive and even disastrous (Parmentier and Fischer, 2015; Kozinets et al., 2017), it can also be managed effectively to enrich consumer culture (Thomas et al. 2013; Preece et al. 2019). Existing studies have generally focused on contexts where the focus of consumption is undisputed – a brand like America's Next Top Model (Parmentier and Fischer, 2015), a practice such as running (Thomas et al. 2013), or an ideology along the lines of inclusivity (Scaraboto and Fischer, 2013). However, such studies provide less insight into cases where consumers feel that this focus of their collective identity is an issue, and where their desire to create and maintain a more heterogeneous culture of consumption necessitates the de-centring of this foci in favour of re-centring another.

Theoretical Foundations

Although existing studies have not addressed this particular empirical problem, they provide theoretical tools and insights. Adopting an assemblage approach (Canniford and Bajde, 2016) enables the study of material and expressive components, working together to allow a consumption assemblage to emerge (Martin and Schouten, 2014), evolve (Thomas et al. 2013), or enervate (Parmentier and Fischer, 2015). Importantly, while not requiring it, it allows for the possibility that one component could become the focus of a particular assemblage. As such, it is plausible that a consumption assemblage could emerge with one focus and evolve to re-focus elsewhere. Indeed, assemblage approaches emphasise the importance of processes, with assemblages always in a state of flux or 'becoming' (Canniford and Bajde, 2016). As such, these approaches facilitate a process theorization (Giesler and Thompson, 2016).

Methodology

Our study is located in Manchester, which has a well-established reputation for celebrating diverse sexualities and genders (Haslop et al., 1998), with a world-famous Gay Village (Binnie and Skeggs, 2004), Pride festival (Hughes, 2006), and local organizations providing specialist services beyond these conspicuous sites and events (Simpson, 2013). Taken collectively, Manchester's LGBTQ+ communities can be framed as an acute case of a culture in flux, with the future of the Gay Village uncertain and the spatial and symbolic trajectories of LGBTQ+ organizations contested. A multi-sited ethnography was conducted (Marcus, 1995, 1998) between 2014 and 2016. Data were collected from *Avant Garde*, an LGBTQ+ running club, *Polari*, an LGBTQ+ theatre group, and *MQC*, the Manchester Queer Choir. The first researcher took notes from meetings, training-sessions, and other events. These were supplemented by photographs, videos, and articles from newspapers and other media. Interviews with members were also conducted, resulting in 31 in-depth transcriptions. Data analysis was conducted throughout the research process (Goulding, 2005), moving from open coding to axial coding, then interpretation and theory-building (Belk et al. 2012). An emergent theme in the data was the role of re-focusing collective identities around novel forms of consumption.

Findings: Emergence, Evolution, Enervation

All three clubs were initially founded as a response to the consumption practices that dominated Manchester's Gay Village and stereotypical 'gay' culture more broadly. Young, gay men in particular were stereotyped by participants as undesirable figures who drunk excessively, went to nightclubs, and lived illicit and promiscuous lives. Historically, these practices have been the focus of the LGBTQ+ collective identities (Kates, 2002, 2004; Visconti, 2008) and markets (Keating and McGloughlin, 2005). All three groups saw their role as providing new social spaces for LGBTQ+ people. These spaces were physically and psychically removed from the night economy of the Gay Village, and offered alternative practices (e.g. running, acting, or singing) to stereotypical LGBTQ+ excessive practices.

Importantly, the stereotype was not considered to be an accurate representation of LGBTQ+ lifestyles, but rather a dominant one that made it more difficult for non-heterosexual individuals to conceive and achieve other lifestyles. The three groups provided material components (e.g. spaces to run or sing) and expressive components (e.g. non-stereotypical representations). They also created imaginative components that facilitated re-assembly (Epp et al. 2014), such as role models. Unfortunately, over time all three groups found themselves refocusing their identities around the stereotypical consumption of the Gay Village, albeit in different ways and to varying degrees. This threatened the collective identity of these groups as alternatives to the stereotype, so all three worked to counterbalance their stereotypical consumption with material, expressive, and imaginative components from elsewhere. In one case (Polari) these counterbalances were not introduced in time and the group disbanded.

Discussion and Conclusion

Our study shows how consumption assemblages can re-focus their collective identities, and explains why consumers and other market actors may be motivated to change focus. Theoretically, it contributes to the literature on communities (Thomas et al. 2013) and other collectives (Arvidsson and Caliandro, 2016), which are usually conceptualised as focused and committed to that focus. While the LGBTQ+ identities of our groups remained consistent, their *consumption* foci were subject to change. Given the intertwinement of consumption assemblages with other assemblages, such as markets (Martin and Schouten, 2014) and brands (Parmentier and Fischer, 2015; Preece et al. 2019), our study also provides theoretical insights into how these might contribute or challenge re-focal activities. There are also a series of practical implications. For managers, this provides the possibility of refocusing markets around new products or brands. For policy-makers, this points to efforts to refocus cultures away from alcohol consumption and other problematic practices (Banister et al. 2019). This study also provides two successful case studies (including one cautionary tale) for pro-active consumers who want to refocus their activities and the collective identities of those who consume like them. However, as the process re-focusing may manifest differently for each consumption assemblage, further focused research is needed.

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The Scale Effect: How Rating Scales Affect Product Evaluation

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EXTENDED ABSTRACT

You are wondering whether to watch the latest blockbuster for a movie night at home. Before deciding whether to rent it on your favorite streaming platform or to look for another option, you consult its ratings on two review websites. Website A presents ratings on a 1-to-10-point scale. Website B presents ratings on a 1-to-5-point scale. In this paper, we aim to answer the following question: Which of these two ratings will more strongly influence your consumption decision?

The results of 8 studies suggest that your decision will be more strongly influenced by the ratings from the website that reports ratings on the larger scale (10-point, in this example). More specifically, we measured the relative influences of ratings expressed on 5-point, 10-point and 100-point scales in settings where people evaluate products based on ratings expressed on a relatively *larger* scale (e.g., 10-point or 100-point) and a relatively *smaller* scale (e.g., 5-point or 10-point). We consistently found that ratings expressed on *larger* scales have *stronger* effects on product attitude, willingness to pay and purchase intentions than ratings expressed on smaller scales. We call this phenomenon the '*scale effect.*'

This finding is surprising because people are most familiar with ratings expressed on the 5-point scale and thus these should be more fluently processed (Schoenmüller, Netzer, and Stahl 2019; Schwarz, 2004). This implies that 5-point ratings should more strongly influence product evaluations than 10-point or 100-point ratings.

Ostensibly, the scale effect might be interpreted as a manifestation of the "unit effect" (Bagchi and Davis, 2016; Pandelaere, Briers, & Lembregts, 2011) in the rating domain. According to the unit effect, people neglect the unit of numerical information and are thus sensitive to the numerosity of attribute values (e.g., a distance expressed in centimeters is perceived to be larger than when expressed in meters). Yet, we failed to find evidence for the unit effect in the rating domain.

Our findings suggest that the scale effect results from a default rating aggregation strategy that can be overcome when there is reason to do so. We find that both deliberate and non-deliberate cognition contribute to the scale effect. People report that they find large-scale ratings more informative than small-scale ratings, and this difference in perceived informativeness contributes to the scale effect. This suggests a deliberate component to the scale effect. But even participants who claim they should give equal weights to ratings from both scales are subject to the scale effect. This suggests a non-deliberate component.

Methodology

We analyzed the scale effect in a series of online behavioral studies in which participants evaluated products based on one large-scale ratings and one small-scale ratings. The studies involved single evaluation settings and joint evaluation settings.

Studies 1 to 3 provide evidence for the scale effect. Study 1 (N = 151) provides correlational evidence using real video games and their ratings published by actual review websites. In studies 2 and 3, we manipulated the scales on which ratings were expressed, providing causal evidence for the effect. In Study 2 (N=101), we used a consequential setting; participants evaluated a set of movies and received as payment a voucher to download and own the movie they evaluated the most positively. Study 3 (N = 541) provides evidence

for the scale effect across different scale pairs (5 and 10 points, 10 and 100 points and 5 and 100 points).

Studies 4 and 5 show that differences in rating numerosity are not sufficient to explain the scale effect. Study 4 (N = 152) found that 'unit effect' does not apply to the rating domain and Study 5 (N = 802) found that communicating ratings visually rather than numerically hardly affects the strength of the scale effect.

In study 6 (N = 151), we measured the extent to which the scale effect is produced by a difference in subjective strength of ratings expressed on larger and smaller scales versus differential weighting of the two ratings. We found that the rating scale does not affect subjective strength but affects how ratings are aggregated into a product evaluation.

Study 7 (N = 543) reveals that one reason people give more weight to large-scale ratings is that they find them more informative, suggesting that the scale effect results from a deliberate intent. Moreover, participants who claim they should give the same weights to ratings of the two scales still give more weight to large-scale ratings, suggesting a non-deliberate component to the scale effect.

In study 8 (N = 501), we manipulated perceived rating informativeness by describing them as average ratings based on few or many consumer reviews. When the small-scale rating was described as based on more reviews, the scale effect was reversed.

Conclusion

The finding that product evaluations are more strongly influenced by large scale ratings than small scale ratings is intriguing in light of the recent decisions, by prominent review websites, to change the rating scales they use to report ratings. The classic restaurant guide Zagat abandoned the 30-point scale in favor of the 5-star scale. Similarly, Trustpilot.com, which provides its 'TrustScore' to online businesses, moved from a 10-point scale to a 5-star scale. Both changes consist in abandoning a larger scale for a smaller scale. If consumers are subject to the scale effect, these changes have potentially made these websites less influential.

We conjecture that the scale effect could affect evaluations in other domains that involve the evaluation of options based on the aggregation of multiple pieces of numerical information expressed on different scales such as multi-issue negotiations, recruiting decisions or the selection of providers.

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Seeking Security through Liquidity in an Era of Precarity: An Ethnography of Digital Nomadism

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EXTENDED ABSTRACT

I imagine 90% of those digital nomads barely make enough to get by. But then again, neither do I, and I have a stable job and an apartment, and all the things society tells you must have. And with those things come expenses. A f***load of them. The last time I had money to spend on a nice vacation or anything really? I don't even remember when that was. And I don't see it changing anytime soon. Maybe what has been romanticized too much for too long is the idea of settling down. Because this idea of a partner, kids, house, a kiss goodbye and a smile before you leave for work does not exist either. At least not for most people. 90% of them also wish they had a different life. Honestly, if I am going to struggle, I'd rather do it in the sun. (Flipflop Poet, YouTube, 2019)

The late modern experience is one of constant change, erosion of stabilities, and disappearance of solid structures and their reliabilities (Bauman 2000; Beck 1992; Giddens 199; Kesselring 2008). Economic uncertainty and professional precarity, alongside environmental decline and global health pandemics, are defining the contemporary moment (Bardhi and Eckhardt 2017; Bauman 2007; Campbell et al. 2020). Life trajectories which for prior generations might have been considered largely solid, predictable and stable (e.g., lifelong career; guaranteed retirement; owned home) are now increasingly uncertain, as the opening quote illustrates. How consumers manage such threats inherent to liquid modernity (Bauman 2000) has been identified as an increasingly important research domain (Campbell et al. 2020). In this study we therefore ask, how do consumers find security and gain a sense of control in precarity?

Prior research suggests that consumers build a sense of security through material possessions and solid consumption such as accumulating objects, consuming familiar goods and products, or achieving solid ideals such as having a family or owning a home (Bardhi and Eckhardt 2017; Weinberger et al. 2017). For many, solid consumption, however, is increasingly becoming a luxury and a resource-heavy indulgence that is out of reach (Bardhi and Eckhardt 2017). For others, solidity can also be a liability (Bardhi and Eckhardt 2017), as modern living gives rise to constellations of risk and uncertainty that demand flexibility and mobility to manage them (Kesselring 2018). Concurrently, it has been shown that, for some consumers, the desire for ownership is waning (Lamberton and Goldsmith 2020), giving way to preference for liquid consumption which promotes flexibility and lightness in lieu of attachment and permanence (Bardhi and Eckhardt 2017). Consumer research, however, has yet to examine how consumer manage to establish security in the long run without ownership, possessions, or safety nets (Bardhi and Eckhardt 2017, 593) or live with enduring insecurity (Campbell et al. 2020).

We explore this gap via a multi-sited ethnography and netnography of digital nomadism – a global lifestyle movement where individuals dispose of most of their possessions and, enabled by widespread Internet access and ease of mobility in a globalized world, serially relocate, often between inexpensive locations, while working remotely (Mancinelli 2020). In contrast to other migrants (e.g., refugees), the digital nomadic way of life inheres lifestyle choices where migration is an escapist and reflexive self-realization project in search of the "good life" (Benson and O'Reilly 2009). This "good life" is often described as the opposite of the insecurity of contemporary (Western) lifestyles; the motivation is to avoid futures foreseen as riddled with economic uncertainty, debt, dead-end jobs or a lonely retirement (O'Reilly and Benson 2009, 4). Our analysis draws on 30 in-depth interviews with digital nomads representing 14 nationalities and various socio-economic levels, although most are privileged in terms of having passports which enable them to live this lifestyle, as well as field notes, photographs and netnographic data.

We find that in an increasingly precarious contemporary context, instead of seeking stability through solidity (possessions, material accumulations, permanence), some consumers paradoxically choose to lean into liquidity as a means to transform and re-imagine their uncertain lived reality and to find security and control. We suggest that when solidity is out of reach or is undesirable, consumers attain a sense of security through lifestyle liquification – a term we introduce to denote a transition in everyday living from prioritization of ownership and rootedness to lightness and detachment. We outline a three-phase process of movement along the solid-liquid continuum (Bardhi and Eckhardt 2017) toward lifestyle liquification as a means to emancipatory construction of control and a sense of security: 1. Relinquishing solidity subsequent to disillusionment with solid ideals and aims; 2. Leaning into liquidity via shifting consumption logics and undertaking reflexive reprogramming of the self; and 3. Legitimizing lifestyle liquification as an alternative pathway to security via marketization and evangelization of liquid living. Each of these phases represents a stage of gradual progression on a continuum from solid to liquid lifestyle orientation, though different consumers may occupy various positions along this continuum at various times.

Our findings challenge established views that security inheres in solid consumption and suggest that for some consumers, solidity can be an unattainable ideal and a source of hardship carrying inherent risks and liabilities. We make several contributions. First, we bring into focus lifestyle liquification as an alternative path to security in times of uncertainty (Campbell et al. 2020), and we show that for many consumers who are increasingly disillusioned with normative life trajectories, idealized solid future goals are no longer aspirational or attainable sources of stability (cf. Weinberger et al. 2017). Second, we extend Bardhi and Eckhardt (2017) by illuminating how and why consumers may choose to move along the solid-liquid continuum in search of different types of utility. Third, we offer a process perspective on consumer lifestyle transformations and expand our understanding on how consumers undertake fresh starts (Price et al. 2018) by materializing pursuits of a better life through liquidity in the face of precarity and uncertainty. Overall, we open new perspectives on how consumers navigate their life projects and draw on different logics of consumption to attain security.

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The Impact of Product Anthropomorphism on Price-Quality Judgments: The Mediating Role of Communal Norm Salience

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EXTENDED ABSTRACT

Consumers frequently rely on price information to form quality judgment (Kardes et al., 2004). In this research, we pose the question, does product anthropomorphism influence the extent to which consumers use price information to judge quality? Anthropomorphism involves attributing human-like qualities to non-human entities (Epley et al., 2007). Prior research shows that consumers perceive anthropomorphized brands or products as social entities and frequently apply social rules in their interaction with such entities (H. Y. Kim & Mcgill, 2018; S. Kim & McGill, 2011). Relatedly, research in social psychology finds that all social interactions involve some elements of a communal relationship (Mills & Clark, 1982; Clark & Mills, 1993). Taken together, we argue that when consumers interact with an anthropomorphized product, they experience a higher salience of communal relationship norms as compared to when they interact with a non-anthropomorphic product (Aggarwal, 2004; Aggarwal & Law, 2005; Aggarwal & Zhang, 2006).

The key and defining difference between communal and exchange relationship norms is the expectation of *quid pro quo* (Clark & Mills, 1993). In a communal relationship, benefits are provided to the relationship partner based on the partner's needs and without any expectation of a comparable return. On the other hand, in an exchange relationship, benefits are provided strictly with an expectation of a comparable return (Aggarwal, 2004; Aggarwal & Law, 2005). Therefore, we propose that when consumers evaluate anthropomorphic products, they do not expect a strict equivalence between the price and quality of the product. We argue that such an expectation of non-equivalence between price and quality stems from the salience of communal norms of not expecting a comparable return (quality) for the benefit provided (price). Integrating the above arguments and the cited literature, we predict,

Hypothesis 1: *Consumers are less likely to make price-quality judgments for anthropomorphic products as compared to non-anthropomorphic products*

Hypothesis 2: *The salience of communal relationship norms will mediate the effect of anthropomorphism on price-quality judgments*

The research in cultural psychology has refined the broad individualist vs. collectivist classification into two kinds of orientations viz., horizontal (emphasizing equality) and vertical (accepting hierarchy) (Singelis et al. 1995). Specifically, vertical collectivists are mindful of hierarchy in their social interactions as the norms governing such interactions are frequently linked to their place in the social hierarchy (Triandis, 1995). As anthropomorphic products are treated as social entities, we argue that vertical collectivists, driven by their norms of social hierarchy, use price to organize anthropomorphic products hierarchically. Subsequently, for quality evaluation of anthropomorphic products, vertical collectivists are likely to use the same hierarchical order determined based on price. Conversely, such a hierarchical ordering based on price is not applicable for non-anthropomorphic products as they are not perceived as social entities. Stated formally,

Hypothesis 3: *Vertical collectivism reverses the proposed effect of anthropomorphism on price-quality judgments such that anthropomorphism enhances the price-quality judgments for vertical collectivists, but no such increase is seen for horizontal collectivists.*

Empirical Package

Study 1

In Study 1 (N = 119 US adults recruited from Prolific, M_{age} = 30.1 years, SD_{age} = 3.05, 58% female), we tested the focal effect using a two-condition (Anthropomorphism: present vs. control) between-subjects design such that in the anthropomorphism (vs. control) condition, participants saw four anthropomorphic (vs. non-anthropomorphic) products priced low to high. The price-quality judgment was found to be significantly lower in the anthropomorphic condition as compared to that in the non-anthropomorphism condition (M_{anthro} = 6.53, SD = 1.41; $M_{non-anthro}$ = 7.07, SD = 1.47; $F(1,117)$ = 4.13, p = .044, d = .37; H1).

Study 2

For Study 2 (N = 120 US adults recruited from Prolific, M_{age} = 30.7 years, SD_{age} = 3.26, 50% female), we followed a design similar to study 1, and in addition, we measured the salience of communal relationship norms in the context of interaction with the products using a seven-item scale adopted from Aggarwal (2004). Findings revealed that anthropomorphism reduced the extent of price-quality judgments (M_{anthro} = 6.52, SD = 1.79; $M_{non-anthro}$ = 7.14, SD = 1.26; F (1, 118) = 4.82, p = .030, d = .40). Mediation analyses (Hayes 2017, Model 4, 5,000 bootstraps) revealed that the salience of communal norms significantly mediated (indirect effect = .19, SE = .102, 95% CI [.02, .42]) the influence of anthropomorphism on the comparative quality evaluation (H2).

Study 3

Study 3 (N = 208 US adults recruited from Prolific, M_{age} = 30.5 years, SD_{age} = 3.28, 51.4% female), tested hypothesized reversal effect for vertical collectivist consumers as compared to horizontal collectivist consumers (H3). We used a 2 (product-type: anthropomorphic vs. non-anthropomorphic) x 2 (cultural orientation: vertical collectivist vs. horizontal collectivist) between-subjects design for this study. Results revealed that for the vertical collectivists, the price-quality judgments reversed such that for the anthropomorphic product-type, it was significantly higher than for the non-anthropomorphic product-type (M_{VC_anthro} = 5.12 vs. $M_{VC\_non-anthro}$ = 4.57, p = .037).

Study 4

The objective of Study 4 (N = 153 US adults recruited from Prolific, M_{age} = 31.5 years, SD_{age} = 4.01, 47.1% female) was to investigate the behavioral consequence of the influence of anthropomorphism on price-quality judgments in an incentive-compatible choice task involving monetary expenditure. The study used two conditions (product-type: anthropomorphic vs. non-anthropomorphic) between-subjects design. The results revealed that only 44.4% of participants

opted for the expensive variant for the anthropomorphic product-type, whereas 63.6% of the counterparts in the non-anthropomorphic condition did so (χ^2 (1) = 4.042, p = .044).

Contribution and Implications

Our findings have several important theoretical implications. First, we extend the price-quality judgment literature by showing that anthropomorphism moderates the price-quality inference. Next, we bridge the anthropomorphism and the relationship norms literature in identifying communal norm salience as the underlying process. Further, we significantly contribute to the cross-cultural consumer psychology literature in demonstrating how the consumers' cultural orientation moderates the influence of anthropomorphism on price-quality inference. While doing so, we also add to the body of work that studies the impact of anthropomorphism on consumer judgment and acts as a bridge between anthropomorphism, pricing, and cross-cultural consumer psychology literature.

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Too Ambiguous for an Algorithm? Anthropomorphic Design of an Algorithm-Based Recommendation Agent Increases the Recommendation Acceptance

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EXTENDED ABSTRACT

In the backdrop of burgeoning e-commerce and enabled by the rapid advances in artificial intelligence (AI) technologies, a host of product recommendation agents are now helping consumers search and choose products in the digital marketplace. In this research, we investigate if anthropomorphism enhances the consumers' likelihood of accepting the product recommendation from the algorithm-based recommendation agents.

Anthropomorphism involves imbuing non-human entities with human traits and abilities such as emotions, agency, etc. (Aggarwal & McGill, 2007). Prior research finds that consumers apply their naïve beliefs about human nature while understanding and predicting the behavior of these anthropomorphized entities (Wen Wan, Chen, & Jin 2017; Kwak, Puzakova, & Rocereto 2015). Extending this line of thought, we propose that consumers attribute the uniquely human ability of cognitive flexibility and the consequent ability of ambiguity processing to recommendation agents when they are anthropomorphized compared to when they are not. We define ambiguity processing as the ability to process ambiguous information to achieve desirable outcomes. As cognitive flexibility entails the ability to adapt cognitive processing in an unexpected condition, we argue that cognitive flexibility enables the effective processing of ambiguous information to achieve desired outcomes. In contrast, people characterize inanimate entities such as computers or machines as rigid and inflexible (Loughnan & Haslam, 2007; Montagu & Watson, 1983). Stated formally,

> *Hypothesis 1:* *Anthropomorphic design enhances the perceived ambiguity processing ability of the recommendation agents as compared to the non-anthropomorphic design*

Research exploring product recommendation acceptance behavior documents that consumers believe that an *apriori* knowledge of their requirements, attitudes, and preferences is essential for providing effective product recommendations (Duhan et al., 1997). In contrast, prior research examining perceptions about algorithms finds that consumers believe algorithms do not have the required knowledge about consumers' requirements, attitudes, and preferences (Longoni et al., 2019). In light of the above discrepancy between the knowledge required and the knowledge possessed, we posit that consumers will perceive providing a product recommendation as a task involving ambiguity for the recommendation agents and therefore expect the perceptions of ambiguity processing ability to enhance the perceived recommendation quality and consequently the acceptance of product recommendations provided by algorithm-based recommendation agents. Formally,

> *Hypothesis 2:* *Anthropomorphic design induced perceptions of ambiguity processing ability, increases perceived recommendation quality, which, in turn, increases the recommendation acceptance by consumers as compared to the non-anthropomorphic design of the agent.*

Empirical Package

Study 1

The objective of Study 1 (N = 201 US adults recruited from Prolific, M_{age} 30.4 years, SD = 3.3, 45.8% females) was to provide empirical support for the predicted effect of anthropomorphism on recommendation acceptance. The study employed a single factor (design: anthropomorphic vs. non-anthropomorphic) between-subject design. Post-exposure to the design manipulation, participants read a hypothetical scenario about seeking a recommendation for a restaurant from the focal recommendation agent. Results revealed that the participants in the anthropomorphic condition were significantly more likely to choose the restaurant suggested by the recommendation agent in the anthropomorphic condition (M_{anthro} = 5.38, SD = 1.10) as compared to those in the non-anthropomorphic condition ($M_{non-anthro}$ = 5.01, SD = 1.25, F (1, 199) = 4.641, p = .032).

Study 2

The goals of Study 2 (N = 160 US adults recruited from Prolific, M_{age} = 30.03 years, SD = 1.91, 53.8% females). This study aimed to test for the proposed mediation and rule out two important potential alternative accounts viz., the lack of focus on uniqueness and the inability to understand the process of recommendation. This study employed a single factor (agent-design: anthropomorphic vs. non-anthropomorphic) between-subjects design. Results showed that participants in the anthropomorphic condition (M_{anthro} = 4.45, SD = 1.09) rated the ambiguity processing ability of the recommendation agent to be significantly higher than the those in the non-anthropomorphic condition ($M_{non-anthro}$ = 4.04, SD = 1.04, F (1, 158) = 5.87, p = .017). Mediation analyses (Hayes 2017; Model 4, 5000 bootstraps) documented a significant indirect effect of anthropomorphic design via the ambiguity processing ability on recommendation acceptance (B = .16, SE = .07, 95% CI [.02, .33]). But the mediation by uniqueness focus and understanding recommendation process was found to be non-significant. The findings of this study provided evidence for the hypothesized effect of anthropomorphism on ambiguity processing ability (H1) and the mediation by ambiguity processing ability while ruling out the two alternative accounts.

Study 3

Study 3 (N = 139 US adults recruited from Prolific, M_{age} = 30.1 years, SD = 3.03, 44.6% females) aimed to provide empirical evidence for the complete underlying process by testing for the serial mediation by ambiguity processing ability and perceived recommendation quality. The study employed a two-condition between-subject design (agent-design: anthropomorphic vs. non-anthropomorphic. Similar to the findings of previous studies, participants in the anthropomorphic condition (M_{anthro} = 5.14, SD = 1.11) reported a significantly higher likelihood to accept the recommendation as compared to those in the non-anthropomorphic condition ($M_{non-anthro}$ = 4.72, SD = 1.16, F (1, 137) = 4.62, p = .033). Serial mediation analyses (Hayes 2017; Model 6, 5000 bootstraps) revealed a significant indirect effect of anthropomorphic design via the ambiguity processing ability and the perceived recommendation quality on recommendation acceptance (B = .18, SE = .09, 95% CI [.004, .36]). The findings of Study 3 provided empirical support for the complete mediation model (H2).

Contribution and Implications

Our findings make two fundamental contributions. First, we add directly to the research in anthropomorphism that explores the application of naïve theories about humans to anthropomorphized entities (Wen Wan, Chen, & Jin, 2017; Kwak, Puzakova, & Rocereto, 2015; Yang, Aggarwal, & McGill, 2019) by documenting ambiguity processing ability as a novel downstream consequence of anthropomorphic design. Second, we also contribute to the research on algorithm aversion (Castelo, Bos, & Lehmann, 2018; Longoni et al., 2019; Yeomans et al., 2019; Dietvorst et al., 2015; Diab et al., 2011; Onkal et al., 2009) by identifying ambiguity processing ability as one of the causes that might underlie the larger phenomenon of algorithm aversion.

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If Artificial Intelligence Kills Consumers? Decoding the Hot-Cold Organizational Dilemmas from Multivariate Neural Patterns

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EXTENDED ABSTRACT

Artificial intelligence (AI) has proven to offer tremendous benefits to many consumers and a nation at large. However, what if AI could kill consumers? For example, self-driving vehicles or surgery robots can kill consumers. With the growing AI applications in a gamut of business organizations, this question points out important yet philosophical aspects. As the capability of AI has pervaded into diverse business sectors, the future of AI is disputed having not only its moral concerns but also the possibilities of causing consumer fatalities. The challenge that our society is facing seems rather more philosophical than technical (Greene 2016). Whereas the need for embedding moral codes into algorithms has been much highlighted (Gill 2020; Martin 2019), there remains some philosophical challenges from the organizational leader's perspective. This research addresses this, which specifically pertains to leaders' dilemmas on whether to release such AI-embedded technologies for the sake of receiving the investment offer which can prevent firms' bankruptcy.

In many business cases, leaders often face organizational dilemmas that one has to transgress their moral values to acquire financial advantages in favor of the company. This trade-off consists of weighing certain motives to sustain moral principles against the opportunity of receiving the investment offer. An example includes that the startup leader might devote to pay respect for human lives, despite the fact the organization will face bankruptcy if it cannot receive the investment, while others might shift their focus on receiving the investment. At startup organizations, leaders often face such dilemmas, whereby deciding to release the AI technology (which can kill consumers) can be the only way to prevent bankruptcy and receive the investment. Yet, until now the underlying neural mechanisms of these individual differences in moral decision-making have remained poorly understudied.

Why do organizational leaders vary their immoral actions depending on the outcome of decisions (i.e. releasing AI technology which can kill consumers or cause their discomforts)? Herein, we developed the novel Hot-Cold Organizational Dilemmas, in which each participant evaluated a total of forty decisions on whether to accept the investment offer at the cost of causing consumers' deaths (Hot Dilemmas: HD) or insignificant discomforts (Cold Dilemmas: CD). Participants who acted as organizational leaders at startups, their brains were scanned with functional magnetic resonance imaging (fMRI) to identify multivariate neural patterns that dissociate the psychological processes of HD from CD.

In the MRI scanner, twenty-four participants were presented with forty HD-CD scenarios in random order, with each scenario varied regarding types of AI technologies ranging from self-driving cars, drones, medical AI, judge AI, and robots. In each scenario, they had to decide whether to release new technology which can kill consumers (HD) or simply cause algorithmic errors (CD) (*decision phase*). They then had to indicate whether they will accept any investment amount from the following six options: [None] [$1-2] [$2.1-4] [$4.1-6] [$6.1-8] [$8.1-10] million (*response phase*). They were instructed that one trial would be randomly selected, from the range of $0 to $10, making the task incentive-compatible. Submitting a price means that the participant is willing to accept the investment at cost of killing consumers or causing discomforts. This enabled us with a classification for deontology (do not accept the investment offer) and utilitarianism (accept the offer).

Primary data analyses included the behavioral and multivariate neural pattern results. On average, participants reported significantly higher numbers of counts of making deontological judgments (not accepting any investment offer) in HD (M = 12.83) than in CD (M = 3.58, $F(1, 23)$ = 49.378, p = .000, η^2 = .682). However, this significant difference varied substantially between participants. To further explore any possible scenario effect, the 2 (HD vs. CD) × 20 scenarios (or trials) repeated-measures ANOVA (analysis of variance) was also performed. There was no significant main effect of scenario types (p > .05) as well as the interaction effect between the two main effects. Moreover, the participants took significantly shorter response times in making judgments for the HD (M = 1.98) than they did for the CD (M = 2.18, $F(1, 23)$ = 10.675, p = .003, η^2 = .317).

Individual differences in proportional differences between dilemma types with the classification accuracy were observed by employing the support vector classifiers. First, during the *response phase*, we found a significant positive correlation between the classification accuracy and the proportional differences in deontology (HD-CD) in the ToM (r = .449, p = .028) and cognitive-control masks (r = .502, p = .013). We further found a significant positive correlation between the classification accuracy and the proportional differences in deontology in the left temporal pole (r = .482, p = .017) as well as in the left TPJ (r = .427, p = .037). Second, during the *decision phase*, we found a significant positive correlation between the classification accuracy and the proportional differences in deontology in the left inferior frontal gyrus (r = .452, p = .027) as well as in the left temporoparietal junction (TPJ) (r = .426, p = .038).

Our findings suggest that multivariate patterns in specific regions (i.e., temporal pole, TPJ, and IFG) within the both ToM and cognitive-control mask differentiate between proportional differences in deontology (HD-CD). The Will-Grace hypotheses (Abe & Greene 2014; Greene & Paxton 2009) further support these classification findings: ToM and cognitive control are both needed to make deontological judgments for HD and to make utilitarian judgments for HD. Consonant with Speer et al.'s (2020) propositions, the current results help to reconcile the Will-Grace conflict as cognitive control is not only required to be utilitarian in CD but also needed to be deontological in HD. We thus support that both ToM and cognitive control networks play different roles depending on dilemma types and individual variability.

Collectively, these insights can pave the effective way to develop a transparent and generalizable AI framework for organizational leaders, engineers, policymakers, and consumer researchers. This also has implications for AI-related consumption domains where potential consumers (adopters) need to be aware of *killing AIs* and select morally acceptable AI technologies.

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Be Precise or Round it up: How Roundness of Goals Influence Goal Attractiveness and Achievability Perceptions

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EXTENDED ABSTRACT

John (vs. Smith) is *489 (vs. 500)* loyalty points away from achieving the goal.

Intuition suggests that John has an easier goal than Smith. Literature on left digit salience (Thomas and Morwitz 2005; Manning and Sprott 2009) suggest additional reasons to support this intuition. This is consistent with the numerical cognition literature. Since, round (vs. non-round) numbers are typically used for large (vs. small) magnitudes (Thomas *et al.*2010), individuals imbibe a *"precise=small magnitude"* heuristic (Precision effect) (Thomas *et al.* 2010; Yan and Pena-Marin 2017). They judge non-round prices to be *smaller* than round prices of similar magnitude (Thomas, Simon and Kadiyali 2010; Thomas, Morwitz and Pyone 2010).

In the context of our example, we argue that Smith (needs 500 points), would find the goal to be more achievable, than John (needs 489 points).

Research on the fluency of round (vs. non-round) numbers shows that since round numbers are more frequently used (Rosch 1975; Coupland, 2011; Jansen & Pollmann, 2001), round (vs. non-round) numbers are more fluently processed (Kettle and Ha¨ubl 2010; King and Janiszewski 2011). Song and Schwarz (2008) have shown that cognitive disfluency of a task may be misattributed to difficulty in its implementation.

Hypothesis 1: *Non-round (vs. round) goals are perceived to be more (vs. less) difficult to achieve.*

Hypothesis 2: *Non-round (vs. round) goals lead to disfluent (vs. fluent) processing resulting in goals being inferred as more (vs. less) difficult to achieve.*

When individuals think about the effort required to do a single unit of the task, the effect of processing fluency of round goals diminishes, attenuating the effect of non-round (vs. round) goal frames.

Hypothesis 3: *Estimation of effort required per unit task moderates the relationship between the roundness of goal and goal progress perception such that when individuals estimate the amount of effort they are required to invest in doing a single unit of the task, the difference of perceived difficulty between round goals and non-round goals attenuates.*

When individuals focus on the process of attaining the goal (e.g., trying their best), the effect of non-round (vs. round) goal frames attenuate.

Hypothesis 4: *Focus on achieving the end goal (vs. intermediate process of attaining the goal)moderates the relationship between the roundness of goal and goal progress perception such that when the focus is on achieving the end goal, non-round (vs. round) goals will be perceived to be more difficult to achieve. In contrast, the difference between the perceived difficulty of non-round and round goals diminishes when the focus is on the intermediate process of attaining the goal.*

Nine studies validated our hypotheses, all of which were supported. Study 1(A&B) tests H1 in different contexts using a one-way between-subjects design with goal framing (round/non-round goal) as the independent variable. Study 1B included both odd-non-round and even-non-round goal conditions to demonstrate that round goals are considered more achievable than both odd-non-round and even-non-round goals. Study 2 tests H1 in a loyalty points programme context using a one-way between-subjects design. Study3 (A&B) demonstrates that the roundness of the goal influences goal perceptions even when people have already started working towards the goal – demonstrated in endowed progress and intermediate review scenarios. Study 4(A&B) tests H2 in non-marketing and marketing contexts, by showing that fluency of round numbers mediates the effect of roundness of goals on goal attractiveness and achievability perceptions. Study5 tests H3 using a 2 (Goal: Round vs. Non-round) x 2 (Effort per unit estimation: Yes vs. No) between-subjects design by showing that when people are not required to think about the effort it would take to do a single unit of the task, round goals are perceived less effortful than non-round goals but when people are asked to estimate the amount of effort required to do a single unit of the task, the difference between the perceived effortfulness of round and non-round goals attenuates. Study 6 tests H4 using a 2 (Goal: Round vs. Non-round) x 2 (Focus: End goal vs. Process) between-subjects design by showing that when people focus on the end goals, non-round goals are perceived more difficult than round goals but when people focus on the process to achieve the goal and thus when they do so, the difference between the perceived difficulty of round and non-round goals attenuates.

Conclusion

This research contributes to the extant literature on goal progress in multiple ways. The roundness of goal is identified as a novel factor influencing consumers' goal perceptions. Boundary conditions under which the roundness of goal ceases to influence the goal perceptions are demonstrated: estimation of the effort required to do single unit of the task and focusing on the process of attaining the goal. The roundness of the goal influences goal perceptions even when people have already started working towards the goal–demonstrated in endowed progress and intermediate review scenarios. This research may be helpful in setting motivating goals and effective loyalty programs.

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Fluency versus Arousal: The Interplay of Two Core Characteristics of Marketing Stimuli

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EXTENDED ABSTRACT

Designing marketing stimuli in a way that consumers can process them fluently is a powerful marketing strategy (e.g., Landwehr, Labroo, and Herrmann 2011; Landwehr, Wentzel, and Herrmann 2013; Lee and Labroo 2004; Schwarz et al. 2021). Importantly, however, fluency effects do not occur in a vacuum (e.g., Graf and Landwehr 2015, 2017). For a variety of reasons—regardless of whether due to marketing interventions or contextual factors—consumers may experience different levels of incidental arousal when processing marketing stimuli (e.g., Gorn, Pham, and Sin 2001; Kim, Park, and Schwarz 2010). In the present research, we investigate the hypothesis that heightened incidental arousal works as an attenuator of fluency-based effects on judgments because processing fluency and arousal are two conflicting experiential states. Specifically, we assume that because an elevated incidental arousal level is a signal of effort (Gellatly and Meyer 1982; Gendolla 1998), it is incompatible with high processing fluency (i.e., low effort; Alter and Oppenheimer 2009) and thus attenuates fluency effects. Arousal may inhibit fluency effects at two processual stages depending on how, respectively, when, people integrate their incidental arousal level as well as their fluency experience into their reaction toward the stimulus. In particular, arousal may either reduce people's fluency experience (i.e., fluency attenuation) or it may reduce the impact of the fluency experience on the subsequent judgment (i.e., response attenuation). Four pre-registered experimental studies on different fluency phenomena test the key proposition that arousal attenuates fluency effects and examine the stage in the process model where the moderation occurs (i.e., fluency attenuation vs. response attenuation).

Study 1 examines whether the mediating process via subjective fluency that produces the effect of color contrast of health claims (i.e., stimulus fluency) on the perceived truth of these claims (Graf, Mayer, and Landwehr 2018; Reber and Schwarz 1999) is moderated by arousal. Thus, it uses a 2 (visual color contrast: low vs. high) by 2 (arousal: low vs. high) mixed experimental design where color contrast of 16 health claims is manipulated within-subjects and arousal is manipulated between-subjects. In this study, as well as in Studies 2, 3A, and 3B, we manipulate arousal by showing participants a slideshow of 30 pictures either high or low in arousal (pictures are taken from the OASIS database; Kurdi, Lozano, and Banaji 2017). To test our conceptual model, we conduct a moderated mediation analysis according to Muller, Judd, and Yzerbyt (2005), which shows that subjective fluency mediates the effect of visual color contrast on the perceived truth of health claims and that arousal moderates this mediation such that people draw less on their fluency experience when making truth judgments under conditions of high arousal (i.e., response attenuation).

Study 2 uses a 2 (chair design exposure: 0 vs. 8) by 2 (arousal: low vs. high) mixed experimental design where exposure to 10 different chair designs is manipulated within-subjects and arousal is manipulated between-subjects. The results of a moderated mediation analysis show that arousal moderates the mediating process via fluency that underlies the repeated exposure effect (Landwehr, Golla, and Reber 2017). Specifically, arousal attenuates the influence of the fluency experience on liking (i.e., response attenuation).

Studies 3A and 3B investigate whether the mediating mechanism via processing fluency that intervenes between the manipulation of stock name pronounceability and the perceived safety of investing in the stocks (Alter and Oppenheimer 2006; Song and Schwarz 2009) depends on the level of incidental arousal. Study 3A applies a 2 (stock name pronounceability: low vs. high) by 2 (arousal: low vs. high) mixed experimental design where pronounceability of six stock names is manipulated within-subjects and arousal is manipulated between-subjects. The results of the moderated mediation analysis show that even though subjective fluency mediates the effect of pronounceability on perceived safety, the mediation is not moderated by arousal. Notably, these findings may be the result of the specific stimuli we used. Specifically, as proposed by Schwarz et al. (2021), the fluency effect of pronounceability manipulations on safety/risk judgments is sensitive to the employed stimuli. Indeed, stimulus level-based analyses show that for two out of the six stocks we used (Flinks and Beaulieaux) the pronounceability (fluency) manipulations of the stocks are not associated with their predicted safety/risk scores. Accordingly, we repeated Study 3A and replaced the two inappropriate stimuli for Study 3B. Using this adapted procedure, we find that, as in studies 1 and 2, the positive mediation via subjective fluency is reduced when people are in a state of elevated arousal, and that the interaction between fluency and arousal occurs in the latter stage of the mediating process such that arousal attenuates the influence of subjective fluency on perceived safety (i.e., response attenuation).

In sum, we find across three different fluency phenomena that the mechanism that translates manipulations of ease or difficulty via processing fluency into positive effects on judgments is reduced when consumers have been previously put into a state of high, as opposed to low, incidental arousal. More specifically, we find that arousal attenuates the partial effect of fluency on the resulting judgment (i.e., response attenuation). Our results provide important theoretical implications for the literature on arousal by showing that, in the context of fluency effects, arousal does not work as an amplifier but as an attenuator of the fluency-based evaluative response. With respect to processing fluency, our research introduces a novel boundary condition of fluency effects and extends the feelings-as-information framework (Schwarz 2012) by showing that people not only misread their fluency experience as being part of their reaction toward the stimulus but also their pre-existing incidental arousal level. From a managerial perspective, the current research suggests that in order to leverage the positive effects of fluent marketing stimuli optimally, they should be accompanied by marketing stimuli and/or contextual settings that are low in arousal.

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Exploring the Role Grandfathers Play in the Consumer Socialisation of Grandchildren

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EXTENDED ABSTRACT

This paper investigates the role grandfathers play in the consumer socialisation of children. Studies of consumer socialisation, exploring how children acquire the skills needed to function in the marketplace (Ward, 1974), more usually concentrate on parents' voices and socialisation efforts within the family setting (Kerrane and Hogg, 2013), largely dependent on the adoption of one of a variety of *family communication patterns* (Carlson et al., 1994) and *parenting styles* (Carlson and Grossbart, 1988). Together, these concepts affect the quality of children's socialisation experiences within the family environ (Bao et al., 2007). However, given changes in family life (e.g. the rise of dual-income families, women's greater participation in the labour force, rising divorce rates), grandparents play increasingly visible roles in raising contemporary children. Within the United Kingdom, the site of our study, grandparents spend on average 8 hours per week looking after their grandchildren (Buchanan and Rotkirch, 2018) – findings which are similar across Europe (Di Gessa et al., 2016) and other countries, such as the US (Laughlin, 2013) and China (Ban et al., 2017).

We choose to explore grandfatherhood as: (1) study of the consumption behaviours of individuals heading towards the latter stages of the lifecourse is surprisingly limited (Barnhart and Penaloza, 2013); (2) there is a paucity of research that explicitly investigates grand*father*hood (Mann, 2007); and (3) because the transition to grandfatherhood offers men opportunity to contest and challenge hegemonic masculinity and traditional breadwinner norms (Sorenson and Cooper, 2010) in favour of a more supportive and involved style of intensive grandparenting.

Seventeen grandfathers from the UK were invited to participate in an in-depth interview covering their grandfather experiences. Participants were aged between 58 and 76 years old, having grandchildren aged between 5-17 years. For men of this age group, work had been central to their identity – and they were likely excluded from occupations surrounding caring work (Sorensen and Cooper, 2010). Interviews began by asking grandfathers to discuss their life, both past and present, including key life events/milestones and daily activities/routines (Godefroit-Winkel et al., 2019), before discussing experiences of becoming and being a grandfather. Participants were asked about the everyday nature of their relationship with their grandchildren, how they socialized with their grandchildren, if/how these relationships shaped their consumption, and how these relationships and practices affected their relationship with their adult children.

Our findings reveal reflexive attempts at intergenerational repair. The men made comparisons with their previous life course subjectivities, notably fathering. The grandfather role that the men wanted to perform was often held in sharp contrast to the "*classic breadwinner*" model of fatherhood that they had largely adopted with their own children. For many, this brought a desire for intergenerational repair (Tuffin, Rouch and Frewin, 2010) with the grandfathers highly reflexive of "*the many mistakes*" they felt they had made during their own children's upbringing (manifest by their reported "*absence*" during early childhood.) Consumer goods acted as important transitional objects (see Winnicott, 1953) that participants enrolled to help perform grandfatherhood. Items like sports balls, boardgames and bicycles took on special significance for the men, offering props to help structure grandfather/child time in a way they did not when their own children were young.

However, despite the hands-on grandfatherhood we report, hegemonic masculine values endured. For many of the grandfathers, particularly those who had retired, sport and outdoor activities emerged as particularly gendered pastimes that they were keen to pursue with their grandchildren. Competitive spirit, aggression and a "*take no prisoners*" mentality was imparted from grandfather to grandchild during 'doing' activities (with the weakness of an aging body concealed from children). Grandfathers were also found to dilute/contest parental socialization efforts (e.g. looking after their grandchildren "*on my terms*" in ways which parents felt jeopardized the safety of their child; or undermined parental intentions e.g. buying children items their parents would not/or items parents were encouraging their children to save for).

While we see shifts in hegemonic masculinity (away from breadwinner models of fatherhood in favor of more hands-on grandfatherhood), the legacy of hegemony permeates the grandfather/grandchild dyad in several ways. First, the objects the men used to facilitate their transition to grandfatherhood (e.g. the bike, the ball) are traditional, codified-masculine, goods (offering comfort and stability in a largely new world of care). Whereas these items remained unused by the men with their own children, ghostly objects in earlier family history, they were played with and used as tool to bond with grandchildren. Second, although intensive grandfatherhood was obvious, it was (again, in a highly masculine way) on the men's terms/following their rules – which has important consequences for consumer socialization. The men could support parental socialization efforts, but more usual was the contestation of parental work (subverting parents' best efforts, usually as consequence of the men thinking they knew what was best for their grandchildren/how to make their grandfather workload lighter). This highly gendered reading sheds greater light on existing familial consumer socialization research which largely focuses on parental socialization effort within the family. Such literature fails to both explore 'other' agents which likely play a key role in the lives of contemporary children/socialization itself, but also the ways in which the process of socialization can be disrupted or diluted by 'other' agents, simultaneously.

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Effects of Influencer Endorsement of Instagram Ads on Brand Attitudes, WOM Intentions, and Purchase Intentions

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EXTENDED ABSTRACT

Many firms nowadays are relying on social media influencers to develop brand equity and enhance customers' purchase intentions. Existing research evidence shows that social media influencers can positively affect the behaviors of followers (e.g., Hughes, Swaminathan, & Brooks, 2019). However, our understanding about the role and impact of digital influencer endorsement is still very limited (Torres, Augusto, & Matos, 2019).

In this paper, we aim to contribute to the current literature in two ways. First, we present a novel experimental test of influencer endorsement of Instagram ads in a real setting, involving real influencers, ads, and followers. Marketers pay for ad exposure in the Instagram feed of famous Influencers. Sometimes, the influencers endorse these ads. The question addressed here is whether such endorsements increase the effect of Instagram ads. We focus on an industry where social media influencers are particularly important: the food industry (Demarest, 2020). Second, we examine whether consumer-influencer identification in this context moderates the effects of influencer endorsement. Previous research has shown that followers tend to accept messages from social media influencers who are perceived to be more similar to themselves (e.g., Balabanis & Chatzopoulou, 2019). Furthermore, we propose that the effects of this interaction on customers' attitudes and behavioral intentions occur through a not yet explored mediator: source credibility.

In Study 1, we recruited in total 132 participants (95.5% female, M_{age} = 25-34 years old) through the Instagram account of an influencer (a food blogger with more than 16,000 followers at the moment of data collection). The large ratio of female participants in our sample reflects the true distribution of gender in the population of total followers. The participants were randomly assigned to one of the two conditions: with vs. without influencer endorsement. The endorsement of the influencer was manipulated by adding a short, separate line: "Reklame | innlegg i samarbeid med [brand name]" in Norwegian, which means "Advertisement | in collaboration with [brand name]," before the main text of the advertisement. In both conditions, participants were exposed to identical text of the advertisement with the same picture of a new breakfast (and snack) food. To test our model, we ran a structural equation model (SEM) with the robust maximum likelihood (MLR) estimator using Mplus version 8.0 (Muthén & Muthén, 1998-2017). Our confirmatory factor analysis (CFA) and SEM model both yielded adequate global fit indices. Both convergence and discriminant validity are achieved. Our results show that compared to the non-endorsement condition, people exposed to influencer endorsement had higher scores of attitudes toward the ad ($M_{influencer}$ = 3.72, M_{firm} = 3.62, p = .09), attitudes toward the brand ($M_{influencer}$ = 3.57, M_{firm} = 3.49, p = .06), purchase intentions ($M_{influencer}$ = 3.16, M_{firm} = 3.01, p = .05), and WOM intentions ($M_{influencer}$ = 2.95, M_{firm} = 2.77, p = .05). Further, influencer endorsement had a positive effect on source credibility (b = .25, p = .04), while source credibility exerted positive effects on attitudes toward the ad (b = .39, p = .01), attitudes toward the brand (b = .30, p < .01), purchase intentions (b = .54, p < .01), and WOM intentions (b = .68, p < .01). The total indirect effects of influencer endorsement on consumers' attitudes and behavioral intentions through source credibility were all positive and (marginally) significant (indirect effect on attitudes toward the ad: b = .10, p = .09; on attitudes toward the brand: b = .08,

p = .06; on purchase intentions: b = .15, p = .05; on WOM intentions: b = .17, p = .05). Thus, we conclude that source credibility significantly mediates the effects of influencer endorsement on consumers' attitudes and behavioral intentions.

In Study 2, we recruited a total of 585 participants (99% female, M_{age} = 25-34 years old) through the Instagram of another influencer. This influencer is also a food blogger in Norway with approximately 113,000 followers (at the moment of data collection). Similarly, the participants were randomly assigned to one of the two conditions: with vs. without influencer endorsement. The manipulation of influencer endorsement was similar to that of Study 1. We added two questions to measure consumer-influencer identification. We used the latent moderated structural equations (LMS) method to test the interaction effect between influencer endorsement and consumer-influencer identification (Klein & Moosbrugger, 2000). Our results show that the interaction between influencer endorsement and consumer-influencer identification exerted a positive effect on source credibility (b = .20, p = .03) while the main, direct effect of influencer endorsement on source credibility is also positive and significant (b = .23, p < .01). Furthermore, the positive effect of influencer endorsement on source credibility was reinforced (b = .36, p < .01) when consumers' perceived identification with the influencer is high (i.e., 1 standard deviation (SD) above the mean). When their identification with the influencer is low (i.e., 1SD below the mean), the positive effect of influencer endorsement was reduced and became insignificant (b = .09, p = .26).

In summary, we find that influencer endorsement is indeed an effective way to enhance the effectiveness of advertisements in Instagram feeds. Specifically, the adoption of influencer endorsement would lead to more favorable attitudes toward the ad, the brand, and stronger intentions to purchase and engage in WOM activities. In addition, we also find that source credibility mediates these effects of influencer endorsement: consumers exposed to an ad with influencer endorsement consider the information source more credible than without such endorsement, and higher level of source credibility in turn leads to more positive consumers' attitudes and behavioral intentions. Finally, we prove that the effect of influencer endorsement on source credibility is stronger (weaker) when consumers' perceived identification with the influencer is high (low). Future research might extend our study by testing the model in other contexts such as the entertainment and video games or fashion and beauty industries.

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DeepMind: Leveraging Deep Learning to Classify and Interpret Mind Perception in Smart Objects from Unstructured Text

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EXTENDED ABSTRACT

Perceiving a mind in others is paramount to navigating the world around us. A theory of mind, defined as the attribution and understanding of internal mental states in another entity, is the hallmark of our social cognitive skills, enabling everyday interactions and coordination with others (Goldstein and Winner 2012). The proliferation of AI-enabled smart objects that appear and "behave" increasingly more human-like raises fundamental questions about the role and impact of mind perception in the consumer technology landscape. Recent research on smart object relationships suggests that consumers may form different types of relationships with such objects (Hoffman and Novak 2018; Novak and Hoffman 2018). While some consumers perceive such objects merely as a medium to complete a task, others tend to attribute more human mental states to them, affecting downstream consumer experiences and behavior (Schweitzer et al. 2019; Waytz, Heafner, and Epley 2014; Yang, Aggarwal, and McGill 2020). However, there are limited means to identify the extent of such mind attributions and uncover the emerging formation of distinct consumer-object relationships.

While previous marketing research has successfully employed text analysis for a variety of applications, such as uncovering consumer sentiments (see Berger et al. 2020; Hartmann et al. 2019; Humphreys and Wang 2018 for reviews), no off-the-shelf dictionary (e.g., LIWC, Pennebaker et al. 2015) or alternative text classifier exists to classify the extent of mind perception. Furthermore, compared to traditional text classification tasks, identifying the extent of mind perception from unsolicited reviews is challenging due to the absence of a theory-based mapping of mind perception dimensions and text objects, as well as the subtlety of its signals.

Following recent calls for multi-method approaches and natural language processing (Berger et al. 2020; Schmitt et al. 2021), this research proposes a novel approach to theory development and methodology using unstructured, user-generated text, leveraging the power of deep contextual language models for automated text analysis. Based on a large-scale panel (N=2500, M_{age} = 35.3; 57.4% female) of smart speaker users, in Study 1 we fine-tune and train a RoBERTa language model (Liu et al. 2019). We demonstrate the accurate prediction of mind perception in customer reviews, benchmarking it against traditional text classification methods (random forest, LIWC dictionary). We call this model "DeepMind". Next, we leverage manifold methods to "white box" our DeepMind language model (Rai 2020) and provide a rich set of interpretable linguistic features signaling higher mind perception in customer reviews. Using a multi-method text interpretation approach that employs LDA topic modelling, Lasso regression, and individual term frequency comparisons, we find that high mind perception reviews are characterized by a stronger personification of the smart speaker as well as containing terms that are characteristic of a more communal relationship.

Study 2 aims at establishing ecological validity for our mind perception classifier, DeepMind, by applying it to a large set of unsolicited, smart speaker customer reviews (20k) scraped from a major online review site (amazon.com). To validate the linguistic features of mind perception we leverage LIME (Local Interpretable Model-agnostic Explanations), a recently developed algorithm designed to explain classification predictions by approximating them locally with an interpretable model (Ribeiro, Singh, and Guestrin 2016). Supporting our previous findings, we find that terms related to personification (e.g. "she" and "her") and a more communal relationship (e.g. "family") have a strong impact on predicting high mind perception in customer reviews. This demonstrates how combining a RoBERTa-based classifier with a local interpretable algorithm such as LIME can provide rich insights into linguistic features linked to an underlying psychological mechanism such as mind perception.

The key objective of Study 3 is to demonstrate generalizability of DeepMind by applying it to a completely different category of smart objects (smart vacuum cleaners) and shows that the language model is not only able to correctly identify and generalize linguistic features of mind perception to a novel category of smart objects, but that greater mind perception in these reviews is significantly associated with the same linguistic features as identified in Study 2 for smart speakers.

To the best of our knowledge, this is the first research developing a state-of-the-art deep learning classifier to unobtrusively detect mind perception in smart objects from user-generated text data and leveraging manifold methods to extract and interpret linguistic features of mind perception. The findings of this research highlight the power of deep contextual language models to detect more nuanced variations in text as compared to other classification methods or mere evaluations of consumer sentiment. This research contributes to and extends prior work in marketing, highlighting the importance of automated text analysis to uncover novel behavioral insight (Berger et al. 2020; Humphreys and Wang 2018). Furthermore, the findings of this research contribute to the emerging research on consumer-smart object relationships (Hoffman and Novak 2018; Novak and Hoffman 2019) and technology-augmented choice (Melumad et al. 2020)

The words consumers write provide an unexplored window into their subjective interaction experiences. The current research develops a novel method using deep learning and interpretable machine learning that sheds light onto the nature of these experiences. We hope that the current methodological approach also opens up new avenues in consumer research to leverage the nuanced insights that can be revealed from the systematic analysis of unstructured, user-generated text using deep neural networks and interpretable machine learning.

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Let the Weak Lead the Strong: Low-Income Benefactors Motivate Others to Give

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EXTENDED ABSTRACT

Charities often share donor stories in the hope of motivating others to donate (e.g., Fidelity Charitable n.d.). Although consumers generally expect wealthier people to donate more (e.g., Ames, Flynn, & Weber, 2004), little is known about whether such behavior motivates others to donate. We propose that donations from a low-income benefactor elicit greater generosity than one from a high-income benefactor. We further suggest that this effect is driven by perceived altruistic motivations, which enhances feelings of moral elevation (i.e., a warm, uplifting feeling people experience after observing others' human kindness and goodness; Haidt 2000). Research shows that low-income versus high-income donors are perceived as having more altruistic motivations. For instance, Yuan, Wu, and Kou (2018) showed that low-income versus high-income benefactors are perceived as having greater prosocial reputations (e.g., generous, noble). We hypothesize that a benefactor's perceived altruism will lead observers to experience a greater level of moral elevation. Feelings of moral elevation have been shown to enhance consumers' willingness to help others (e.g., Algoe and Haidt 2009). Thus, individuals who see a low-income (vs. high-income) donor should subsequently be more willing to emulate the benefactor's helping behavior by donating.

Across four experiments, we test the following hypotheses:

Hypothesis 1: *Consumers will donate more money after observing a low-income (vs. high-income) benefactor donating to the same charity.*

Hypothesis 2.: *Observing donation behavior of a low-income (vs. high-income) benefactor will lead consumers to experience a greater level of moral elevation.*

Hypothesis 3A.: *The relationship between benefactor income and donations is mediated by feelings of moral elevation among observers.*

Hypothesis 3B.: *The relationship between benefactor income and donations is serially mediated by the perceived motivation of the benefactor (M1) and moral elevation (M2) experienced among observers.*

We further suggest that observers' donation behavior in response to a low-income versus high-income benefactor depends on the benefactor's personal connection with the charity. On average, high-income benefactors tend to be seen as more selfish and less altruistic (Yuan et al. 2018). Thus, when information about the benefactor's personal connection to the charity is present (vs. absent), observers may perceive the high-income benefactor's motives as relatively more altruistic, and hence experience greater moral elevation and subsequently donate more.

Hypothesis 4.: *The effect of benefactor income on donations is moderated by personal connection such that the income effect is attenuated when the benefactor's personal connection is present (vs. absent).*

We test our hypotheses in four experiments. Experiment 1A test H1-H3A. Undergraduate students (N = 258) read a scenario about a benefactor who was portrayed as either high-income, middle-income, or low-income. Results revealed a significant main effect of benefactor income on donation likelihood ($F(2, 255) = 10.27$, $p < .001$). Participants were more likely to donate after seeing a low-income benefactor giving than a middle-income benefactor ($p < .001$) or a high-income benefactor ($p = .002$); the latter two conditions did not differ ($p = .19$). There is a significant main effect of benefactor income on moral elevation revealed ($F(2, 255) = 10.02$, $p < .001$, $\eta_p^2 = .07$). Participants reported experiencing higher levels of moral elevation after seeing a low-income benefactor giving than a middle-income ($p = .007$) or high-income ($p < .001$) benefactor. A PROCESS model (model 4; Hayes 2019) revealed significant indirect effects of benefactor income on donation likelihood via moral elevation (low-income vs. middle-income: 95% CI: .096, .572; low-income vs. high-income: 95% CI: -.837, -.260). This study results support H1-H3A.

Experiment 1B (N=209) includes a control condition where the benefactor's is not specified. Results indicated a main effect of income on donation likelihood ($F(3, 205) = 2.63$, $p = .05$). Participants were more likely to donate in response to a low-income benefactor than a middle-income benefactor ($p = .01$), a high-income benefactor ($p = .02$), or a benefactor with unspecified income ($p = .06$). The latter three conditions did not differ (all $ps > .52$). A similar pattern of effects was found for donation amount. Results also revealed a significant main effect of benefactor income on moral elevation ($F(3, 205) = 6.13$, $p = .001$). Participants experienced higher levels of moral elevation in response to a low-income benefactor than a middle-income benefactor, a high-income benefactor, or a benefactor with unspecified income (all $ps < .02$). No difference was found between any other conditions (all $ps > .13$). Mediation analyses using the Process model revealed significant indirect effects of moral elevation (low-income vs. middle-income: 95% CI: -.165, -.275; low-income vs. high-income: 95% CI: -.702, -.184; low-income vs. control: 95% CI: .115, .976).

Experiment 2 examines the serial mediation presented in H3B. Undergraduate students (N=168) read a scenario about a benefactor who was described as either being low-income or high-income using. Consistently, results indicated a main effect of income on both donation likelihood ($F(1, 166) = 6.25$, $p = .013$) and donation amount ($F(1, 166) = 10.32$, $p = .002$). Participants were more likely to donate/donated more in response to a low-income versus high-income benefactor. Serial mediation models using benefactor income as the predictor, perceived motivation of the benefactor (M1) and the level of moral elevation observers experience (M2) as serial mediators (model 6; Hayes 2019) were significant for both donation likelihood (95% CI: -.537, -.180) and donation amount (95% CI: -1.493, -.422).

Experiment 3 (preregistered) tests H4. MTurk participants (N = 404) were randomly assigned to one condition in a 2 (benefactor income: high vs. low) × 2 (benefactor personal connection: present vs. absent) between-subject design. Results on donation likelihood showed no interaction ($p = .86$) but only a main effect of benefactor income ($F(1, 400) = 5.44$, $p = .02$), such that observing a low (vs. high) income benefactor donating led to greater donation likelihood. For donation amount, results showed a significant interaction ($F(1,

400) = 4.00, p = .046), and a main effect of benefactor income (F(1, 400) = 8.76, p = .003). Consistent with H4, when benefactor personal connection was absent, people donated more money after observing a low (vs. high) income benefactor donating ($p < .001$). No donation amount difference was found when benefactor personal connection was present (p = .50). A moderated serial mediation analyses (model 85; Hayes 2019) using perceived benefactor motivation as the first mediator, moral elevation as the second mediator, and benefactor personal connection as the moderator was significant (95% CI: .002, .030).

Taken together, we show that a low income (vs. high) benefactor is more effective in eliciting donations among observers. The effect is driven by the perceived altruistic motivation of the benefactor and the level of moral elevation experienced among the observers. We further demonstrate that this effect can be attenuated by presenting information about the benefactor's personal connection with the cause. We contribute to research on moral elevation, build upon work examining moral judgments and provide insights to charities about what type of benefactor they should feature in motivating others to donate.

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Cleaning with Dustin Bieber: Nicknaming Autonomous Products and the Evolving Relationship with New Technologies

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EXTENDED ABSTRACT

Advances in artificial intelligence and robotics permit today's products to become increasingly autonomous, taking over various consumer tasks and making decisions on their own. The rise of these autonomous products (APs) has translated into new forms of relationships. Products are seen as *collaborators* complementing human skills, as *competitors* substituting human skills, or as *coopetitors* combining both aspects. Since APs possess human-like characteristics, the desire to personify and personalize them evokes more easily compared to conventional products. One way this manifests is by the increased use of nicknames for APs. Consumers discuss online what nickname to choose for their new device (SmarmysPiza 2019) and verbally integrate APs into their social lives by referring to them by their nickname. An analysis of consumer-created Tweets shows that whereas only 1% of Tweets include a nickname for traditional vacuum cleaners, 12% do so for robotic ones. On the company side, several firms such as Husqvarna and iRobot already support the use of nicknames for APs. They highlight nicknames in their communication and provide an option to assign a nickname in their mobile applications. Despite these unequivocal trends, it is unclear how nicknaming influences consumers' perception and use of APs.

Drawing on consumer behavior literature on APs, psychology literature on nicknames in a social context, and findings from organizational management research on coopetition, we propose that, in specific consumer-product relationships giving a nickname can help to regain control over autonomous products, which in turn increases their evaluation. Our theorizing is based on social response theory assuming that people spontaneously apply the same social heuristics used for human interactions to technologies because they possess similar social characteristics (Nass and Moon 2000; Nass et al. 1995). Based on Zhang and Patrick's (2018) definition of brand nicknames, we conceptualize product nicknames as consumer-created substitutes for formal product names, such as "Dustin Bieber" for a robotic vacuum cleaner (Mirani 2020). Psychology literature on nicknames in interpersonal relationships finds that nicknames can emphasize individuality or belonging to a group (Bruess and Pearson 1993). Thus, we expect that the use of nicknames (vs. no nicknames) leads to higher evaluations of APs. As, in social contexts, close relationships are associated with mitigated uncertainties and perceptions of a collective responsibility, we further suggest that the positive effect of using nicknames on evaluation of APs is mediated by perceived control. Moreover, we theorize the effects to depend on the specific consumer-product relationship. Interpersonal relationships are commonly described as cooperative, competitive, or a combination of both, that is, "coopetitive" (Deutsch 1949). According to previous research, coopetition in a social context and between firms is associated with positive effects, such as intrinsic motivation or performance, and it may outperform sole competition or cooperation (Park and Russo 1996; Tauer and Harackiewicz 2004). Combining prior research, we argue that the provision of a nickname might augment team-perception and collaboration in coopetitive settings. Consequently, we assume that nicknaming can foster cooperation as well as motivation in coopetitive environments and lead to a higher feeling of control. Namely, we predict that the positive effect of using nicknames on perceived control over APs is moderated by coopetition in that coopetitive settings enhance the effect.

We tested our predictions across three studies using different samples and study designs (N = 9,577). In study 1, we conducted a large field study with actual customers in collaboration with a distributor of a smart kitchen device. We showed that customers evaluate APs differently when using a nickname for them. 33% of customers used a nickname for their smart kitchen device. Customers using nicknames were more satisfied with their smart kitchen device and used the product more often compared to users that did not use a nickname. In addition, the interaction with the product was described as more collaborative when using a nickname. Next, study 2 experimentally manipulated nicknaming. The study employed a between-subjects design with random assignment to two conditions (nicknaming: yes vs. no) describing the use of a robotic vacuum cleaner. After the manipulation, we measured usage intention and perceived control. We recruited participants through Amazon Mechanical Turk. Participants in the nickname condition were more likely to use the product and perceived to have more control when they created a nickname. Furthermore, a mediation analysis supported the proposed mediation of the positive effect of using nicknames on evaluation via perceived control. Finally, study 3 experimentally manipulated nicknaming a robotic vacuum cleaner and the relationship consumers have with their APs. Participants recruited on Prolific were randomly assigned to one condition of a 2 (nicknaming: yes vs. no) × 3 (relationship: coopetition vs. collaboration vs. control) between-participants design. After the manipulation, we measured product evaluation, perceived control, and perceived collaboration. While in the collaboration and control conditions, nicknaming did not have a statistically significant effect, in the coopetition condition nicknaming lead to higher product evaluations. As expected, perceived collaboration did not differ across the collaboration and coopetition condition. Conclusively, we ran moderated mediation analyses to test our proposed conceptual framework. The results supported the notion that nicknaming APs affects product evaluation via perceived control when experiencing coopetition.

The current research investigates the increasing practice of assigning nicknames to APs in the context of evolving relationships between humans and technology. Overall, our studies demonstrated that using nicknames for APs leads to an increase in perceived control, which in turn increases the evaluation of the product. However, we only found such effects in coopetitive settings, where consumers perceive the AP as a "friendly competitor" that challenges them but still provides a feeling of collaboration. We argue that nicknaming APs can offer an effective counter to the feeling of loss of control that is commonly triggered by product autonomy (de Bellis and Johar 2020; Jörling et al. 2019; Puntoni et al. 2021). We conclude that depending on product category (as some products may be perceived as more collaborative or competitive in general) and context, encouraging the use of nicknames can be a valuable measure for practitioners.

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Creatives' Brand Attitudes Affect the Type of Ads They Produce

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EXTENDED ABSTRACT

Consumers and professional creatives often produce creative work for brands, such as new product designs or TV commercials. Several factors influence the production of marketing materials, such as creative managers' leadership style (Mallia, Windels, and Broyles 2013) or the level of collaboration between client and agency (Calderwood, Koslow, and Sasser 2021). However, research has overlooked the impact of creatives' brand attitudes on the outcome of their work. Advertising creatives are consumers themselves; what distinguishes them from other consumers is that brands are also the object of their work.

We investigate how creatives' brand attitudes affect the type of advertisements that creatives produce for a brand. Specifically, we propose that creatives who have negative brand attitudes are more likely to produce functional advertisements, appealing to rationality, and less likely to produce emotional ads, appealing to emotions (Aaker and Norris 1982; Holbrook and Batra 1987; Zarantonello, Jedidi, and Schmitt 2013). We propose that this happens because individuals who dislike a brand believe that their attitudes have a negative impact on their work and that they try to correct for this perceived bias by staying rational and suppressing their emotions. This, in turn, inadvertently spills over onto their creative output. We tested these predictions in four studies, in laboratory and field contexts. All studies were preregistered, except study 2.

In study 1, 201 participants (M_{age} =33.98, SD =12.38; 22.39% male, Prolific) wrote a TV commercial script for their most liked or most disliked fast-food restaurant brand. In this and all other studies, scripts were coded as containing functional (1 = Yes, 0 = No) and emotional elements (1 = Yes, 0 = No), by independent coders (studies 1-2) or the first author (study 4). Participants who worked for a disliked brand were less likely to produce an emotional ad (B = -.490, $\chi^2(1) = 2.715$, $p = .099$) and more likely to produce a functional ad (B = .512, $\chi^2(1) = 2.962$, $p = .085$), as compared to participants who liked their brand. Given the practical importance of our research question, we investigated it in a more consequential context in study 2. Ninety-eight professional creatives (M_{age} = 32.22, SD = 7.45; 59.2% male) from 18 advertising agencies wrote a TV commercial script for their most liked and most disliked brand in counterbalanced order. We found that negative brand attitudes decreased the likelihood of writing emotional ads (B = -.816, $\chi^2(1) = 4.568$, $p = .033$;) and increased the likelihood of writing functional ads (B = .946, $\chi^2(1)$ = 10.375, $p = .001$). Study 3 provided evidence in line with our proposed mechanism. Two hundred eight participants (M_{age} =35.52, SD =11.94; 31.3% male) imagined producing a script for a brand they liked or disliked. Consistent with our hypothesis, participants who imagined working for a brand they disliked (vs. liked) were more likely to believe that their attitudes would have a negative impact on their work, rather than positive (B = 6.013, $\chi^2(1) = 31.923$, $p < .001$) or null (B = 2.584, $\chi^2(1) = 5.870$, $p = .015$). Moreover, participants who disliked (vs. liked) the brand rated staying rational ($t(182)$ = 4.54, $p < .001$) and suppressing emotions ($t(184)$ = 8.46, $p < .001$) as more important strategies to produce a good commercial ($t(161)$ = -7.615, $p < .01$). Finally, in study 4, we addressed the alternative explanation that individuals who like a brand might simply have more positive emotions to express about it as compared to people who dislike a brand. The latter might have fewer positive emotions (or none), and therefore include less emotional content in their scripts. In study 4, 190 participants (M_{age} = 35.4, SD = 13.60; 30.5% male, Prolific) were randomly assigned to a positive, neutral, or negative brand attitudes condition (between subjects). In each condition, participants read a fictitious brand description inducing the intended brand attitudes and wrote a TV commercial for this brand. Negative brand attitudes reduced the likelihood to create an emotional ad, as compared to positive (B = -.820, $\chi^2(1) = 4.835$, $p = .028$) and neutral brand attitudes (B = -.876, $\chi^2(1) = 5.071$, $p = .024$). The likelihood to create an emotional ad was similar between the positive and neutral brand attitudes conditions ($p = .888$). Moreover, negative brand attitudes increased the likelihood to create a functional ad, as compared to positive brand attitudes (B = .629, $\chi^2(1) = 2.993$, p = .084) and neutral brand attitudes (B = .633, $\chi^2(1) = 2.848$, $p = .09$). Participants in the positive and neutral brand attitudes conditions were equally likely to write a functional ad (B = -.004, $\chi^2(1) = 0.000$, $p = .991$). This pattern of results is inconsistent with the alternative explanation that the mere presence or absence of emotions drives the previously observed effects. Indeed, creatives with positive brand attitudes do not include more emotional content in their ad compared to participants with neutral attitudes. Instead, these results are consistent with our proposed mechanism, driven by negative attitudes.

From a theoretical standpoint, we contribute to the advertising literature because we are the first to demonstrate how creatives' brand attitudes affect the type of advertisement that creatives produce. We also contribute insights to the literature on creativity by proposing novel psychological processes involved in projects that creatives dislike. From a practical standpoint, this research challenges the intuitive idea that creatives' negative brand attitudes might affect ad performance negatively (Kover 1995; Phillips, McQuarrie, and Griffin 2014). In fact, choosing a creative that dislikes the brand can be beneficial in situations in which functional ads outperform emotional ads (Chandy, et. al. 2001; Guitart and Stremersch 2021).

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"Dream, Love and Cuteness": How Markets Fuel a Diminishing "Girl Culture"

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EXTENDED ABSTRACT

Since the Weinstein scandal in 2017, feminist movements have become so popular that they encouraged brands to change their practices. Several things have improved over the past few years: overpricing women's items (a phenomenon known as "pink tax") or objectifying women in advertising have become scarce, and immediately condemned on social media. The children's toys French market is emblematic of this turning point, with the adoption of a charter in 2019, in which brands and retailers signed commitments to end gender stereotypes in product design, promotion and merchandising. We can only welcome these advances, but they should not let us forget that the road to gender equality is still long. Beyond advertising or pricing, Gendered Segmentation (GS) remains common practice, and by relying on stereotypes, it tends to maintain an artificial dichotomy between genders.

In line with feminist sociologist Andrée Michel (1986), we distinguish two kinds of sexisms: explicit and implicit sexism. Explicit sexism refers to clearly unequal or demeaning situations (e.g. an advertisement for vacuum cleaners on Mother's Day). Such sexism is visible and usually quickly condemned. Implicit sexism is more insidious and contributes to a gendered culture that has impacts on several aspects of social life, including self-identity, educational and career aspirations, or leisure activities. In this research, we aim to address this implicit sexism by describing the less visible but still demeaning components of the girl culture conveyed by the Market through GS.

The marketing literature has a long but discrete tradition with gender. Researchers have studied gender to show how men and women react differently to marketing cues (*e.g.* Dahl, Sengupta & Vohs, 2009), to understand life experiences of males and females as consumers (*e.g.* Hutton, 2015) or to criticize gender inequalities produced by the market (*e.g.* Fine & Rush, 2018). Recently, special issues in marketing journals (Journal of Macromarketing (40), 2020; Journal of Consumer Research, 2021) have brought to light the gender field in marketing research and we expect it to grow in the future. Despite this growing interest, the way GS conveys a gendered culture that offers less opportunities for girls than for boys has not been studied by marketing academics. That is the gap we aim to fill with this research.

Since gender identity is mostly constructed during childhood (e.g. Martin, Ruble & Szkrybalo, 2002), we studied two gender-segmented markets dedicated to children aged 6-8 years old: books and clothes. We show that, on both markets, GS relies on stereotyped themes, and that, through texts and images, a diminishing "Girl Culture" is being communicated to children.

To grab the "Girl Culture" and its main characteristics, we built a corpus of products offered by the two major French actors (Kiabi and Hachette), selected not only for their leadership, but also because they practice gendered segmentation. A corpus of book summaries on the one hand and of tee-shirts with a text message on the other hand was constituted and submitted to text-analysis. In the publishing market, we selected two gendered collections by Hachette: "My First Pink Library[1]" (PL) (for girls) and "My First Green Library[2]" (GL) (for boys), targeting 6 to 8 readers. We gathered 55 abstracts from the publisher's website (31 for PL and 24 for GL). In the clothing market, we selected the market leader Kiabi (Xerfi, 2020) and collected all tee-shirts that included a text message from its website. By doing so, we reached a total of 96 girls' tee-shirts and 123 boys' tee-shirts for 3 to 12 years old children. We first ran lexical analyses on the textual data using dedicated software: Iramuteq and Tropes. We then conducted an exploratory content analysis on the T-shirts, in order to analyze texts in their context, and take images and symbols into consideration.

Results are consistent on both markets. We highlight the content of a girl culture in which physical appearance, emotions and fantasy are encouraged. Unlike boys, the messages conveyed to girls do not appeal to strength or competition but to beauty through the lexical field of Physical Appearance. Girls are described as "Little", "Pretty" or "Beautiful", and so are their activities, animals and companions. In addition, girls are invited to spread love, smile and happiness and we can see the importance of emotions and sensitivity in girlhood. Finally, girl culture is a culture of dream and fantasy, where unicorns, magic and fairy tales are omnipresent.

This culture is problematic because it is diminishing in contrast to the themes communicated to boys. When girls are encouraged to be superficial, dreamy and lazy, boys are represented as super-heroes, invited to discover, conquer, protect and save the world. This leads to two very different perspectives: narrow and superficial opportunities for girls, ambitious, dominant and socially rewarded ones for boys.

Clothing is a way to define and communicate one's social identity to others (Feinberg, Mataro et Burroughs, 1992; McNeill et McKay, 2016) and through a focus on appearance, it can influence gender identity development in childhood (Halim et al., 2014, 2018). Books are also significant vectors of gender identity construction (Brugeilles, Cromer and Cromer, 2002). As "sacred" objects, they are rarely criticized even if they frequently convey stereotyped representations of genders (e.g. Brugeilles, Cromer and Cromer 2002; Epiphane, 2007). Our analysis shows that stereotypes are omnipresent on these two markets. The girl culture communicated on everyday consumer products tends to reduce girls to their cuteness, feelings and emotions, but also to an imaginary world far from reality. To increase external validity, it would be interesting to extend the analysis to other publishing and clothing brands, as well as to other markets. To reinforce internal validity, it would be necessary to go further in the content analysis and especially in the text/image articulation. Finally, the appropriation of this Girl culture and its consequences should be studied.

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The Role of Perceived Risk and Device Type in Online Crowdfunding Decisions

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EXTENDED ABSTRACT

Background & Literature Review

Online investing platforms (e.g., Robinhood) have grown quickly over the past few years, with online crowdfunding channels having also become popular investment options (Forbes, 2020). Many of those services are available exclusively through mobile apps and websites, and investors' overall service experiences are thus likely to differ as their devices often vary from PCs to smartphones. However, whether and how different devices affect investors' behavior remains largely unknown. To address these gaps, we examine whether device type a influences investors' perceived risk and willingness to invest (WTI) in different online investment conditions.

Risk-taking tendencies often depend on emotional sensitivity (Blekher *et al.*, 2019), and devices with a larger screen evoke stronger emotional responses such as increased excitement (Reeves *et al.*, 2000) and more positive attitudes (Nayler and Sanchez, 2018) toward content displayed. Thus, PCs, of which the average screen size is significantly larger than that of smartphones, may also amplify the level of an individual's perceived risk regarding investment information (H1). Additionally, since perceived risk negatively affects consumers' judgments such as investment options (Mrkva *et al.*, 2020), we propose that using a PC (vs. smartphone) indirectly influences WTI through stronger perceived risk, resulting in lower WTI (H2).

Psychological distance may also play a role in device effects on investment. Previous research has asserted that consumers' perceived psychological distance (e.g., temporal or social distance) should be considered to assess risks accurately (Raue et al., 2015). For instance, temporal distance, such as a delayed investment payoff, leads to stronger perceived risks (Okada and Hoch, 2004), and social distance also has negative effects on consumers' spending decisions (Trope et al., 2007). Thus, we propose that temporal (H3a) and social (H3b) distance from an investment target will amplify the negative indirect effect of H2.

Studies

Method

Three experimental studies were conducted. In Study 1 (*n*=166; men: 58%; age 18–34: 63%), we focused on testing H1 and H2 using a one-way (device type: PC/tablet/ smartphone) between-subjects design. In Studies 2 (*n*=164; men: 68%; age 18–34: 54%) and 3 (*n*=160; men: 65%; age 18–34: 47%), the role of temporal (H3a) and social (H3b) distances was tested in addition to H1 and H2, using a 2(device type: PC/smartphone) × 2 (psychological distance: close/ distant) between-subjects design.

Participants in the studies were randomly assigned to one of the conditions. They read an investment scenario and evaluated their investment interest in a fictitious crowdfunding project (i.e., Studies 1 and 2: face mask projects; Study 3: restaurant projects). In Study 2, temporal distance varied by adjusting return schedules, and social distance in Study 3 varied by the type of restaurant (close: a burger restaurant; distant: a halal food cart). Device identification codes were embedded in the survey to automatically detect and filter device type.

Based on the scenario, participants answered questions on (1) perceived risk (1=not risky at all, 7=very risky; Raghubir and Das, 2010); (2) WTI (1=strongly disagree, 7=strongly agree; α=.88) using a modified scale based on the existing scales (Yang *et al.*, 2019, Baker and Churchill, 1977); (3) perceived temporal distance (1=not very long/soon, 7 very long/soon; α=.70) on a modified scale based on Liberman *et al.* (2007); (4) perceived social distance (1=very close, 7=very distant; α=.89) using the measure based on Kim *et al.*(2008); and (5) demographics.

Results

Study 1. Neither temporal (F(2,163)=.51, p=.60) nor social distances (F(2,163)=2.13, p=.12) significantly differed by device type, hence were controlled. A mediation analysis was conducted using PROCESS macros (Model 4; 50,000 bootstrap samples; Hayes, 2018). We found a negative indirect effect of device type (X: 1=PC; 2=tablet; 0=smartphone) on WTI (Y) through perceived risk (M), and the difference was significant only between PCs and smartphones (b=-.18, 95%CI[-.40, -.02]). The direct effect of PCs was reversed, resulting in higher WTI (b=.66, p=.005).

Study 2. Temporal distance was manipulated successfully (F(1,162)=34.67, p<.0001). The results from PROCESS Model 4 (50,000 bootstrap samples; Hayes, 2018) showed that the proposed indirect effect (H2) of device type (X: 1=PC; 0=smartphone) was significant when temporal distance was controlled for (b=-.10, 95%CI[-.23,-.01]), supporting H2. However, similar to Study 1, controlling for perceived risk, the direct effect of using a PC was reversed, resulting in higher WTI (b=.58, p=.002). A separate analysis (Model 15; 50,000 bootstrap samples) showed that the negative indirect effect of device type (1=PC; 0=smartphone) on WTI was significant in the temporally-distant condition only, supporting H3a.

Study 3. Social distance was successfully manipulated (F(1,158)=39, p<0001). The proposed indirect effect was consistent with that in Studies 1 and 2; the same model used in Study 2 revealed the effect of H2 was consistent when social distance was controlled (b=-.14, 95%CI[-.30,-.005]). However, controlling for perceived risk, the direct effect of PCs was again reversed, leading to higher WTI (b=.71, p=.0004), suggesting an important role of perceived risk. A separate analysis (Model 15; 5,000 bootstrap samples) indicates a similar negative indirect effect, which was significant only in the socially-distant condition, supporting H3b.

General Discussion and Implications

This study presents several theoretical implications. The study is the first to present empirical evidence that device type is a potential cue in online investment environments that affects perceived risk and influences final investment decisions. The findings expand the area of device effect research, which was limited to the effects of device features (screen size; input mode) and non-investment contexts. Our findings also highlight the important role of perceived risk in online investment processes. When risks were involved, PCs led to lower WTI through stronger perceived risks, but when the risks were controlled for, the negative effect was reversed, resulting in higher WTI. These reverse effects imply that using a PC may not always result in lower WTI if the level of risks is controlled for.

Moreover, the findings suggest that crowdfunding investment services should actively monitor their customers' device type condition to optimize business outcomes. However, as the studies were limited to crowdfunding settings, examining field data from different investment services (e.g., stocks, crowdfunding) may add more insights to the findings.

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Craving for Density: Residential Mobility Increases Consumer Preference for Color Satiation

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EXTENDED ABSTRACT

With the rapid development of the economy and society, moving has become an essential part of consumer life all over the world (Oishi and Talhelm, 2012). Research has examined how residential mobility affects individuals' self-concept (Oishi, Lun, and Sherman, 2007), their friendship selection (Lun et al., 2012), choices of social networks (Oishi et al., 2013), and civic participation (Kang and Kwak, 2003). However, little is known about how residential mobility might systematically alter consumers' aesthetic preferences.

To answer this question and fill the research void, our research identifies color saturation as an important aesthetic dimension in product choices and documents that residential mobility fundamentally increases consumer preferences for high color saturation in product choices. Specifically, frequent movers always worry about their friendships (Oishi et al., 2013), concern about their income stability (Anam et al., 2008), wonder whether they can get social support (Lun et al., 2012) and are unsure about whom they can trust (Yuan et al., 2021). All these make residential mobility induce a strong sense of uncertainty (Yu et al., 2020; Yuan et al., 2021), which has been provided to be an indicator of lack of personal control (e.g., DiFonzo and Bordia, 2002, etc.). According to compensatory control theory (Kay et al., 2009), consumers often seek to restore perceived control when their sense of control is threatened. Extant research has shown that highly saturated color increases the perceived size of objects (Hagtvedt and Brasel, 2017) and super-sized items are often associated with greater control (Taylor, Noseworthy, and Pancer, 2019) and power (Dubois, Rucker, and Galinsky, 2012). Further, Batra and Ghoshal (2017) find that participants who experience self-threat prefer more saturated colors and this high-intensity sensory consumption has a self-restorative effect. Taken together, we propose that products with high color saturation can serve as a means to compensate for one's lack of control derived from residential mobility.

More formally, we hypothesize that:

Hypothesis 1: *Residential mobility increases consumer preferences for color saturation.*

Hypothesis 2: *Sense of control mediates the effect of residential mobility on consumer preferences for color saturation.*

Across four studies, the present research tests the central premise that residential mobility influences color saturation preference, and explores the underlying mechanism.

Study 1 aimed to provide preliminary evidence that as residential mobility increased, consumers preferred the products with high color saturation more. 109 new university students participated in this study. Participants first indicated how many cities they had lived in before attending the university (Lun et al., 2012). Then, they were asked to indicate their preference for four pairs of products (i.e., computer, mug, luggage, bag; one with relatively high color saturation and the other with relatively low color saturation). Results showed that as participants' residential mobility increased, their preference for high color saturation became stronger ($b = .35$, $t(107) = 2.10$, $p = .039$).

Study 2 aimed to examine the causal relationship between residential mobility and consumers' preference for color saturation. 188 MTurk workers participated. Participants were first randomly assigned to the three experimental conditions: baseline control vs. residential stability vs. residential mobility. They were asked to completed a "simulation task" which was used to manipulate their perceived residential mobility (Lun, Oishi, and Tenney 2012; Oishi et al., 2012). Similar to Study 1, participants then indicated their preference for six pairs of products. Planned contrast showed that participants in residential mobility condition preferred products with high saturation more ($M = 4.79$, $SD = 1.52$) than those in both the residential stability condition ($M = 4.17$, $SD = 1.47$, $t(185) = 2.43$, $p = .016$, $d = .41$) and the control condition ($M = 4.23$, $SD = 1.40$, $t(185) = 2.08$, $p = .038$, $d = .38$). There was no difference between the residential stability condition and the control condition ($t(185) = .23$, $p = .819$, $d = .04$).

In Study 3 we attempted to prove our mechanism that residential mobility reduced consumers' sense of control, which leaded consumers to prefer products with high color saturation. 122 university students participated. Participants were first randomly assigned to two experimental conditions: residential stability vs. residential mobility. The manipulation of mobility was identical to Study 2. Then, they answered several questions in which sense of control (Cutright and Samper 2014) was measured. Afterwards, participants were asked to indicate their preference for three pairs of products. We found the mean indirect effect was positive and significant ($a \times b = .25$ $(.14)$, 95% CI $[.001, .56]$). Residential mobility had a negative effect on sense of control ($a = -.90 (.19)$; $t(120) = -4.69$, $p < .001$; 95% CI $[-1.28, -.52]$), and sense of control negatively predicted preference for product with high color saturation ($b = -.28 (.13)$, $t(119) = -2.20$, $p = .030$; 95% CI $[-.53, -.03]$).

Study 4 attempted to provide further test for the underlying mechanism by manipulating participants' sense of control. 246 university students participated. The study employed a 2 (sense of control: neutral condition vs. boosting condition) × 2 (mobility: residential mobility vs. residential stability) between-subjects design. First, participants either wrote about their daily life (neutral condition) or a time when they felt that they were in complete control (boosting condition). Then, they received the same residential mobility manipulation from Study 2 and 3. After that, participants indicated their product preference. Planned contrasts showed that, in the control condition, residential mobility increased preference for high color saturation ($M_{residential-mobility} = 4.09$, $SD = 1.39$; $M_{residential-stability} = 3.58$, $SD = 1.27$; $t(242) = 2.07$, $p = .040$, $d = .38$). However, when participants' sense of control was pre-boosted, there was no significant difference between the residential mobility and residential stability conditions.

Taken together, these studies provide consistent and convincing evidence that residential mobility reduces individuals' sense of control, which increases their preferences for color saturation in product choices. Our research not only enriches research on residential mobility, color saturation, compensatory control and aesthetic preferences, but also give suggestions to managers that they should consciously identify markets with high residential mobility and customize products with high color saturation for them to achieve higher sales.

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Alexa, I Want to Do Good: The Role of Voice Assistants in Encouraging Greater Prosocial Behavior

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EXTENDED ABSTRACT

Given the widespread adoption of voice shopping (i.e., shopping using a digital assistant), firms have already started to acknowledge the importance of understanding and managing the customer experience with these devices (Grewal, Roggeveen, & Nordfält 2017). However, only a nascent stream of research has focused on exploring the impact of voice shopping (Munz and Moriwtz, 2019; Dellaert et al., 2020). In contrast to prior work that focused on information processing affecting consumers' purchase journey, we focus on the social cognitive implications of voice assistants as "interaction partners" in a shopping process.

Research has shown that voice assistants with AI-powered technologies are perceived by many users to be social agents with agentic capabilities, mental states, and intentions (Shang et al., 2012). Work in the domain of social presence has shown that the mere presence of others (real or imagined) make consumers to act in accordance with social norms (i.e. acts or behaviors which is considered as appropriate or correct by the society at large, Xu, Mehta and Kelly, 2019) or even affect consumers' purchase behaviors (Dahl, Manchanda and Argo, 2001). Building on these work, we propose that, the agentic and anthropomorphic qualities of the voice assistants have a similar effect of serving as social "others" to their users which activates social norms related to pro-social choices.

In sum, we propose that using voice assistants for shopping evokes perception of social presence which makes social norms salient. Consequently, consumers utilizing a voice assistant for shopping (vs. shopping online using a computer) would be more likely to exhibit pro-social behavior with regards to their purchase and consumption choices. We test our prediction across three studies.

In Study 1, AMT Participants (N=242) were randomly assigned to one of the two different device conditions (voice assistant or computer) through which they could place the order. At the end of the ordering process, all participants were asked to indicate if they would like to add a tip amount (on a 0-100 percentage scale). Afterwards the perception of social presence and social norm was measured on a 9-point scale (1= Strongly Disagree, 9=Strongly Agree). A one-way ANOVA on the amount of tip percentage indicated that participants ordering food using the voice assistant tipped significantly higher percentage than those ordering online using a computer ($M_{\text{voice-assistant}}$ = 12.05, SD = 8.59 vs, M_{computer}= 9.89, SD = 8.64; F (1, 241) = 3.83; p = .05). A mediation analysis using Hayes' (2018) PROCESS macro revealed the expected serial mediation path (Voice assistant → Greater Social Presence → Increased Social Norm → Increased Tipping Behavior) at the 95% confidence interval (CI) (a × b = .71, 95% CI: .30,1.24).

Study 2 examined the impact of using a voice assistant (vs. shopping online using a computer) on the willingness to donate to a charitable cause via rounding up to the nearest dollar during the check-out process. Similar to Study 1, participants who utilized a voice assistant for ordering groceries indicated significantly higher likelihood to donate (i.e., by rounding-up to the nearest dollar) than those ordering online using a computer (M_{computer} = 4.15, SD = 2.39 vs $M_{\text{voice-assistant}}$ = 5.12, SD = 2.15; F (1, 134) = 6.28; p = .01). There was also a significant serial mediation (Voice assistant → Greater Social Presence → Increased Social Norm → Higher willingness to donate) at the 95% confidence interval (CI) (a × b = .28, 95% CI: .11, .53)

Study 3 (N=155 AMT participants) used a brand choice trade-off context where participants were placed in a shopping scenario and asked to make a choice between a brand which was expensive but related to a charitable cause versus a brand which had a price promotion and hence cheaper in comparison. The study utilized a 2 (device used for shopping: voice assistant vs. computer) X 2 (norm reminder: present vs absent) between-subjects design. In the "*Norm reminder: present*" condition, along with the ordering process, participants were explicitly reminded of the fact that donating to a cause is a social norm. This information was not given in the "*Norm reminder: absent*" condition. Towards the end of the grocery shopping process, all participants were asked to indicate the brand they would like to purchase on a 9-point scale item (1=Definitely the one with a price discount of 20%; 9= Definitely the one which donates 20% to the charity). A 2 X 2 ANOVA revealed a significant main effect of the source (F (1, 194) = 6.52, p < .012) and a significant interaction between the source and norm reminder (F (1, 194) = 4.86, p < .029). Consistent with our predictions in the *norm reminder absent condition,* participants who utilized a voice assistant for shopping (vs. using a computer) were more likely to choose the brand that contributed to a cause ($M_{\text{voice-assistant}}$ = 5.41, SD = 3.27 vs, M_{computer} = 3.38, SD = 2.69; p < .006). As predicted, in the social *norm reminder present* condition, however, there was no significant difference in the preference of the brand chosen by participants ($M_{\text{voice-assistant}} =$ 5.14, SD = 3.01 vs. $M_{\text{computer}=}$ 5, SD = 2.88; p < .99).

Implications

In this paper we highlight the novel consequences of the interaction with voice-based smart devices (e.g., Amazon Alexa, Apple Siri, Google Assistant, etc.). This research is among the first to empirically document a "bright side" in the form of subsequent pro-social and charitable behaviors. The possibility that smart devices evoke prosocial shopping norms and behavior represents a powerful societal benefit of their adoption that has not been previously recognized, with potentially profound implications for the cause-related marketing, retail design, and customer journeys.

NOTE:

References are available upon request.

How Attentional Overload Affects Consumer Preferences

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EXTENDED ABSTRACT

The current work uncovers how subtle attentional cues in retail settings can affect shoppers' purchase decisions. When shoppers buy durable products online, they are often prompted to buy accessories, such as an extended warranty, along with them. We show that merely presenting a warranty decision on a separate screen (vs. the same screen along with the durable) can make shoppers more likely to buy the warranty. We propose that presenting the warranty decision on a separate screen reduces attentional overload, which in turn increases the purchase of accessories. We label this as the *attentional overload effect* and posit that when the main and the accessory product are presented on the same screen, attentional overload reduces shoppers' focus on accessory purchase decisions by screening them out.

In the consumer decision-making process, Mormann et al. (2020) characterize the relationship between attention and choice in four stages: awareness, screening, evaluation, and choice execution. When our attention is overloaded, we filter out less important information (Treisman 1964). By reducing attentional overload, shoppers are prevented from screening out accessory purchase decisions. One way to reduce attentional overload is to present the accessory decision on a separate screen from the focal product decision. Across six laboratory experiments and one archival analysis, we show that merely presenting an accessory decision on a separate screen can increase accessory purchase propensity.

We first identified this attentional overload effect in Study 1 ($n = 599$), where we manipulated in a 2x2 between-subjects design the presentation screen (same screen vs. separate screen) of an accessory product offer and the type of accessory product (protection plan vs. stylus pen) in a hypothetical shopping task for a tablet. We found a significant main effect of presentation screen such that presenting the accessory decision on a separate screen increases its purchase propensity, regardless of the type of accessory ($b = .98$, $p < .001$). Furthermore, using response times as a proxy for attention, we found that log response time mediated the effect of the presentation screen on accessory purchase propensity ($a \times b = .14$, 95% CI = [.06, .24]). Study 1B ($n = 578$) followed up this study by ruling out the possibility that any information increases attentional overload and demonstrated that this effect occurs even in the presence of a distracting advertisement on the separate screen ($b = .53$, $p < .05$).

In study 2A ($n = 900$), we tested the proposed underlying mechanism of attention more directly in a 2x2 between-subjects design manipulating shoppers' beliefs about the importance of the warranty decision (control vs. important) in addition to the presentation screen (same screen vs. separate screen). We expected that giving instructions highlighting the importance of the warranty decision would increase attentional focus to the warranty and thus purchase propensity in the same screen condition, but less so in the separate screen condition. Results indicated that the interaction between presentation screen and decision importance was significant ($b = -.67$, $p < .05$). Giving an importance instruction about the warranty increased warranty purchase propensity to a greater extent in the same screen condition (control = 18%, instruct = 37%, $b = .99$, $p < .001$) than in the separate screen condition (control = 40%, instruct = 48%, $b = .33$, $p = .09$).

Study 2B ($n = 562$) further examined the role of attention by introducing another moderator, a decline button or a rejection-framed response, in a 2 (presentation screen: same vs. separate) x 2 (decline button: absent vs. present) between-subjects design. Prior literature has shown that a rejection-framed option increases deliberation (Sokolova and Krishna 2016). Our prediction was that adding a decline button would increase attentional focus to the warranty decision and therefore increase warranty purchase propensity in the same screen condition, but less so in the separate screen condition. As expected, there was a significant interaction effect ($b = -1.01$, $p < .05$). Adding a decline button increased warranty purchase propensity in the same screen condition (absent = 17%, present = 31%, $b = .76$, $p < .01$) but did not increase purchase propensity in the separate screen condition (absent = 32%, present = 27%).

In studies 3A and 3B, we identified two boundary conditions for the attentional overload. First, Study 3A ($n = 229$) revealed that the attentional overload effect does not occur for products that are unrelated to the goal of purchasing the focal product (e.g. a Polaroid camera offer when deciding to buy a tablet). Second, Study 3B ($n = 418$) investigated the attentional overload effect in a consequential and non-shopping paradigm – a charity donation context. A significant interaction effect was found for presentation screen and familiarity ($b = .25$, $p < .05$). Floodlight analysis (Spiller et al. 2013) revealed that only for high familiarity individuals did presentation screen increase donation propensity.

Finally, Study 4 investigated how purchase setting, a proxy for attentional overload, affects real-world behaviors. According to our theorization, attentional overload of the warranty decision should be higher in online settings compared to brick-and-mortar settings, and therefore sales of warranty should be lower in online versus brick-and-mortar settings. We obtained archival data collected from a club store in a particular state of the U.S. and analyzed transaction-level sales of three durable product categories (TVs, cameras, and tablets) along with any concomitant warranty purchases. In total, we had 257,073 transactions made by 207,053 customers. Consistent with our prediction, warranty sales were lower in online than in brick-and-mortar settings (in-store: 17%, online: 6%; $b = -.98$, $p < .001$).

Critically, this research builds on previous literature in attentional models of choice (Krajbich et al. 2012) by elucidating the bi-directional relationship between attention and choice in a consumer domain. Typically, when the outcome of the choice matters, we pay more attention to the choice. However, we show the reverse association also holds true – when we pay more attention to choice options, that option is chosen. The current work also has important practical implications. We show why separating out secondary purchase decisions using pop-up windows are effective in increasing accessory sales.

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Can Markets Be Caring?

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EXTENDED ABSTRACT

Care, defined as logics and practices of *maintenance, cultivation and repair of our "'world' so that we can live in it as well as possible"* (Tronto and Fisher 1990, 40), is increasingly provided through markets, whereas the relative prominence of other sources of care provision, such as families/households, communities/neighbourhoods and government, is declining. Accordingly, a substantial body of inter-disciplinary research (e.g., Skeggs 2014; Tronto 2013; Mol 2008; Sandel 2013; The Care Collective 2020) cautions that market norms and logics are incompatible with care values. In this conceptual paper, we draw from our expertise in consumption, markets, and marketing to revisit this premise. We ask, can markets ever be caring, and if so under which conditions? We build upon Tronto's (2013) distinguishing between "caring for", "caring about" and "caring with" logics to review existing marketing and consumer research, and to explore and map out markets' capacity to/for care in each of these three domains. In doing so we also distinguish between mainstream versus alternative market logics.

Caring for refers to "someone or some group notic[ing] unmet caring needs" (Tronto 2013, 22). Care, here, involves looking after the physical and emotional needs of others, and is primarily understood as a hands-on, often dyadic, care giving practice. This type of care occurs often in families or between friends but can also occur in self-care. It is largely seen as incompatible with market logics. For instance, Hochschild's (2003; 2013) work on outsourcing domestic care work doubts the market's capacity to effectively address the care gap at home. On the other hand, research has shown that under certain conditions, market and caring logics may not be incompatible. Marcoux (2009) for example, has shown how some consumers prefer the sense of control and anonymity offered by professional moving companies as opposed to feelings of indebtedness that are common when asking a friend to help.

Caring about has to do with attending to and recognizing specific care needs but not taking direct responsibility in terms of hands-on care provision (Tronto and Fisher 1990). Within consumption, this means making market choices that indirectly enhance the wellbeing of other people, communities, and the planet. An archetypal example would be caring about producers in the global South by buying Fair Trade products or donating in relevant forums (e.g., Hawkins 2018). Yet, many critics argue that caring at a distance is not enough as, somewhat paradoxically, it may work at reproducing individualism rather than a genuine sense of care and interdependence. For example, Chatzidakis, Maclaran and Bradshaw (2021) identify how more radical consumers are averse to mainstream forms of sustainable and Fair-Trade consumerism and prefer instead to participate in small-scale initiatives that directly link them with politically minded producers.

Caring with addresses the more societal and political aspects of care, or in other words how institutions and infrastructures of care provision can be effectively democratized (Tronto 2013). From a consumption perspective, a key concern is access, ownership, and accountability in the provision of "public goods" (Visconti et al. 2010) or items of "collective" consumption (Castells 1977), including health, education, housing but also motorways, parks, and community libraries among others (see Peck et al. 2021). Numerous social critics argue that state-funded models of collective care provision as superior to marketized ones (e.g. Fraser 2016). Research within UK higher education, for instance, has shown how marketization has led to the cultivation of more explicitly consumerist and choice-driven demands and attitudes (Tomlinson 2015). As a result, students are torn between shared commitments or obligations and instrumental concerns (Ibid.).

Alternative market logics. Yet, as mentioned earlier, not all markets are driven by logics of maximised capital accumulation and fierce competition. Markets can be collaborative and mutually supportive, with consumers, retailers, and producers working together to produce positive community outcomes (e.g. Lee, Ozanne and Hill 1999; Weinberger and Wallendorf 2012). Some of these markets do have the capacity to be more democratic, accountable to stakeholders, and to defend common resources (Peck et al. 2021). Platform cooperativism, for example, has emerged within the sharing economy as a way for platform participants to share profits, rather than utilizing gig workers who are typically exploited within sharing economy systems (Schor 2020). However, alternative markets can also be romanticized in terms of their ability to converge market with care-oriented values and logics. For instance, alternative markets are more commonly based on ideas of solidarity and (physical or virtual) community bonding that may not extend to everyone either because of their ability to participate in them or because of potential ingroup-outgroup boundary markers. In the solidarity economies of Exarcheia, Athens for instance, "mainstream" consumers were not always welcomed (Chatzidakis, Maclaran and Varman 2021).

From this analysis, we argue that the relationship between market and care logics can be much more nuanced and multi-faceted than assumed in prior research and introduce propositions to guide future research in this arena. We identify three key dimensions that directly affect the compatibility of mainstream markets with care logics: expectations of (nonmarket) reciprocity and interdependence; existence of asymmetrical vulnerabilities and social-environmental externalities; and centrality of instrumental motives. We also identify moderating dimensions such as need for anonymity and social distance, need for empathy and emotional attentiveness.

Our contribution is four-fold. First, we contribute to an inter-disciplinary debate on the (in)compatibility between market and care logics (e.g., Skeggs 2014; Tronto 2013; Mol 2008; Sandel 2013; The Care Collective 2020) by adding further nuance. Second, we advance research on 'care in consumption' by integrating previously separate research streams (e.g. on familial consumption, environmental consumption, sharing, self-care, and sustainable/ethical consumption) (McInnis 2011). Third, we develop a framework that considers the conditions that enhance or limit the extent to which markets can effectively serve current care needs for our society and the planet. Finally, we offer a series of implications and useful avenues for future research via the propositions.

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Don't Show the Price Too Early: How (and When) Uncertainty Improves Perceived Price Fairness

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EXTENDED ABSTRACT

Consumers often see a hidden price and need to engage in an action to reveal it (e.g., "Click here to see the price," "See the price in cart," etc.). Will consumers perceive the same price differently if it is first hidden and then revealed than if it is presented directly? We propose that first hiding a price and then revealing it (vs. directly showing a price) can create uncertainty about the price (i.e., price uncertainty), which in turn, can increase perceived price fairness and purchase likelihood.

Our proposition is based on three streams of literature. First, consumers are aversive to information gaps (i.e., not knowing) and are motivated to reduce an information gap by searching or mentally constructing the missing information (e.g., guessing what the missing information might be; Loewenstein 1994). Hence, we argue that when the price is hidden, consumers tend to predict what the price will be.

Second, prior research suggests that when facing possible negative outcomes, people often "brace for the worst" to reduce potential disappointment when the outcome is realized (Sweeny and Cavanaugh 2012). Since price is usually associated with psychological losses and pain (Rick, Cryder, and Loewenstein 2008; Thaler 1985) and thus often seen as a negative outcome, we further argue that consumers confronting a hidden price tend to cope with price uncertainty by expecting a higher/worse price.

Finally, the literature on price fairness suggests that consumers evaluate the fairness of an offered price by comparing it against their expected price (Kalyanaram and Winer 1995; Monroe 1990), and a smaller difference (i.e., offered price minus expected price) results in a higher level of perceived price fairness (Winer 1988). Consequently, a higher expected price, resulting from price uncertainty, will make the offered price look fairer.

Hypothesis 1: *Price uncertainty (vs. certainty) will increase perceived fairness of the offered price.*

Hypothesis 2: *An increase in the expected price drives the positive effect of price uncertainty on perceived price fairness.*

Furthermore, price is often, but not always, interpreted as a negative outcome. For example, if the context suggests that a price is being hidden because it is too good to be openly disclosed, as in sales events, then consumers may brace for the best and lower their expected price. As a result, in these situations, price uncertainty will reduce the expected price, enlarge the difference between the offered price and the expected price, and make the offered price look less fair.

Hypothesis 3: *The effect in H1 will be reversed when contextual information suggests the price is favorable and encourages people to expect the best.*

Study 1 ($N = 82$ students) tested both the positive effect of price uncertainty on perceived price fairness (H1) and the mediation effect of expected price (H2), using a two-cell (price uncertainty: certain vs. uncertain) between-subjects design. Participants imagined that they were living in an apartment for $600 per month, and needed to decide whether to renew the lease for next year. Those in the certain condition read that their monthly rent next year would be $650, while those in the uncertain condition clicked on a button to log in to the resident portal, waited for six seconds on a loading page, and then saw the monthly rent next year ($650). As predicted, participants in the uncertain condition perceived the $650 monthly rent to be fairer (3.95 vs. 2.93; $F(1, 80) = 8.63$, $p = .004$), because they expected a higher rent next year before seeing the actual rent ($635.72 vs. $607.21; $F(1, 80) = 6.96$, $p = .010$; 95% CI = [.01, .32]).

Study 2 ($N = 296$ Prolific workers) replicated the results of Study 1 in a different product domain (face masks to protect against COVID-19) and found price uncertainty increased purchase intention (45% vs. 36%; $\chi^2(1) = 2.90$, $p = .089$).

Study 3 ($N = 394$ MTurk workers) tested H3 and used a 2 (price uncertainty: certain vs. uncertain) × 2 (discount: present vs. absent) between-subjects design. We created an online shopping scenario where participants were searching for a pair of sunglasses. Those in the discount-present condition learned that there was a 50% discount on a pair of sunglasses, while those in the discount-absent condition did not learn this information. Then, all participants saw a picture of a pair of sunglasses. Similar to our previous studies, price uncertainty was manipulated by revealing the (discounted) price ($75) either right below the product picture (certain condition) or after participants entered a code and spent four seconds on a loading page (uncertain condition). A two-way ANOVA on perceived price fairness revealed a significant interaction effect ($F(1, 390) = 6.98$, $p = .009$): price uncertainty had a positive effect on perceived price fairness in the discount-absent condition (3.98 vs. 3.52; $F(1, 390) = 4.07$, $p = .044$), but a negative effect in the discount-present condition (3.81 vs. 4.20; $F(1, 390) = 2.96$, $p = .086$). Furthermore, expected price showed a consistent pattern: price uncertainty increased expected price in the discount-absent condition ($70.42 vs. $52.22; $F(1, 390) = 12.23$, $p = .001$), but not in the discount-present condition ($49.35 vs. $49.72; $F(1, 390) = .01$, $p = .943$). Finally, expected price significantly mediated the interaction effect of price uncertainty and discount on perceived price fairness, as indicated by a mediated moderation analysis (Model 8; 95% CI = [-.42, -.06]).

Theoretically, this research extends the existing literature on uncertainty, which primarily examined the influence of aleatory uncertainty (e.g., 50% likely to pay $5 and 50% likely to pay $10), by investigating the effect of epistemic uncertainty (e.g., not knowing a price). It also adds to the literature on price fairness by illustrating a novel effect of price uncertainty. Practically, our findings suggest an easy and costless method for marketers to optimize consumers' perceptions of the offered price: creating temporary uncertainty about the price and then resolving it.

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Transmitting Craft: Collective Custodianship as Social-Symbolic Work

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EXTENDED ABSTRACT

In this day and age craftwork is being revived (Maciel and Wallendorf 2017), because now more than ever consumers are looking for sources of identity (Moisio, Arnould, and Gentry 2013), emotional value (Fuchs, Schreier, and Van Osselaer 2015), play (Seregina and Weijo 2017), and connections to the past (Türe and Ger 2016) amidst ever increasing alienation and disenchantment. Craftwork requires knowledge and skills (Campbell 2005; Sennett 2008), and consumer research often takes a practice-theoretic approach (Maciel and Wallendorf 2017; Seregina and Weijo 2017; Watson and Shove 2008) to examine how craft practices are transmitted across time through the embodied and routinized enactment of these competencies (Llewellyn 2021). Alternatively, we explore how craftspeople may consciously and intentionally work to transmit their craft.

Craft research implies the potential importance of intentional work in the transmission of craft, which we conceptualize as the craft's continued enactment and reproduction. For one, Sennett (2008) suggests that knowledge transfer between craftspeople is an important transmission mechanism, and that this transfer is optimized when there is a balance between tacit knowledge learned through observation, and explicit knowledge that is consciously and discursively communicated (Sennett 2008). Second, authenticity is the very essence of craft value (Türe and Ger 2016), and it must be maintained for effective craft transmission (Beverland 2005; Campbell 2005). Since authenticity is socially constructed, effortful work (Koontz and Joshi 2017; Peterson 2005) may often be needed to manage various cues regarding the (in)authenticity of craft (Beverland and Farrelly 2010; Grayson and Martinec 2004).

Although prior work provides insight into consumers' intentional craft rejuvenation of family heirlooms (Türe and Ger 2016), less is known about craft transmission within the marketplace. In this work we study craft prosumers, who in addition to creating "use-value" such as play (Seregina and Weijo 2017), also create products of "exchange-value" to sell (Humphreys and Grayson 2008). Studying prosumers provides a unique opportunity to illuminate new, more social insights into craft transmission. For example, a craft prosumer must consider beyond themselves, various "social values and preferences" (Humphreys and Grayson 2008, 973). Moreover, craft prosumers are likely to possess unique motivations for craft transmission, beyond economic-based motivations such as market driving (Maciel and Fischer 2020). In this research we ask, how do prosumers work to transmit their craft across time?

To answer this question, we adopt a social-symbolic work perspective as our theoretical lens (Lawrence and Phillips 2019). Social-symbolic work is "the purposeful, reflexive efforts of individuals, collective actors, and networks of actors to shape social-symbolic objects," (e.g., craft), which are combinations of "discursive, relational, and material elements that constitute a meaningful pattern in a social system" (Lawrence and Phillips 2019, 24, 31). We adopt this perspective because a primary focus of social-symbolic work theory is explicating the "role of intentional action" during the construction of the social world (Lawrence and Phillips 2019, 49). Beneficially, this lens is also complementary to practice theory and prior craft research, as it situates practices as a bridge between social-symbolic work and the social-symbolic objects they are directed at.

To explore our ideas, we studied craft maple syrup in the province of Ontario, Canada. Our data collection included semi-structured interviews with 17 maple syrup craftspeople and one industry leader. Each of these craftspeople "made and designed" their own products (Campbell 2005, 27), and given our study of prosumption, they sold maple syrup in the marketplace. To supplement these interviews, we observed craft prosumers during maple syrup festivals (Bradford and Sherry 2015) at six different farms. We adopted a hermeneutic approach to analyze our data (Arnold and Fischer 1994; Spiggle 1994).

Through our analysis, we find that indeed, although these craftspeople are partly driven by their products' exchange-value, they are true prosumers in the sense that they are primarily motivated to engage in the craft because of the personal value they derive, such as play (Seregina and Weijo 2017), and self-expression (Campbell 2005). Moreover, these prosumers collectively engage in particular types of social-symbolic work with the purposeful intention of transmitting the maple syrup craft across time, both in order to sustain the practice of the craft itself, and for the sake of sharing its value and enjoyment with others. We classify this type of work as collective craft "custodianship" (Dacin, Dacin, and Kent 2019; Montgomery and Dacin 2020).

First, we find that maple prosumers intentionally transfer tacit and explicit craft knowledge through a number of embodied, and discursive, conscious practices, such as teaching, demonstrating, and storytelling. Our data suggests that passion, a sense of responsibility to sustain the craft, and feelings of reciprocity motivate our informants to share their knowledge. Furthermore, we contribute the insight that this process can become cyclical, as it not only replenishes and refines stocks of craft knowledge, but it is enacted through self-expressive, identity-affirming practices that re-enchant and remotivate prosumers. Over time, this cyclical process creates and maintains craft maple syrup communities. Taken together, we contribute a nuanced model of knowledge transfer and acquisition, and integrate disparate streams of consumer knowledge theory that either focus on tacit, or explicit knowledge (Llewellyn 2021).

Our data also shows how prosumers engage in collective custodianship through social-symbolic authenticity work. We find that prosumers collectively manage authenticity threats by discursively framing elements of the craft that they and the community have sustained or have in common as core. Conversely, they redirect attention away from elements subject to authenticity contestations, by framing these as peripheral. The two craft elements most frequently framed as core were the production process itself, and place. Through these findings, we uncover a new mechanism of authenticity management (Grayson and Martinec 2004), illuminate that prosumers actively negotiate which material elements the craft's "indivisible essence" is derived from (Türe and Ger 2016), and reaffirm the sacredness of place (Belk, Wallendorf, and Sherry 1989).

To conclude, we find that craft prosumers engage in collective custodianship, where they intentionally work to transmit their craft across time within their community and the marketplace more broadly, through the mechanisms of knowledge transfer and authenticity management.

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Threat Specificity in Fear Appeals and the Role of Perceived Assimilation to Threat

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EXTENDED ABSTRACT

Fear appeals are a common communication tactic that intent to motivate compliant behavior by focusing on an undesirable outcome that consumers want to avoid (Latour and Rotfeld, 1997). Past research shows that fear appeals can be effective (Tannenbaum *et al.*, 2015), especially when the communication highlights a personally relevant threat, portrayed as severe and probable (Rogers, 1975; Witte, 1992). This serves to induce perceptions of being at high risk of attaining the distressful outcome, ultimately scaring consumers into action (Pechmann *et al.*, 2003). However, evidence also suggests that fear appeals are not always effective despite meeting these criteria (Merkel *et al.*, 2020; Milne *et al.*, 2002).

We draw from the consumer goal literature to show that fear appeal effectiveness can be optimized by manipulating threat specificity – i.e., extent to which the threat or avoidance goal is framed as a nonspecific versus specific outcome. For instance, a consumer who wants to maintain a youthful appearance can either frame the threat as getting rid of an *aging appearance* (nonspecific) or getting rid of *under-eye lines and wrinkles* (specific). In the current research, we propose that framing the threatening undesirable outcome in a nonspecific (versus specific) way is more likely to motivate compliant behaviors by inducing a sense of assimilation (versus contrast) to the feared outcome. This reasoning is consistent with past findings showing that thinking about the self in a nonspecific (versus specific) way draws attention to the similarities between the different aspects of the self-concept (Forster *et al.*, 2008; Wakslak *et al.*, 2008). The perceived assimilation evokes a sense of urgency to escape the imminent threat, motivating compliant behavior.

Study 1 aimed to confirm that fear appeal specificity impacts consumer motivation to engage in compliant behavior and to examine the mediational role of perceived assimilation. All participants (N=92) initially viewed an ad image depicting a downward perspective of gender-neutral feet standing on the scale. Threat specificity was manipulated by modifying the ad's tagline: "Have you gained a little bit of weight? We can help!" (nonspecific threat), and "Have you gained 5 pounds? We can help!" (specific threat). We then measured perceived assimilation to the undesirable outcome. Finally, to assess compliant behavior, participants reported their willing to pay (WTP) for the gym membership, using a sliding scale: $0-$60/month. The more motivated an individual is to avoid gaining weight, the more they should be willing to spend on the membership. Results revealed that participants exposed to the nonspecific (versus specific) fear appeal reported higher WTP for the gym membership (Mnonspecific=27.64, Mspecific=20.92, t(90)=2.28, p=.025), and reported higher levels of assimilation to the threat (Mnonspecific=4.83, Mspecific=4.23, t(90)=2.20, p=.030). The mediational index (PROCESS: model 4, 5,000 bootstraps: Hayes, 2017) was significant (95% CI=[.26, 5.17]), confirming that perceptions of assimilation mediated the observed effect. These findings support that nonspecific (versus specific) threats in fear appeals motivate compliant behavior by instilling a sense that one is close to reaching the feared outcome, thereby prompting immediate action.

Study 2 aimed to confirm the direction in which nonspecific (versus specific) fear appeals impact responses by adding a control condition, and examine whether threat specificity produced general motivating effects, or whether their motivating effects were limited to the ad's recommended actions. Participants (N=171) were randomly assigned to view one of three versions of the gym ad. The advertisements including the nonspecific and specific threats were the same as in Study 1. The control ad simply included an image of the gym's interior and equipment, void of any reference to a self-relevant threat. Participants were then introduced to a market research survey supposedly designed by a new potato chips brand. They were also given a bowl of chips and told to help themselves to as many chips as they wanted while completing the questionnaire. Amount consumed was calculated for each participant, and served to reflect restraint behavior. Results confirmed that threat specificity impacted self-regulation (F(1,166)=3.32, p=.039). Pairwise contrasts revealed that it was the nonspecific fear appeal that motivated restraint beyond the level of restraint exhibited by participants exposed to the specific threat (Mnonspecific=4.95g., Mspecific=7.12g., t(166)=2.58, p=.026) and control ad (Mcontrol=6.75g., t(166)=-2.57, p=.028). These findings confirm that fear appeals construed in a nonspecific (versus specific) way produce general motivation effects relating to any behavior that aims to avoid the focal threat.

Study 3 aimed to generalize our findings to another threat domain (i.e., illness). Data was collected during the COVID-19 pandemic. All participants (N=164) viewed an image depicting two hands holding each other, one belonging to a sick individual with IV tubes inserted in the wrist. Threat specificity was manipulated by modifying the campaign's tagline: "Wash your hands to prevent sickness" (nonspecific threat), and "Wash your hands to prevent COVID-19" (specific threat). Immediately after ad exposure, we assessed level of motivation to wash hands. Note that we added a relevant moderator to the model: involvement, conceptualized in our study as the extent to which participants were informed about COVID-19. We proposed that threat specificity will have a more significant impact on people who are not actively involved in keeping themselves informed and safe. Using a floodlight analysis (Spiller *et al.*, 2013), we found a significant main effect of threat specificity (t=-2.16, p=.032), as well as a significant threat specificity x involvement interaction effect (t=2.05, p=.042). The difference in hand-washing motivation between the threat specificity conditions was significant for low involvement values. These results confirm that fear appeals focusing on a nonspecific (versus specific) threat effectively motivate compliant behavior, especially among the most susceptible audience.

Our findings make several theoretical and practical contributions. First, by incorporating the notion of threat specificity, we identify a new type of message framing that has the potential to increase fear appeal's persuasive power. We also authenticate the role of perceived assimilation as an alternative mechanism, which broadens our understanding of how fear appeals impact consumer responses. Finally, our results confirm that fear appeals have the potential to help marketers mobilize consumer behavior, especially when the communication highlights a nonspecific rather than specific self-relevant threat.

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The Happiness of Withholding Happiness

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EXTENDED ABSTRACT

Positive life events generate happiness. Unfortunately, the happiness from most positive events fades over time as people pay less attention and adapt to their hedonic benefits (Frederick and Loewenstein 1999; Kahneman and Thaler 2006; Wilson and Gilbert 2008). This work introduces a simple yet costless method that allows people to adapt slower and thus derive more happiness from a positive event—*delaying* sharing the event with others.

We make two main predictions. First, we predict that delaying the disclosure of a positive event will generate more happiness than immediate disclosure. Second, we predict that most people tend to disclose positive events immediately, thereby spoiling the additional happiness they could have obtained from delayed disclosure. While these two predictions seemingly contradict each other, they may both be related to an inherent desire to disclose information, akin to a desire to be known (Kim, Barasz, and John 2021). When people obtain information that others do not have, they experience a strong desire to disclose it, especially if the information is about the self and is positive. Consequently, they act to satisfy the desire (Hofmann et al., 2012) and thus tend to disclose the information immediately.

If the desire is left unsatisfied, however, it draws attention to the desire and related objects (Loewenstein 1996), such as the not-yet-disclosed positive personal event (Lane and Wegner 1995; Slepian, Chun, and Mason 2017). This increased attention allows people to derive more happiness from the event. Furthermore, delaying the disclosure of the event does not mean that the person will *never* disclose it; they can still disclose it, just with a delay. As people anticipate future events and experience utility in the present from anticipation (e.g., anticipating an upcoming vacation can evoke happiness now; Loewenstein 1987), anticipating the eventual disclosure of the positive event—which will be rewarding and pleasant (Tamir and Mitchell 2012; Vijayakumar et al. 2020)—can similarly generate happiness in the moment. Taken together, we predict that delayed (vs. immediate) disclosure of a positive event will generate more happiness.

We report three studies testing our predictions and theory. Study 1 (*N* = 252) asked participants to imagine receiving a dream job offer and had three between-subjects conditions: in the *immediate-disclosure (delayed-disclosure)* condition, participants imagined that they shared the news with someone they named *immediately (seven days)* after they received the job offer; in the choice condition, participants chose to share the news immediately or in seven days, and they predicted which choice would lead to greater overall happiness in the following 21 days. All participants reported their expected happiness for each of the 21 days and indicated how strong their desire to disclose was on days 1, 7, and 8. As predicted, the average expected happiness across the 21 days was higher in the delayed-disclosure (vs. immediate-disclosure) condition, and the strength of the desire to disclose the news mediated this effect. In the choice condition, however, most participants (94%, 75/80) chose to disclose the news immediately versus in seven days, and most (95%, 76/80) predicted that immediate disclosure would lead to greater happiness.

Study 2 (*N* = 137) replicated these findings with a real hedonic experience. Participants in the study learned that they would compete in a math competition in teams of two and that if their team won, they could leave the lab 10 minutes earlier. At the end of the competition, all participants learned that their team won, but that their teammate had not learned the good news yet. Participants in the *immediate-disclosure* (*delayed-disclosure*) condition informed their teammate that they had won *immediately* (*in about 30 minutes*); participants in the choice condition could choose to do so *immediately* or *in about 30 minutes* and predicted which choice would lead to greater overall happiness during the lab session. We sampled participants' happiness and desire to disclose eight times during the lab session. Replicating previous findings, participants in the delayed-disclosure (vs. immediate-disclosure) condition felt overall happier, and the strength of their desire to disclose mediated this effect. Again, in the choice condition, most participants (49/52, 94%) chose to disclose the winning information with their teammate immediately, and most (48/52, 92%) predicted that doing so would make them happier.

Study 3 (*N* = 266) tested our theory with a seven-days longitudinal design and in a gift-giving context. Participants came to the lab on November 7, four days before "Double Eleven," one of the major shopping events in China. They learned that they could send someone a Double Eleven gift prepared by the experimenter. The study had only two between-subjects conditions, with no choice condition. In the immediate-disclosure condition, participants texted their gift recipient immediately about the Double Eleven gift and wished them a happy Double Eleven. In the delayed condition, participants sent their gift recipient a happy Double Eleven text without mentioning the gift; they were also told not to disclose anything about the gift until four days later. On November 11, participants in the immediate-disclosure condition texted their gift recipient another happy Double Eleven; participants in the delayed-disclosure condition did the same and informed their recipient of the gift. We measured participants' daily happiness from November 7 to 13. On November 7, 10, and 11, we also measured their desire to disclose the gift information. During the seven-day study period, participants in the delayed-disclosure (vs. immediate-disclosure) condition felt overall happier, and the strength of their desire to disclose mediated this effect.

These studies provide converging evidence that delayed (vs. immediate) disclosure of a positive personal event can yield more happiness, but that when given a choice, most people would choose immediate disclosure. Practically, our research provides a simple and costless strategy that can boost happiness. Theoretically, our work contributes to research on hedonic decline, interpersonal sharing, prediction bias, and recent research on the innate psychological desire to disclose information.

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Analyzing eWOM on Large Social Media Platforms

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EXTENDED ABSTRACT

Despite WOM's growing importance, much remains unexplored when it comes to electronic word of mouth (eWOM). Prior investigations are often unable to make a distinction between "eWOM as a proxy", i.e., eWOM that is present on a platform, but is never seen by or interacted with by other consumers, and "eWOM as a market influence", i.e., eWOM with which other consumers have engaged (Babić Rosario et al., 2020).

In this study, we propose a method for identifying influential eWOM based on information about consumers' brand attitudes and network positions on large social media platforms. In doing so, we answer the call for more and better ways of identifying consumers which are of particular importance for firms' efforts to facilitate eWOM. We also address the need for separating the wheat of "influential eWOM" from the chaff of "eWOM as a proxy". Finally, we contribute to the growing body of literature that abandons surveys and Likert scales in favour of extracting valuable quantifiable information directly from rich textual data as it naturally occurs (Berger et al., 2020).

Data

Although our approach can be applied, with minimal modifications, to a wide range of social media platforms and online fora, the current implementation is fine-tuned for deployment on Reddit as one of the richest sources of eWOM. Reddit, the self-proclaimed "front page of the Internet", is the seventh largest website in the US and the 18th largest worldwide according to Alexa Internet (2021).

We analyzed twelve of the biggest Reddit communities centered around various brands, platforms, and consumption practices in the video game industry. The dataset we collected includes the entirety of activity in 12 Reddit communities between November 2018 and July 2019 with 19.01 million comments and 1.09 million submissions posted by 1.97 million users. Over the course of our analysis, we "zoom in" on a highly specific portion of the dataset, narrowing down our scope to a subnetwork of 1,613 users.

Approach

Our approach revolves around using natural language processing (NLP) methods and complex network analysis to account for consumers' preferences when modeling diffusion of eWOM across a social network. Every element of the model accepts an input and generates an output based on the data processing routines specific to that element. Brief description of all elements follows.

First, we apply a number of normalization techniques to raw data obtained from Reddit: punctuation removal, conversion to lowercase, and lemmatization (conversion of inflected forms of a word to its dictionary form). Next, we analyze the normalized textual data with Latent Dirichlet Allocation, or LDA, an unsupervised machine learning technique often used for topic discovery (Blei et al., 2003). Additionally, we conduct sentiment analysis with VADER, an algorithm that uses a set of dictionaries and syntactic rules for estimating sentiment (Hutto & Gilbert, 2014). The raw data are then transformed into a graph, or network of Reddit users. Specifically, we transform our dataset into a large-scale directed network (Newman, 2018, p. 110), where nodes in the network are defined as individual Reddit accounts and directed asymmetric links between nodes represent accounts' interrelations.

To see beyond the purely topological features of the network and be better equipped for making predictions about its functioning in real-world conditions, we account for nodes' percolation states (Campbell, 2013; Newman, 2018, p. 569), which we define in the context of the study as the probability of an individual engaging in eWOM about a brand-centric topic and compute based on the user's sentiment about that topic. Finally, we model dynamic propagation of eWOM throughout Reddit by simulating repeated interactions between users in different user network clusters across a series of rounds, and measure the speed of eWOM diffusion for each round.

Results

We test our approach by applying it to one week of activity by 360,495 users in 12 subreddits. In search for the optimal LDA model, we conducted a grid search of various hyperparameter values, estimating C_V coherence, a state-of-the-art synthetic measure of topic model quality (Röder et al., 2015; Syed & Spruit, 2017), for each model. The highest-scoring models were manually inspected for topic interpretability. The final model was able to delineate discussions about various video game consoles. We chose to focus on the topic centred around consoles produced by Nintendo (for illustrative purposes). The resulting network is a fraction of the original, with only 1,613 nodes, but is of considerably higher relevance as it is the result of homing in on a potential topic of interest, made possible by the inclusion of valuable information about the content and emotional valence of discussions occurring within the network. Following the rest of the steps in our model, we were able to identify optimal nodes for producing influential eWOM, outperforming simpler, "naïve" methods.

Conclusion

A key methodological innovation of our work lies in the context-agnostic eWOM diffusion model which is capable of forecasting dissemination of information in a real-world network of users. Our model accounts not only for the overall structure of the communities, but also for attitudes of their members. This approach allows for a more direct investigation of consumer behavior compared to the more restrictive methods such as surveys, small-scale experiments etc. (Berger et al., 2020; Kumar et al., 2018).

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Do the Ends Justify the Means? Understanding Moral Reactance to "Poverty Porn"

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EXTENDED ABSTRACT

Aid organizations and the media often use graphic imagery of people living in poverty as a means of gaining attention, sympathy, and support. Such emotionally evocative imagery is common because it is typically more effective than more affect-poor information (Nisbett and Lee, 1980; Small, Loewenstein, and Slovic, 2007; Small and Verrochi, 2009).

Yet some commentators and philosophers worry these tactics are harmful. In fact, to emphasize their harm, critics have referred to these tactics as 'poverty porn' (Collin, 2009; Dortonne, 2016; Roenigk, 2017; Schaffer, 2016). Criticisms about 'poverty porn' come in different forms. One key concern is graphic images of poverty exploit and objectify those in need. These images, it is argued, define recipients of aid by their suffering—often depicting them at their most vulnerable and heart-wrenching moments. Certain depictions of poverty can also promote negative stereotypes (i.e., all of Africa is poor) and ideas about white saviorhood, for example, by celebrating Western celebrities helping aid recipients in developing countries (Rearick, 2017). Another concern is that these images can portray an exaggerated or even false representation of life under poverty (Roenigk, 2017; Schaffer, 2016).

Because these criticisms vary in kind, we sought to unpack the tactics of 'poverty porn' and to investigate lay perceptions of the abovementioned criticisms. Specifically, we examine if and when people see the ends (i.e., greater support for important causes) as justifying the means (e.g., graphic imagery that may involve exploitation or deception). Across six studies, we isolate specific 'poverty porn' tactics and ask participants to judge their acceptability. We find people are not particularly disturbed by tactics involving exploitation, but they are relatively more disturbed by tactics that involve blatant deception.

In studies 1 and 2, participants judge the appropriateness and acceptability of different poverty porn tactics: 'staging a photograph', 'stereotyping', 'showing an aid recipient's worst moments', 'using a white savior', and 'using an actor'. Across both studies, results indicate participants are significantly more bothered by methods that deceive the audience (i.e., staging a photo or using an actor) than those that are a true representation but may cause some other harm to the group being portrayed (i.e., stereotyping, using white saviors, or showing worst moments). These results run counter to what the media and other experts criticize in their arguments against 'poverty porn' tactics; they typically emphasize the exploitative and objectifying nature of these tactics as the biggest problem (i.e., Collin, 2009; Dortonne, 2016; Rearick, 2017; Roenigk, 2017; Schaffer, 2016).

Study 3 examines the question of whether reactions to these tactics would change if the intent of the advertisement was profit (i.e., self-interest) rather than helping the aid recipients. It's possible harming people living in poverty (through exploitation) in order to help them seems justifiable but harming them in order to increase profitability would seem unjustifiable. We find deception is equally penalized regardless of whether the intent is to provide aid or profit. However, neutral, manipulative, and exploitative advertisements were all rated as significantly less acceptable when the intent was profit. This results in a significant interaction such that the differences between judgments as a function of intent disappear when the tactic is deception. In other words, deception is never justifiable but exploitation and other tactics are more so when there is a good intent.

In studies 4 to 6, we explore why deception is penalized more than other 'poverty porn' tactics. Study 4 disentangles one possible explanation for our effect. It is possible participants judged non-deceptive tactics as more acceptable because they did not view them as particularly harmful. Therefore, in study 4, we make these harms salient by describing them as "problematic: we compare 'poverty porn' tactics that are problematic because they either a) deceive the audience or b) exploit and objectify the aid recipients. We find that even when harms are directly spelled out, participants rate tactics that deceive the audience as less acceptable than tactics that exploit aid recipients.

Our prior experiments focus on deception as one specific tactic that harms the audience (i.e., by manipulating consumers into spending their money in a way they would not have otherwise). In study 5, we test whether consumers are averse to the deception per se, or whether they are averse to the harms associated with it (i.e., manipulation without explicit deception). To do so, we compare deception to non-deceptive manipulation that has identical consequences (i.e., eliciting support). Results show deception is rated as significantly less acceptable than manipulation, indicating consumers are particularly averse to the act of deception, rather than the harm associated with it. Finally, Study 6 attempts to further unpack reactance to deception by separating the intent to deceive from the end result of misrepresentation. We compare advertisements that misrepresent a population's level of need to an equal extent, but differ in their use of deception (e.g., by staging a photo of a person in need versus using a candid photo of one person in need, but neither is representative of the poverty level in the population). We find that the deceptive advertisement is seen as particularly unacceptable, providing further evidence that the act of deception itself taints judgments.

Across 6 studies, we find consumers judge 'poverty porn' methods that deceive the audience as less acceptable than those that exploit or objectify aid recipients. We further unpack when consumers view such tactics as exploitative as well as why deception is uniquely troubling.

Understanding lay perceptions of 'poverty porn,' and deception in particular, has important implications. First, this work bridges philosophy and consumer psychology to foster an understanding of what prosocial marketing tactics will be praised versus admonished by consumers. Second, our work expands our understanding of deception by showing lying for prosocial purposes is not always rewarded (i.e., Lewis et al., 2012; Levine and Schweitzer, 2014; 2015). When it comes to charitable organizations using deception, the ends do not always justify the means.

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4D: The Four Dimensions of Anthropomorphism – Manipulations and Measures

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EXTENDED ABSTRACT

Anthropomorphism refers to the tendency to attribute human-like characteristics, intentions, and behaviors to nonhuman objects (Aggarwal and McGill 2007). Extant anthropomorphism research has employed a number of different manipulations to humanize nonhuman objects (name, first-person conversation, etc.). The unstated premise behind employing these different manipulations appears to be that anthropomorphism is a unidimensional construct and that these manipulations all elicit that dimension similarly. Furthermore, prior work on anthropomorphism also employs many different scale items to assess the effectiveness of these manipulations. However, there has been little effort to examine if these different manipulations and different scale items respectively activate and assess one or multiple dimensions of humanness.

This current research endeavors to examine if the different manipulations activate different dimensions of humanness and assess the extent to which the different scale items tap into them. We first conducted a meta-analysis covering 27 published papers with 97 studies that reported complete details of their manipulations and manipulation check items. Results of our systematic review confirm our conjecture that extant papers on anthropomorphism regard anthropomorphism as a unidimensional construct, and that the field seems to be using different manipulations interchangeably. Furthermore, there are no consistent manipulation check items, and once again, there appears to be an assumption that these different items tap into the same unidimensional underlying aspect of humanness.

Study 2 aimed to test if the anthropomorphism manipulations actually make salient different dimensions of humanness. Participants were randomly assigned to one of five different conditions (one control and four anthropomorphism conditions, including name, personality, imagination, and conversation). Participants evaluated a (humanized or objectified) car on 26 anthropomorphism manipulation check questions used across previous studies. An exploratory factor analysis was conducted using principal component analysis (PCA) with varimax rotation to identify different anthropomorphism dimensions. An examination of the RMSEA () and SRMR () showed that a four-factor model was appropriate. The four factors manifested four dimensions of anthropomorphism: The first, *personification* factor, reflects participants' general impression that the product has some humanlike features. The second, *personality* factor, refers to specific personality traits that participants think the product has. The third, *agency* factor, measures the extent to which participants believe that the product has a mind of its own. The fourth, *empathy* factor, assesses the extent to which participants share the product's perspectives and feel connected to it.

Further analysis showed that the four anthropomorphism manipulations resulted in different scores on each anthropomorphism dimension. For the personification and agency dimensions, the imagination and conversation conditions scored higher than the other three conditions (), which didn't differ from each other (). For the personality dimension, the imagination condition scored significantly higher than the other four conditions (). The conversation condition scored significantly higher than the name, personality, and control conditions (), which didn't differ from each other (). For the empathy dimension, the imagination condition scored higher than all the other four conditions () which didn't differ from each other (). In sum, results of study 2 show that different manipulations elicit different dimensions of anthropomorphism, and that different scale items assess these different dimensions more or less successfully.

If different anthropomorphism manipulations manipulate different aspects of humanness, then consumers should respond more or less positively to a brand that employs these manipulations. Study 3 tested this prediction under a scenario of product wrongdoing. All participants read about a new-to-the-market orange juice brand. Participants were randomly assigned to one of the four conditions, including a control and three anthropomorphism conditions (name, imagine, conversation). All participants answered the manipulation check questions as used in study 2 with a few minor changes. Next, participants were asked to imagine that they consumed a pack of the orange juice bought a week earlier, and then got sick about an hour later. Participants then completed a number of brand evaluation measures. A Principal Component Analysis confirmed four anthropomorphism dimensions: personification, personality, agency, and empathy. Replicating the results of (Puzakova et al. 2013), the evaluation of the brand was less positive when it was anthropomorphism (averaged across the four conditions). However, further examination revealed that the results were more nuanced. Although participants' brand evaluations were lower in the name condition compared to control (), the imagination and conversation conditions were not different from the control condition (), suggesting that the specific anthropomorphism manipulations affected whether or not the brand would be penalized. The effect was mediated by empathy: manipulating anthropomorphism through imagination and conversation increased consumers' empathy towards the brand resulting in lower likelihood to punish the brand for wrongdoing.

To further distinguish between the imagination and conversation manipulations, Study 4 employed a hypothetical out-group stationery brand. We predicted that the conversation condition would make the outgroup brand even more of a separate individual since the brand would be 'talking' to the consumer as a distinct entity, resulting in less positive evaluation. However, the empathy associated with imagination manipulation would result in more positive evaluation of the same outgroup brand. The procedure was similar to that of study 3. We recruited U.S. participants and first primed their *American identity* to make the outgroup aspect of the Chinese brand particularly salient (White and Dahl 2007). Results showed that participants in the imagination condition trusted the brand more and evaluated it more positively than in the other two anthropomorphism conditions (). A series of mediation analyses showed that the personification sub-scale mediated the effect of anthropomorphism on brand-related downstream variables.

CONCLUSION

Our research finds that different anthropomorphism manipulations work distinctively by making salient four dimensions of humanness: personification, personality traits, agency, and empathy. We also show that different manipulations result in different downstream consumer reactions to an out-group brand and a product wrongdoing. Furthermore, different scale items are in fact different, tapping more or less successfully into the different dimensions of humanness.

Overall, when anthropomorphizing products and brands, marketers should choose the appropriate manipulation to ensure that the 'right' human dimension is made salient and the 'desired' consumer response received.

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Old is Not Always Gold: The Role of Temporal Congruence in Shaping the Downstream Effects of Firm's Longevity

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EXTENDED ABSTRACT

Marketers often employ a firm's year of establishment to communicate the business's longevity (Desai, Kalra, and Murthi 2008). Prior literature suggests that older firms are evaluated more favorably due to their perceived credibility and quality (Zhang, Kashmiri, and Cinelli 2019), with a firm's longevity acting as an extrinsic cue.

Nonetheless, contrary to the dominant belief that longevity is always beneficial, in this research, we contend that this may not necessarily be so, especially when the benefit offered is incongruent with firm's longevity. For example, we argue that when an older automobile firm offers self-control (e.g., eco-friendly) vis-à-vis indulgence (e.g., luxury) oriented benefits, it may negatively impact purchase evaluation. Likewise, when an older culinary firm offers self-control (e.g., healthy) vis-à-vis indulgence (e.g., tasty) oriented benefits, it is more likely to impact purchase evaluation negatively. Therefore, in this research, we aim to examine how and why consumers associate a firm's longevity with benefits-oriented to indulgence ("taste" and "luxury") vs. self-control ("health" and "eco-friendly") and its downstream effects.

The association of indulgence (vs. self-control) oriented benefits to old (vs. young) firms and its downstream effects can be explained from three perspectives: the consumer, the regulators, and the firm. We suggest that product categories evolve such that the benefits move from the core and basic product needs to indulgent needs and subsequently to self-control needs that are focused on the long-term well-being of the self and the society.

A theoretical backing for this comes from the hierarchy of needs (Maslow 1970), which explains how consumers tend to move from safety needs to rich resources (Kivetz and Simonson 2002) and next toward the self-actualization needs, which are more about self-control (Paschen, Wilson, and Robson 2020). Another theoretical argument for this comes from the product life cycle theory that explains how product benefits evolve over the life cycle of the product category (Vernon 1992).

In a pilot study ($N = 31$), we found that consumer expectations from products shift from the basic needs when the products are introduced to indulgent needs and later to self-control-oriented needs for four existing product categories and two futuristic product categories.

Literature suggests that indulgence-oriented benefit from food is "tasty," a more primitive and tangible consumer expectation. Tasty food is energy-dense containing a higher content of sugar, salt, and various other fatty elements (Breslin 2014; Papies and Veling 2013). As humans evolved, their lifestyles changed. With the shift toward a more sedentary lifestyle and an increase in associated ailments (Larsen 2003), consumers' consciousness of healthy eating habits has also increased. Similarly, the automobile industry's evolution indicates that consumers initially demanded indulgence-oriented benefits (comfort/luxury) and only much later opted for eco-friendliness (Damiani, Deregibus, and Andreone 2009) due to regulatory pressures. Further, the evidence from policymaking and regulation suggests that as product categories have evolved, the policymaking and regulatory intervention has happened at a later stage.

Also, older firms, as such, have in the past offered products that satiated indulgent needs, while younger firms, because of the reasons cited above, are more likely to offer self-control-oriented needs. Though older firms evolve with time, their core offering remains unchanged (Demir et al. 2017). Moreover, older firms have well-defined associations due to their established expertise (Olsen, Slotegraaf, and Chandukala 2014). However, because of their low longevity, younger firms are not perceived to have the expertise; hence, the effect might be weaker.

Additionally, extant literature suggests a negative correlation between taste and health and between luxury and eco-friendliness (Raghunathan, Naylor, and Hoyer 2006; Beckham and Voyer 2014). Therefore, we hypothesize;

Hypothesis 1:   *Consumers associate indulgence (vs. self-control) oriented benefits with old (vs. young) firms.*

Hypothesis 2:   *When the old (vs. young) firm is positioned along indulgence (vs. self-control) oriented benefits, it is highly likely to have a positive purchase evaluation. However, this effect might be weaker for younger firms.*

Due to their longevity, older firms are more likely to have knowledge, experience, and skills in offering benefits that were temporally congruent to these firms' founding time. Prior studies suggest that expertise enhances fit (Choi and Rifon 2012) through the "match-up" effect (Till and Busler 2000). The "match-up hypothesis" (Kamins and Gupta 1994) posits that perceived expertise in offering specific benefits enhances congruence (Lee and Koo 2016) between a brand and its offered benefits, in turn influencing brand evaluation (Gong and Li 2017; Jacob, Khanna, and Rai 2020). Formally,

Hypothesis 3:   *The impact of a firm's longevity and association with indulgence (vs. self-control) oriented benefits on consumers' purchase likelihood is serially mediated by perceived expertise followed by congruence.*

Hypothesis 4:   *The indulgence (vs. self-control) oriented benefits moderate the mediating effect of perceived expertise and congruence on the relationship between the firm's longevity and purchase likelihood.*

We conducted five studies to validate our findings, all of which were supported. Studies 1A and 1B tests H1 using a single-factor (firm's longevity: old/young) between-subjects design for two different product categories. Study 1A established the association with a single attribute for "tasty" and "healthy," whereas study 1B did it with multiple attributes (pre-tested) for "luxury" and "eco-friendly." Unlike studies 1A and 1B, in study 1C, the perceived benefit was the independent variable, and the type of firm (old/young) was the dependent variable. We tested H1 in study 1C using a 2 (firm's longevity: old/young, between-subjects) X 2 (benefits: indulgence – luxury/ self-control - eco-friendly oriented benefits, within-subjects) mixed design. Study 2 tests H2 using a 2 (firm's longevity: old/young) X 2 (benefits: indulgence – luxury/self-control - eco-friendly oriented

benefits) between-subjects design. Finally, study 3 tests H3 and H4 using 2 (firm's longevity: old/young) X 2 (benefits: indulgence – tasty/self-control - health-oriented benefits) between-subjects design and showed a significant moderated serial mediation.

This is possibly the first work to demonstrate that the positive impact of longevity is contingent on the fit with its perceived benefits. It adds to the benefits evolution literature by elucidating the change in benefits offered by firms from basic to indulgence and self-control-oriented benefits. For practitioners, this research emphasizes the need to judiciously exploit a firm's longevity in alignment with the benefits offered.

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Experiential Versus Material Purchases: A Cultural Identity Perspective

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EXTENDED ABSTRACT

Researchers are increasingly interested in two domains where consumers spend their discretionary incomes—experiences and material objects. Work in this domain has focused primarily on outcomes—e.g., social relationships, happiness (e.g., Van Boven and Gilovich 2003). In this research, we examine the experiential-material phenomenon from a different angle—that of what *predicts* experiential and material purchases. Specifically, we investigate the potential influence of a consumers' local/global identity on their preference between experiential and material purchases.

One important consequence of globalization is that consumers tend to absorb, to various degrees, two distinct identities (i.e., a local and a global identity), which reflect how strongly they associate with the local and global communities, respectively (Arnett 2002). Individuals with a strong local identity [locals] remain faithful and respectful of local traditions, have strong interests in local events, and identify with people from their local community, whereas those with a strong global identity [globals] favor globalization, view the world as a global village, and identify with people from the whole world. Accordingly, we propose that an important distinction between locals and globals is their different needs for relationship strength—conceptualized as the extent to which individuals desire to strengthen their relationship with others. Specifically, we posit that locals tend to have greater need for relationship strength than do globals. This is because locals often stay in and grow attached to their communities (Strizhakova and Coulter 2019), which motivates them to stay in touch with and ensure the continuity of future contacts. Differently globals view the world as a "global village". They like to form open, mobile, and transient relationship with others (Oishi 2010)—i.e., their relationships are more fluid.

In the context of purchase type (experiences vs. objects), this is relevant because experiences are known to possess stronger socialization aspects. Specifically, experiences are more often consumed with others (Caprariello and Reis 2013) and more conducive to interpersonal interactions via conversations (Bastos and Brucks 2017) than objects. Therefore, experiential purchases should be particularly appealing to people seeking stronger social ties. Thus, we propose that consumers with greater need for relationship strength—locals—will be more likely to acquire experiential versus material purchases. Differently, global's lower focus on relationships strength should make them indifferent.

Study 1. We collected field data to examine our focal prediction. First, the amount displayed in the receipts of shoppers in two different stores were photo-recorded. One of the stores mainly sell an experiential purchase (toys; N=52) and another a material purchase (hats; N=57). Further, we measured participants' local-global identity (Tu et al. 2012). As expected, shoppers with a stronger local identity spent significantly more on toys than on hats (β=0.33, t(105)=2.78, $p<.01$), whereas shoppers with stronger global identity spent statistically indistinguishable amounts (β=-0.03, t(105)=-0.29, p=.77).

Study 2. Keeping the focal purchase constant (a BBQ grill) and manipulating only how it was framed to participants (as an experience versus object), this study manipulates local-global identity to reexamine the focal effect and test the predicted mechanism. Participants (N=228) were randomly assigned to a 2(identity: local vs. global)×2(purchase: experiential vs. material) between-subjects study. We manipulated local/global identity following existing procedure (Ng and Batra 2017). Participants then were presented with information about the grill focusing on either its experiential or material properties. We then measured participants purchase intention and need for relationship strength. As expected, locals reported greater purchase intention for the experientially- (M=4.90) than the materially-framed grill (M=4.06; F(1, 224)=8.87, $p<.01$), whereas globals showed indistinguishable purchase intention ($M_{\text{experientially-framed}}$=4.08 vs. $M_{\text{materially-framed}}$=4.20; F(1,224)=0.16, p=.69). Need for relationship strength mediated this effect (.16, 95%CI [.004,0.414]).

Study 3. This study retests the mechanism with a moderation-of-process procedure. Participants (N=656) were randomly assigned to a 2(identity: local vs. global)×2(purchase: experiential vs. material)×3(benefit-of-relationship-strength: suppressed, control, enhanced) between-subjects design. We expected that enhancing the desire-for-relationship-strength would increase global's preference for experiential purchase as they have a lower need for relationship strength to begin with. However, such effects should not emerge for locals (a "ceiling effect"). Similarly, when the desire-for-relationship-strength is reduced, with locals (but not globals) reducing their preference for experiential purchases. No variation was expected for material purchases given their predominant lack of socialization aspects.

The identity manipulation was the same as in Study 2. Benefit-of-relationship-strength was manipulated by varying the degree of benefit-of-relationship-strengh. Participants in the control condition were asked to review their daily routine and write down their thoughts. Next, participants viewed information about the grill as an experience or an object, as in Study 2, and completed the measure of purchase intention. As expected, when benefit-of-relationship-strength was enhanced, globals showed a greater purchase intention for the experientially-framed BBQ (M=5.04) than in the control condition (M=4.14; F(1,199)=10.19, $p<.01$). Locals showed similar high purchase intention across the two conditions (M_{enhanced}=5.17 vs. M_{control}=5.16; F(1,199)<.01, p=.95). When benefit-of-relationship-strength was suppressed, locals showed lower purchase intention for the experientially-framed grill (M=3.80) than in the control condition (M=5.16; F(1, 190)=20.14, $p<.001$). Globals showed similarly lower purchase intention across the two conditions ($M_{\text{suppressed}}$=3.99 vs. M_{control}=4.14; F(1,190)=0.19, p=.67). No such effect was observed for the materially-framed grill. We also replicate previous findings in the control condition that locals had greater purchase intention toward the experientially-framed (M=5.16) than the materially-framed grill (M=3.79; F(1, 213)=18.70, $p<.001$). However, globals showed no difference in purchase intention across the two conditions ($M_{\text{experientially-framed}}$=4.14 vs. $M_{\text{materially-framed}}$=4.25; F(1,213)=0.14, p=.71).

Consistent with our theorization, globals had a greater need for relationship strength in the benefit-of-relationship-strength enhanced (M=5.36) than in the control condition (M=4.65; F(1, 98)=6.41, p=.01). However, locals' need for relationship strength did not differ across benefit-of-relationship-strength enhanced (M=5.43) and control (M=5.54; F(1, 101)=.35, p=.56) conditions. Additionally, locals had a lower need for relationship strength in the benefit-of-relationship-strength suppressed (M=4.47) than in the control (M=5.54; F(1,

109)=17.90, *p*<.001) condition, whereas globals' need for relationship strength did not differ in the benefit-of-relationship-strength suppressed (*M*=4.79) and control (*M*=4.65; F(1, 81)=.17, *p*=.68) conditions.

The findings in this research contribute to the experiential versus material purchase and identity literatures. We identify a reliable *antecedent* of consumers' inclination to acquire experiential versus material purchases—consumers' local-global identity. This is an important addition to a literature that has noticeably focused on *outcomes* of the two purchase types. Thus, our findings bring a fresh perspective to the experiential consumption literature. Further, we show the critical role of need for relationship strength in explaining consumers' purchase intention for experiential over material purchase. We expect this research to open various avenues for future inquiries in the aforementioned two literatures.

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Making Up for Failure: A Simple Nudge to Improve Goal Persistence

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EXTENDED ABSTRACT

Prior research has found that when small failures occur during goal pursuit (i.e., eating a dessert or skipping the gym) consumers often believe that there is a low chance of reaching their larger goal (e.g., losing weight/staying fit), leading them to completely abandon it (i.e., Cochran and Tesser, 1996; Soman and Cheema, 2004). If feeling like one has failed by engaging in goal inconsistent behavior on the path to goal achievement leads people to be more likely to quit, it may be that encouraging consumers to make up for their failures will increase the likelihood that they reach their goal. We demonstrate that this simple, cost-free nudge can help protect consumers against demotivation due to small failures and improve consumers' overall goal persistence.

In Study 1, we conducted a survey of 303 people on Amazon Mechanical Turk to gauge lay intuitions for the making up for failure intervention in the exercise domain. Results indicated that consumers believed they would be more likely to use and be more motivated to work out by an app that offers a making up for failure functionality than one that does not (likely to use: $t(302) = 5.99$, $p < .001$; motivated to work out: $t(302) = 5.35$, $p < .001$)

In Studies 2 and 3, consumers engaged in real goal behavior. They were given a goal and reported their progress every day for a week using an interface that included a bar graph presenting their progress with one bar per day. Control condition participants simply inputted their minutes studied and viewed their progress. Make-up condition participants were given an additional functionality: they could make up for their past failure. For instance, if they failed their goal on day 2, and did extra minutes on day 3, they were able to reallocate those extra minutes from day 2 to day 3. In Study 2, two hundred and seventy people from Amazon Mechanical Turk participated. Participants were randomly assigned to one of the two experimental conditions: the control or the make-up condition. All the participants were given the same goal: studying a new language for 20 minutes a day using a free app they downloaded on their phone.

Consistent with the idea that encouraging participants to make up for failure helps goal pursuit, participants in the make-up condition ($M = 98.33$, $SD = 64.25$) studied more minutes over the course of the 7-day study than participants in the control condition ($M = 79.61$, $SD = 59.99$; $B = 18.78$, $t(268) = 2.48$, $p = .014$). While daily performance declined over time across the board, there was no interaction between time and condition; the make-up condition always performed significantly better than the control condition ($B = -0.0004$, $t(1515) = -0.003$, $p = 0.99$).

Study 3 was largely the same as Study 2 with a few changes. Two hundred and forty-nine participants were recruited from a large Northeastern university's behavioral lab. In this study, participants were asked to work out for 28 minutes a day using a free app they downloaded on their phone. Participants were randomized into one of three experimental conditions: the control, the make-up, or the frontload condition. This new front-load condition allowed participants to front-load for future failure. For instance, they could work out 56 minutes on day 2 and reallocate those minutes to day 3, allowing them to skip a workout on day 3.

We found that those who were encouraged to make up for their past failure ($M = 89.89$, $SD = 87.39$) worked out marginally significantly more than those in the control condition ($M = 64.29$, $SD = 80.64$; $B = 25.59$, $t(247) = 1.83$, $p = .06$). Unlike the make-up condition, the front load condition ($M = 74.55$, $SD = 99.02$) did not vary significantly from the control condition ($B = 10.25$, $t(247) = 0.74$, $p = .46$), nor did it vary significantly from the make-up condition ($B = -15.34$, $t(247) = -1.11$, $p = .27$). These results suggest *when* consumers are nudged to make up for their failures affects their goal persistence. Unlike in Study 2, there was a significant time and condition interaction ($B = -0.73$, $t(1504.55) = -2.59$, $p = .01$), such that the make-up condition's advantage over the control condition declined over time. The difference in this effect across the two studies may indicate that making up for failure is more effective for shorter or easier goals over time (e.g., 20-minute goal in Study 2 vs. ~30-minute daily goal in Study 3).

Across three studies, we find that encouraging people to make up for their failures is a desirable intervention (Study 1) that can help improve goal persistence (Studies 2 and 3). Our work helps fill a gap in the goals and motivation literature by showing one way that consumers can be encouraged to persist after failure. Furthermore, it demonstrates a simple low-cost nudge that companies can implement to help consumers achieve their goals.

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"Yes, I Recall," But "No, I Don't"? – Why Negating (vs. Affirming) Brand Attributes Impairs the Brand's Recall Memory

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EXTENDED ABSTRACT

Negations, i.e., use of a "no" or a "not" are frequently used to communicate salient brand attributes (e.g., FedEx's advertisement, "When there is no tomorrow," or Kraft's slogan for the DiGiorno brand of frozen pizza, "It's not delivery – it's DiGiorno.") This research examines implications of such "brand-attribute" negation on the recall memory of brands when an attribute is negated. Specifically, we investigate the following: does "brand-attribute" negation impair recall memory of the brand? What is the underlying mechanism leading to such impaired brand recall memory? And, the boundary condition of such effects. We demonstrate that negation activates negation-related semantic concepts, which through a spreading activation mechanism (Collins and Loftus 1975), attenuates consumer's general "judgment of importance" and impairs brand recall memory. We contribute to theories of negation and judgment by advancing our understanding of the mechanism through which negation is construed and processed by consumers.

Consumer researchers have conceptualized the organization of brands and brand-related information (e.g., brand attributes) in memory, using the Human Associative Memory (HAM) theory (Anderson and Bower 2014) that represents declarative knowledge as a network of concept nodes connected by associative links. When a specific knowledge structure is primed, the central node and related nodes are activated. This activation propagates along the links of the network to nodes of all related concepts. Such brand associations influence consumers' product evaluations and choices (Van Osselaer and Janiszewski 2001). Within the HAM tradition, the association strength between a cue (e.g., brand attribute) and an outcome (e.g., brand) and the activation of an outcome in the presence of a cue is strengthened each time the cue and the outcome co-occur.

Research shows that negation is associated with cognitive inhibition and prevents activation of the core concept or schema being negated (Carpenter and Just 1975; Giora et al. 2007; Kaup and Zwaan 2003; MacDonald and Just 1989). Consequently, when a brand's attribute is negated, cognitive inhibition prevents activation of the associative link between the brand and the attribute preventing the two from co-occurring severing the associative link between the brand and attribute nodes, thereby impairing brand memory. Further, since cognitive inhibition is unique to negation, its opposite action, i.e., affirmation, would not impair brand memory. Thus,

Hypothesis 1:   *Brand attribute negation (vs. affirmation) impairs brand recall memory.*

Research has shown that both intrinsic and extrinsic motivation are critical factors that determine how individuals process information and formulate their attitudinal and behavioral responses (Darke, Chattopadhyay, and Ashworth 2006). Thus, memory may be influenced by the consumer's motivation to remember while processing information. In the context of brands, one such intrinsic motivation is brand love (Batra, Ahuvia, and Bagozzi 2012)the authors investigate the nature and consequences of brand love. Arguing that research on brand love needs to be built on an understanding of how consumers actually experience this phenomenon, they conduct two qualitative studies to uncover the different elements ('features'. Brands that

evoke greater "brand-love" vis-à-vis those that do not are more deeply embedded in the consumer's memory, motivating the consumer to remember the brand, irrespective of whether the brand attribute is negated or affirmed. Similarly, an extrinsic motivation, such as a monetary reward, should motivate the consumer to remember the brand, irrespective of brand attribute negation or affirmation. Formally,

Hypothesis 2:   *When a consumer's brand-love is low (vs. high), there is a significant (vs. no significant) difference in brand recall memory under brand attribute negation vs. affirmation.*

Hypothesis 3:   *When consumers are extrinsically motivated by the presence (vs. absence) of a financial incentive, there is no difference in brand recall memory under brand attribute negation vs. affirmation.*

What is the mechanism underlying brand-attribute negation induced impaired brand memory? The HAM model depicts consumer memory as episodic and semantic traces of incoming information comprising schemas or knowledge structures (Kronlund, Whittlesea, and Yoon 2008). We argue that when an attribute is negated, the central and related nodes associated with negation are activated. This facilitates related information processing through 'spreading semantic activation' such that negation-related semantic concepts are stimulated above threshold more quickly than if not primed (Collins and Loftus 1975). This increases the accessibility in memory of specific semantic concepts that negation-related experiences exemplify (e.g., 'oppose,' 'contradict,' etc.) We propose that such cues prevent activation of the associative link between the brand and attribute nodes and exclude such associations from the consumer's immediate scope of consideration. Such exclusion from one's immediate scope of consideration triggers lower judgment of importance toward the negated concept and also induces generally lower judgments of importance in an individual's mind. Being cognitive misers, humans disregard the unimportant and forget under negation. Thus,

Hypothesis 4:   *Accessibility of negation-related semantic concepts mediate effects of explicit negation on consumer's judgment of importance and their brand recall memory.*

Thus, H4 proposes that attribute negation (vs. affirmation), through activation of negation-related semantic concepts, induces lower judgments of importance, leading to impaired brand recall memory. Next, we test our hypotheses.

Five studies validated our hypotheses, all of which were supported. Study 1 tests H1 with real brands that respondents were familiar with, using a one-way within-subjects design with attribute framing (negation/affirmation) as the independent variable. Each attribute emphasized a positive aspect of the brand but was framed either using negation or affirmation. Study 2 tests H1 and H2 with real consumers through a mall-intercept study with real brands using a 2 (brand-love: high/low) x 2 (attribute-framing: negation/affirmation) two-way within-subjects design. Study 3 tests H1 for both

familiar and unfamiliar brands using a 2 (brand familiarity: familiar/unfamiliar) x 2 (action: affirmation/negation) mixed design with familiarity as between-subjects and action, within-subjects. Study 4 tests H3 using a 2 (motivation: high/low) x 2 (action: affirmation/negation) mixed design, with motivation as between-subjects and action as within-subjects. Finally, study 5 tests H4 by showing that the accessibility of negation-related semantic concepts mediates the effect of explicit negation on consumer's judgment of importance and subsequent brand recall memory.

The principal theoretical contribution of our work is in investigating the mechanism leading to brand-attribute negation-induced forgetting. This has implications for brand managers, who communicate essential product attributes through carefully constructed messages. The findings suggest that managers need to communicate attribute information using affirmation rather than negation frames and that judicious use of affirmation (vs. negation) frames to convey the same information may be beneficial to marketers.

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The Video-aperitif During Lockdown in France: (Re)Defining Situation and Context of Online Consumption

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EXTENDED ABSTRACT

The aperitif is an alcoholic drink taken before a meal as an appetizer, but also a crucial part of the French culture and social life (Corbeau and Poulain 2002). The term *apéro* then refers less to the pre-meal beverage itself than to the moment, social and symbolic aspects of the consumption practice. The aperitif is a moment of food sociability, which can be broken down into four ideal-types: the spontaneous aperitif, the home invitation for only an aperitif, the aperitif invitation as prelude to a meal at home, and the aperitif-dinner (Poulain 2005).

From the very beginning of the first lockdown in France (implemented between March 17 and May 11, 2020), the press has widely reported on a massive phenomenon: online video-apéro, under the terms *Skypéros*, *WhatsAppéros* or even *Coronapéros*, either referring to the platforms or the virus. This research aims to understand this new consumption practice both online and at home (Epp, Schau, and Price 2014) as an opportunity to better distinguish the concepts of consumption situation and context.

The concept of situation has been at the heart of social sciences since Goffman's seminal text (1964) and became central to marketing research (Belk 1974, 1975, Punj and Stewart 1983). The invitation to take better account of the context to avoid the pitfall of micro-social approaches is more recent (Askegaard and Linnet 2011). The situation is determined by the triptych: participants, spatial and material elements, temporal dimensions (Michaud-Trévinal and Stenger 2018). The situation is lived and experienced, subjective. It fundamentally depends on the context (or framework; Goffman 1974).

The context corresponds to the way the situation is lived, to the interpretation structures, to the cognitive patterns, which each person uses to understand the events that occur (Girin 2016). Any experience can intertwine itself to several frameworks–either primary or transformed frameworks (Goffman 1974)–which are related to each other. Primary frameworks can be natural, involving the laws of nature, or social, involving human intentions. The framework is transformed when it resembles a primary framework but has a different meaning. If the transformation is visible and explicit to all participants, it refers to a keying process (e.g., band rehearsal). If the transformation is hidden and intended to distort the interpretation, it is a fabrication process (e.g., mystery shopper).

Three qualitative studies were conducted. At first glance, the results show that video-apéros allow people to "see each other", "get closer" and even "create new links" in the same way as aperitifs. Video-apéros are very much linked to the pandemic context: they allow people to maintain habits despite lockdown– "for me, the video-apéro [...] helps to share things with people close to us with whom we used to have aperitifs before" (Eléonore). This is one of the interests of video-apéros: doing as before, and in a performative way, showing to oneself and to others that everything is fine!

The video-apéros resonate with Poulain's aperitif ideal-types (2005) but goes beyond. On the one hand, *spontaneous video-apéros* are organized following a quick proposal. On the other hand, *scheduled video-apéros* are organized to live an expected moment. They take three different forms: *invitation to the video-apero*, planned to try a new mode of social interaction with colleagues; the *pre-meal video-apéro*, based on the historical principle of appetizers within a closer social circle; the *video-apero dinner*, close to a buffet dinner with friends or family.

However, many frustrations caused by video-apéros tend to keep them away from aperitifs: physical interaction is impossible: "we can't hug each other" (Mireille); verbal or visual interactions are unnatural: "when everyone is talking at the same time, you can't hear yourself" (Bettina); and the restricted and static field of vision causes a certain "weariness".

Finally, for most participants, the video-apéro seems to be nothing more than a copy of the real thing in which the interactants play at having an aperitif: "as if you were going out for real and before going out, you wanted to make yourself a bit prettier" (Aline). And in the absence of interaction rules usually imposed by the hosts, participants are surprised once they realize they have a different idea about the unfolding of a video-apéro: "We were having an aperitif, but she wasn't really having an aperitif" (Gabriel).

The practice of video-apéro reveals a real proximity to the traditional aperitif, but frame analysis of the consumption experience highlights the variety of situations and contexts. On the one hand, the mediatization of the experience, located in distinct places, prevents face-to-face co-presence. On the other hand, the interactants do not necessarily share the same type of space, materiality and food which usually structure consumption situations (Michaud-Trévinal and Stenger 2018). The variety of situations therefore leads to a diversity of consumption experiences.

Framing operations of the consumption experience are also often differentiated. Firstly, participants do not necessarily experience the same type of video-apéro, which leads to ambiguous or even frustrating experiences and to disengagement (Goffman 1974). Secondly, the reference framework is not always shared. For some participants, the video-apéro clearly refers to a primary and social framework: it is an aperitif with a mediated consumption experience. For others, the practice is part of a keying process. The playful dimension of the consumption experience is then prominent, agreeing that one is doing as if while considering that it is not really an aperitif but a copy of the model (Goffman 1974). If all the guests agree, the experience is balanced and the activities are frank. If not, a breakdown is observed. The frustration revealed in our results is symptomatic of participants who would like to privilege a primary social framework but resign themselves to a keying process.

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Virtual Reality Promotes Patience for Hedonic Experiences

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EXTENDED ABSTRACT

Virtual Reality (VR) has become more popular than ever. The global market size for VR was 15.81 billion dollars in 2020 and this number is expected to increase at a compound annual growth rate of 18% in the coming years (Grand View Research, 2021). One common use of VR in marketing is to communicate information about products, especially experiential products, by offering consumers a preview of what they would purchase. For instance, Destination British Columbia, a tourism marketing corporation in Canada, applied VR technology to introduce local travel destinations to potential tourists (Newcomb 2014).

While past research on vividness suggests that VR communication should be more effective (Breugelmans and Campo 2011; MacInnis and Price 1987; Metcalfe and Mischel 1999; Roggeveen et al. 2015), we argue that incorporating VR technologies in marketing practice sometimes decreases the effectiveness of communication. VR refers to a set of technologies that supports immersive experiences in a virtual environment beyond the physical reality (Berg and Vance 2017). Because VR does not simply increase vividness, but in fact fosters a strong sense of physical presence in the virtual environment, or "telepresence" (Kim and Biocca 1997; Steuer 1992), we argue that previewing a real experience through VR can make consumers feel that they have already had part of the experience. This illusion of having already engaged in the experience should make it more difficult for consumers to justify consuming it immediately in real life. Consequently, we predict that consumers will exhibit more patience for an experience after having previewed it through VR (vs. regular video). Importantly, we contend that VR should only lead to greater patience for the real experience when there is a need to justify consumption (i.e., when the experience is hedonic rather than utilitarian; Okada 2005).

We find evidence for this effect in two studies. In study 1, participants were randomly assigned to a 3 (medium: VR vs. regular-video vs. pictures) x continuous (perceived experience type: hedonic vs. utilitarian) between-subjects design. Participants imagined that they were interested in visiting Rome in Italy. In the VR condition, participants watched a 360-degree video about Rome via an Oculus Rift VR headset. In the regular-video condition, participants watched the same 360-degree video on a computer while wearing headphones. In the pictures condition, participants viewed screenshots taken from the same video. A manipulation check confirmed that VR generated a higher level of telepresence than regular-video, and regular-video generated a higher level of telepresence than pictures. We measured patience by asking participants to choose between taking a trip to Rome sooner for a higher price and taking the same trip later for a lower price, with the latter option representing greater patience. We also measured whether participants perceived the experience as more hedonic or more utilitarian (1 = hedonic, 100 = utilitarian). There was a significant interaction between medium and experience type ($X^2 = 7.95$, $p < .05$). A floodlight analysis revealed that compared to the regular video, VR led to more patience when the experience was perceived as more hedonic ($\beta_{JN} = 1.52$, SE = .78, $p = .05$ at 1.52 SD below the mean), but less patience when it was perceived as more utilitarian ($\beta_{JN} = -2.33$, SE = 1.19, $p = .05$ at 1.98 SD above the mean). Additional analyses revealed that compared to the picture condition, regular-video led to less patience when the experience was

perceived as more hedonic ($\beta_{JN} = 1.43$, SE = .73, $p = .05$ at 1.15 SD below the mean), indicating participants became more impatient for the real experience after watching the regular-video than after watching pictures. There was no significance region when comparing pictures to VR. Consistent with prior research on the benefits of vividness, the regular video made participants more impatient compared to the picture condition when the experience was perceived as hedonic. However, supporting our predictions, VR (relative to regular-video) led to a unique effect: greater patience for the experience when it was perceived as hedonic.

Study 2 replicates this effect and shows an important boundary condition: if the preview of the experience is too fleeting, the preview itself will not be sufficient to make consumers feel that they have already had part of the experience. Thus, our effect should only occur when there is sufficient time for consumers to preview the experience. Participants were randomly assigned to a 2 (medium: VR vs. regular-video) x 2 (duration: long vs. short) x continuous (perceived experience type: hedonic vs. utilitarian) between-subjects design. Participants imagined that they were interested in visiting Machu Picchu in Peru. We manipulated medium the same way as in study 1. A manipulation check confirmed that telepresence was higher in the VR condition. Duration was manipulated by showing participants a 7-minute 360-degree video introducing Machu Picchu or a 2-minute version of the same 360-degree video. Both videos featured the same number of destinations and only varied in the details provided about each location and the duration spent on each location. Next, participants answered the measures as in study 1. There was a significant three-way interaction ($X^2 = 5.25$, $p < .05$), and a significant two-way interaction between medium and experience type when the message was long ($\beta = -.03$, $p < .05$). Consistent with our predictions, as the trip became more hedonic, participants were more patient in the VR condition than in the regular-video condition ($\beta = .91$, SE = .44, $p < .05$). When duration was short, the two-way interaction was not significant ($p > .1$), presumably because the fleeting message was not sufficient to make consumers feel that they have already had part of the experience.

Our results contribute to the literature by identifying a special case where a highly vivid presentation of a novel hedonic experience, which can generate a high level of telepresence, leads to patience. Additionally, we offer marketers pathways to attenuate the impact of this effect, such as by making consumers perceive the experiences as less hedonic or providing only fleeting experiences via VR.

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The Way We Were: Memories of Extraordinary Group Experiences Impact Cohesion and Well-Being

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EXTENDED ABSTRACT

Every year, millions of dollars change hands in hopes that extraordinary experiences will benefit stressed consumers (e.g., Make-A-Wish). While such experiences promote well-being (Bhattacharjee and Mogilner 2014; Van Boven 2005), little is known about the long-term effects of the special memories (Zauberman, Ratner, and Kim 2009) on the group that shared the experience. To address this gap, we introduce a group-level variable, cohesion, and test hypotheses related to stress, distraction, and group well-being.

Drawing on group and family functioning literature (Mudrack 1989; Olson 2000), we define cohesion as the perception of a group as stable, bonded, and enduring (Friborg et al. 2003). We expect special memories of extraordinary experiences to enhance cohesion because they capture meaningful events shared by the group (Zabriskie and McCormick 2001), which enjoys reliving them (Wildschut et al. 2006). In turn, cohesion is a robust predictor of well-being (Li et al. 2014; Lightsey and Sweeney 2008).

> *Hypothesis 1:* *The positive relationship between more special memories of extraordinary group experiences and well-being is mediated by cohesion.*

We also investigate how stress at the time of the experience influences the relationship between special memories and well-being years later. People with more stress are likely to exhibit greater affiliative behaviors within the group (Taylor 2006; von Dawans, Strojny, and Domes 2021), promoting cohesion during the experience. Memories of these experiences, then, should provide a meaningful reminder of when the group experienced increased cohesion, thereby elevating perceptions of current cohesion and well-being.

> *Hypothesis 2:* *The mediational pathway will be moderated by stress at the time of the experience, such that higher (vs. lower) stress will strengthen (attenuate) the effect of special memories on cohesion and well-being.*

Finally, we examine a feature of extraordinary experiences: distraction, or the degree to which the experience allows the group to escape their daily reality. By buffering the effects of stress (Iwasaki, MacTavish, and MacKay 2005), the distracting extraordinary experience enables highly stressed group members to focus on living through the experience together, allowing them to satisfy affiliative needs (Taylor 2006) and to create memories of cohesiveness (Shaw, Havitz, and Delemere 2008); without this buffer, stress impairs interactions (Webster-Stratton 1990). Thus, we hypothesize a three-way interaction:

> *Hypothesis 3:* *Distraction will moderate the effect of special memories on cohesion and well-being for more (vs. less) stressed individuals, such that extraordinary experiences higher (vs. lower) in distraction will strengthen the indirect effect.*

Study 1

Study 1 addresses H1 and H3 using groups under profound stress: families with critically ill children who partook in an extraordinary experience ('wish') through Make-A-Wish. We surveyed 132 families, asking them to describe their wish and answer questions about the group. Participants completed measures of family well-being (adapted from Hills and Argyle 2002; 7 items, α=.91), cohesion (Friborg et al. 2003; 6 items, α=.83), the extent to which a *memory* of the experience is perceived as special (3 items, α=.94), and distraction (4 items, α=.86)—all of which represent separate constructs. We assessed social support (3 items, α=.83), which captures benefits provided by outsiders (Norris and Kaniasty 1996), as an alternative mediator.

First, we examined the indirect effect of the specialness of memory on well-being through cohesion using PROCESS Model 4 (95% CIs, 5,000 draws [same hereafter]). The effect is significant (β=.12, CI=.01, .53): more special memories are associated with greater cohesion (β=.26, CI=.10, .43), which predicts well-being (β=.46, CI=.25, .66). This effect is concurrent to, but independent of, a significant indirect effect through social support. These results suggest that the link between specialness of memory and well-being is uniquely mediated by cohesion, supporting H1.

Given our high-stress sample, H3 suggests that high-distraction wishes should be associated with greater cohesion. We examine whether distraction moderates the mediated pathway using PROCESS Model 7. With cohesion, the moderation of the mediated pathway is supported (IMM=.24, CI=.05, .42): for less distracting wishes, the indirect effect is significantly smaller (β=.53, CI=.13, .89) than for more distracting wishes (β=.79, CI=.19, 1.34). Distraction does not moderate the mediated pathway with social support. These results provide support for H3. However, study 1 uses correlational data, does not manipulate stress, and includes only extraordinary experiences—issues addressed in study 2.

Study 2

Study 2 examines H1, H2, and H3. We randomly assigned participants (*n*=189) to recall either an ordinary or extraordinary experience with close others (adapted from Bhattacharjee and Mogilner 2014). After writing about the experience, participants completed manipulation checks, followed by measures of cohesion (α=.89), distraction (α=.80), well-being (adapted from Diener et al. 1985; 4 items, α=.89), and stress at the time of the experience (Elo et al. 2003). We measured two alternate mediators: social support (α=.79) and communitas (Arnould and Price 1993; 10 items, α=.89).

The manipulation was successful: individuals in the ordinary (vs. extraordinary) condition reported less special memories (*p*<.01) and less extraordinary experiences (*p*<.01). We expect that recollecting extraordinary (vs. ordinary) group experiences will be associated with increased cohesion and well-being for people highly stressed at the time of the experience, especially if the experience was highly distracting. We examine this three-way interaction using PROCESS Model 11. Cohesion predicts well-being (β=.34, CI=.17, .51) and a significant three-way interaction predicts cohesion (β=.24, CI=.12, .36). For low-stress participants, memories of extraordinary (vs. ordinary) experiences produce significantly more cohesion when the

experiences were *less* distracting (β=.98, CI=.33, 1.63) and significantly less cohesion when they were *more* distracting (β=-.85, CI=-1.50, -.19). For high-stress participants, memories of extraordinary (vs. ordinary) experiences produce significantly more cohesion when the experiences were *more* distracting (β=.96, CI=.27, 1.65) but no effect when they are *less* distracting (β=-.26, CI=-.97, .45). That is, highly stressed individuals benefit from extraordinary experiences only if they provide an escape. This pattern of effects with cohesion remains the same regardless of the inclusion of social support or communitas.

Overall, we contribute to the extraordinary experiences literature by demonstrating that special memories of extraordinary experiences benefit close groups in the long-term by influencing perceptions of cohesion and well-being, particularly for consumers who are highly stressed at the time of undertaking more distracting experiences.

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Local versus Global: The Effect of Identity Salience on Impulsive Consumption

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EXTENDED ABSTRACT

Impulsive consumption is highly prevalent in the United States. Hence, an understanding of consumer segments that are more or less likely to consume impulsively as well as factors that strengthen or weaken the tendency can help enhance firm performance. Acknowledging the importance of this phenomenon, previous researchers have identified various factors that influence impulsive consumption, such as self-control (Vohs and Faber 2007) and self-regulation (Verplanken and Sato 2011). However, extant literature has ignored the role of local-global identity in influencing impulsive consumption. Globalization has substantially influenced the world economy, with the world trade of exports and imports of goods and services having increased by 26% from 2008 to 2018 (World Trade Organization 2019), making it timely and important to understand the effect of this variable.

Although prior research has not examined the relationship between local-global identity and impulsive consumption, extant findings seem to suggest that a global (vs. local) identity leads to a greater level of impulsive consumption. Ng and Batra (2017), for example, showed that consumers high in global identity tend to have a promotion focus, whereas those high in local identity tend to have a prevention focus. Since promotion focus is positively associated with impulsive consumption (Sengupta and Zhou 2007), previous research may imply that global (vs. local) identity enhances the tendency of impulsive buying.

However, in sharp contrast to the above perspective, we propose that consumers with a local identity (henceforth, "locals") are more likely to engage in impulsive consumption than those with a global identity (henceforth, "globals"), because they have an accessible constraints mindset, defined "a general cognitive orientation focused on the existence of constraints" (Mehta and Zhu 2016, p. 770). A fundamental difference between a local and a global identity is the focus they place on local vs. global traditions and events. Locals' attention and focus tend to be confined to their local community. In contrast, globals are not bounded to a particular community and are open to diversified experiences and values (Zhang and Khare 2009). Such a difference can be partly attributed to the restrictions that locals have, with respect to access to the outside world. In particular, compared to countries characterized by a global identity, countries characterized by a local identity have more physical and economic constraints, including lower life expectancy, lower level of environmental sustainability, and lower gross domestic product per capita, and have fewer political and civil liberties (Au et al. 2011).

Also, locals (but not globals) tend to be constrained in other aspects of their lives, such as fewer travels and limited media consumption (Arnett 2002). Individuals from more localized countries are limited to local news and events and have restricted access to the news and stories from other cultures; however, those from more globalized countries do not have these constraints and are able to access the stories and news from the rest of the world (Arnett 2002). Previous research also points to a negative association between autonomy and local identity. For example, Singaporean students perceived lower autonomy compared to Canadian students (Rudy et al. 2007), where Singaporeans are higher in local identity than Canadians (Gao, Zhang, and Mittal 2017). The foregoing discussion suggests that local (vs. global) identity enhances the salience of a constraints mindset.

Our core thesis that a constraints mindset mediates the relationship between local-global identity and impulsive consumption relies on the proposed link between constraints mindset and impulsive consumption tendency. We expect this association due to the compensatory role of impulsive buying in mitigating the sense of constraints. Research suggests that consumers who face constraints tend to find it aversive and are motivated to change that state (Mehta and Zhu 2016). For example, when consumers stay in a constrained environment, such as a crowded restaurant, they tend to select and consume more high-calorie food (Hock and Bagchi 2018). Likewise, impulsive purchasing becomes an act of freedom within a restricted situation and relieves people from constraints (Thompson, Locander, and Pollio 1990). Accordingly, we hypothesize that locals have a stronger constraints mindset than globals, which in turn, leads them to consume more impulsively.

We further expect that, when constraints are enhanced by a contextual cue, globals—whose baseline level of constraints mindset is low and have greater potential for increase—should have a higher level of constraints mindset and their impulsive consumption tendency should increase, compared to baseline conditions. However, such a contextual cue is less likely to influence locals, whose constraints mindset (and hence, tendency to engage in impulsive consumption) is already high and has limited room for further increase ("ceiling effect"). Furthermore, locals' baseline constraints mindset is high and has a greater potential for decrease. Hence, a contextual cue that lowers constraints should reduce locals' impulsive consumption tendency. However, globals' baseline constraints mindset is low and is difficult to decrease further using contextual cues ("floor effect"). Hence, their impulsive consumption tendency should be unchanged when constraints are suppressed, relative to the control condition.

Notably, we expect that local-global identity predicts impulsive consumption for vice products, but not for virtue products. A major reason is that vice (vs. virtue) products lead to greater temptation for immediate gratification and thus are more likely to be consumed impulsively (Wertenbroch 1998). Consistent with this reasoning, when examining the relationship between power distance belief and impulsive consumption, Zhang, Winterich, and Mittal (2010; study 3) found that power distance belief affects consumers' purchase of vice products, but not virtue products.

Study 1 provided initial evidence using chronic measures of impulsive consumption tendency and local-global identity. A regression analysis on impulsive consumption tendency, using global-identity and local-identity indices as predictors, revealed a positive effect of local-identity index and a non-significant effect of global-identity index. These results support our prediction that a local (but not global) identity increases consumers' impulsive consumption tendency.

Study 2 tested the effect of local-global identity on impulsive consumption behavior in a real-life setting. Shoppers of a grocery store who agreed to participate were also asked to complete a short survey that contained the measure of local-global identity and demographics. The items on each receipt were classified into two categories: vice products and virtue products. A regression analysis on the amount spent on vice products, using global-identity and local-identity indices as predictors, revealed a positive effect of local-identity

index and a non-significant effect of global-identity index. However, a regression analysis on the amount spent on virtue products revealed no effect of local-identity index or global-identity index. Therefore, using actual consumption data in a real-life setting, local (but not global) identity increases consumers' impulsive consumption tendency, as manifested by the spending on vice products, but not on virtue products.

Study 3 featured a 2 (identity: local vs. global) × 2 (product type: vice vs. virtue) between-subjects design. Participants were randomly assigned to local/global identity conditions. Thereafter, participants answered questions measuring constraints mindset. Further, we used popcorn and salad as the vice product and the virtue product, respectively. Participants were asked to indicate their preferences. A 2 (identity) × 2 (product type) ANOVA on impulsive consumption tendency revealed a significant identity × product type two-way interaction. For the vice-product, locals had a higher impulsive consumption tendency than globals. However, for the virtue-product, there was no difference in impulsive consumption tendency across locals and globals. Also, constraints mindset mediated the relationship between local-global identity and impulsive consumption tendency in the vice-product condition but not in the virtue-product condition.

Study 4 adopted a 2 (identity: local vs. global) × 3 (constraints: enhanced, reduced, unchanged) between-subjects design to demonstrate the moderating role of constraints. Participants answered questions measuring constraints mindset. Further, participants were asked to make a decision of purchasing the ice-cream certificate. A 2 (identity) × 3 (constraints) ANOVA on likelihood of purchasing the ice-cream certificate revealed a significant identity × constraints two-way interaction. We compared the likelihood of purchasing the certificate in the constraints-enhanced and -unchanged conditions among locals and globals separately. For globals, there was a higher level of impulsive consumption tendency in the constraints-enhanced condition than in the control condition. For locals, there was a similar level of impulsive consumption tendency across constraints-enhanced and control conditions. We also compared the likelihood in the constraints-reduced and -unchanged conditions among locals and globals separately. Globals had a similar level of impulsive consumption tendency across constraints-reduced and control conditions, whereas locals had a lower level of impulsive consumption tendency in the constraints-reduced condition than in the control condition. Also, constraints mindset mediated the relationship between local-global identity and impulsive consumption tendency in the control condition (but not in the constraints-enhanced condition or the constraints-reduced condition).

The issues we address in this research have significant implications for the literature on impulsive consumption and local-global identity. Our research represents a first attempt to explicitly examine the effect of local-global identity on impulsive consumption. We are also the first to uncover constraints mindset as a new qualitative difference between local identity and global identity. Because of such a difference, locals and globals exhibit different levels of impulsive consumption. Building upon the "constraints mindset" logic, we identify a contextual factor that sets boundary conditions for impulsive consumption.

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Entrusting the Future to Others' Hands: People Delegate Choice to a Decision Device More When Choosing for the Future

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EXTENDED ABSTRACT

People often face situations where they have to decide in advance what they will get in the future. While much of the extant research on decisions for the future focuses on the outcome of the decision (i.e., which alternative is chosen), another field of research finds that people often also avoid choice, such as by deferring or opting out of choice (Tversky and Shafir 1992; Dhar 1997), going with the default (Dinner, Johnson, Goldstein and Liu 2011), or delegating to another person (Steffel and Williams 2018). However, it is relatively unaddressed how the decision to choose versus leaving choice to other means might be different when people are choosing for the future. In the current research, we examine whether preference for delegating choice differs by outcome timing and propose a novel account of why people might delegate—due to the utility driven from the uncertainty provided by delegation, which can cause an apparent preference reversal when both choice and delegation are delayed.

While choice is inherently valuable (Leotti, Iyengar, and Ochsner 2010), making a choice can also be costly as it can incur cognitive load (Hauser and Wernerfelt 1990) or negative affect, such as regret from potentially choosing wrong (Zeelenberg 1999). Previous research has viewed decision avoidance, including delegation, as a means of eliminating such costs. As the literature on time discounting suggests that the value of the outcome is reduced as a function of how much into the future it is delayed (Samuelson 1937; Urminsky and Zauberman 2015), it is possible that the reduced perceived benefit of the outcome against the cost of choosing leads to delegating the choice more when choosing for future outcomes. While this explanation can also be extended to other means of choice avoidance (e.g., deferral or defaults), delegation is unique in that it offers temporary uncertainty about what they will get, from which people may derive pleasure (Ruan, Hsee, and Lu 2018). Hence, it is also possible that there is direct utility from delegation, over and beyond reducing the cost of choice.

Across five studies (total N=2,023), we demonstrate that people are more likely to delegate choice when the outcome is in the future than when it is in the present and test the predictions of the utility-from-delegation account. In our typical decision task, participants were asked to decide what item to receive (either immediately or in the future), between two alternatives within a consumption domain, varying the domain (e.g., snacks, genres of movies, etc.). For each decision, they chose from among three options: the two alternative consumer goods (i.e., making a choice) and a third option of delegating the decision to an external mechanism (e.g., randomization device, friend, majority rule, or computer algorithm).

Study 1 (N=633) demonstrated our main effect: participants were more likely to select the decision aid option when choosing for the future (27.13%) than for now (16.93%; B=0.10, SE=0.014, p<.001, 95% CI=[0.075, 0.13]). There was no significant difference in the effect of outcome timing on choice to use the decision aid across the different types of decision aids participants were offered (F(3, 1896)=0.33, p=.80), suggesting that preference for delegating future outcomes is more likely to arise from the fundamental benefit that delegation provides. In addition, the preference for delegation scaled with the number of days to the outcomes (study 2, N=320; B=0.001, t(615.6)=6.55, p<.001).

If the increased delegation for future outcomes were mainly driven by discounting of future outcomes, a similar preference should be observed for choosing defaulted options in the future. However, unlike delegation, choosing the default would not create momentary uncertainty. In study 3 (N=320), given the same sets of alternatives as in study 1 but with one of the options designated as the default, the proportion of participants who chose the default did not significantly differ between the immediate and delayed timing conditions in either of the domain conditions (snacks: 57.6% vs. 60.0%, p=.73; movies: 64.2% vs. 59.5%, p=.42), suggesting there is additional utility provided by delegation for delayed options that is not offered by defaults.

Importantly, in study 4 (N=427), the increased preference for delegation for future outcomes persisted even when the timing of the choice (i.e., if they have to choose, when they would be choosing, as opposed to delegating) was delayed into the future as well, so that any perceived costs of choice are also discounted (difference between choice-now condition and choice-later condition: B=-0.038, SE=0.042, 95% CI=[-0.12, 0.048]). Furthermore, in study 5 (N=320), the effect was mitigated when the outcome of the delegation was to be known later, thereby delaying the resolution of the uncertainty provided by delegation (effect of outcome timing with delayed resolution of uncertainty: B=0.036, SE=0.041, p=.38), which is consistent with the utility-from-delegation account.

Our research shows that outcome timing matters in people's preferences for delegation. Importantly, while people prefer to delegate more for future outcomes than for immediate outcomes, the persistence of this preference in the absence of immediate cost of choice suggests that our effect cannot be fully explained by previous accounts of delegation behavior, but rather that delegation may provide direct utility, through momentary uncertainty and its resolution, over and beyond eliminating the cost of choice.

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Fairness in Segmentation and Targeting

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EXTENDED ABSTRACT

Do consumers today believe it is appropriate for companies to target customers based on demographics? Across 10 experiments (N=6,234), we find consistent evidence that perceptions of fairness are lower when advertising specifically targets groups based on race or gender, relative to advertising that broadly engages the general public.

Study 1a employed a 2 (advertising: *broad* vs. *targeted*) × 2 (segmentation basis: *race* vs. *gender*), between-subjects design. Participants read about "a new product" that would "appeal specifically to a particular [race/gender]." A company planned to either "advertise the new product broadly to the general public" (*broad*) or "advertise the new product specifically to that [race/gender]" (*targeted*). We then asked: "How fair is this plan?" Fairness perceptions were lower in the *targeted* condition (M=5.81) than in the *broad* condition (M=7.38, p<.001).

Studies 1b and 1c examined *gender* and *race* as the basis of segmentation, respectively, and were identical to Study 1a, with one exception: participants expressed purchase intentions.

In Study 1b, participants expressed lower purchase intentions in the *targeted* condition (M=3.96) than in the *broad* condition (M=5.46, p<.001). In Study 1c, participants expressed lower purchase intentions in the *targeted* condition (M=4.81) than in the *broad* condition (M=5.68, p<.001).

Study 2a tested whether targeting would be perceived as unfair even when promoted products and services were beneficial. It employed a 2 (advertising: *broad vs. targeted*) × 2 (valence: *beneficial* vs. *detrimental*), between-subjects design. We described a new snack that was "healthy/unhealthy", with (low/high) levels of saturated fat, sugar, and sodium and (many/few) vitamins and minerals." A company believed the snacks would appeal specifically to Black individuals and advertised either "to Black people directly" (*targeted*) or "broadly to the general public" (*broad*). Participants then rated: "How acceptable is this advertising plan?" and "How fair is this advertising plan?" Fairness perceptions were lower in the *targeted* condition (M=5.01) than in the *broad* condition (M=6.21, p<.001). And the lack of an interaction indicated that targeting was viewed as equally unfair in the *beneficial* and *detrimental* conditions (p=.479). A follow-up study (2b) confirmed a similar pattern for gender-based targeting.

Study 2c tested an alternative explanation—that broad advertising has greater reach and thus potentially could feel more equitable. We adapted the *snack* scenario from Study 2a and explicitly told half the participants, that the message would reach "100k customers." If the effect were driven by different inferences about reach, this line should moderate the effect. We replicated the main effect of *broad* versus *targeted* advertising (p<.001), but there was no main effect of reach (p=.589) and no interaction (p=.600).

Study 3 employed a single-factor 2 (advertising: *broad* vs. *targeted*), between-subjects design. All participants first read: "A company has developed a new product, which they believe will appeal specifically to a particular demographic group." The company planned to either "advertise the new product broadly to the general public" (*broad*) or "advertise the new product specifically to that particular demographic group" (*targeted*). We then asked participants

to rate fairness and indicate the extent to which they agreed or disagreed with 10 statements:

1. "The company is limiting access to some people and not others"
2. "The company is making choices on behalf of individuals, instead of letting them choose for themselves"
3. "The company is taking too much control away from individuals"
4. "This plan lets individuals make their own decisions" [reverse-coded]
5. "This plan feels discriminatory"
6. "This plan feels equitable" [reverse-coded]
7. "This plan is inclusive" [reverse-coded]
8. "The company is favoring some people over others"
9. "The company is making assumptions about individuals based on superficial information"
10. "This plan reflects an understanding of unique individual preferences" [reverse-coded]

Fairness perceptions were lower in the *targeted* condition (M=6.56) than in the *broad* condition (M=7.53, p<.001). We next created factor variables by averaging the items that loaded primarily onto each of two factors, which we characterize as "loss of agency" and "discrimination," respectively. A bootstrapped mediation revealed that both simultaneously (and independently) mediated the effect. The remaining studies manipulate these factors directly.

Study 4a employed a 2 (advertising: *broad* vs. *targeted*) × 2 (cofounder/CEO: *Black* vs. *non-Black*), between-subjects design. Participants read that a company had "developed a new line of snacks" that "will appeal specifically to their Black customers." The company planned to "advertise the snacks" either "broadly to the general public" (*broad*) or "specifically to Black people" (*targeted*). The company's CEO was either a "Black entrepreneur" or "non-Black entrepreneur." Finally, participants rated the fairness of the plan. We observed a simple effect of condition when the cofounder/CEO was non-Black (p<.001), and a significantly attenuated simple effect of condition when the cofounder/CEO was Black (p<.001). This attenuation was confirmed by a significant interaction (p=.045).

Study 4b employed a 2 (advertising: *broad* vs. *targeted*) × 2 (product appeal: *race-based* vs. *preference-based*), between-subjects design. Participants read that a company had snacks that it believed would appeal "a particular race (due to their preference for spicy food)" (*race-based*) or "to people who like spicy food" (*preference-based*). The company planned to "advertise the snacks" either "broadly to the general public" (*broad*) or "specifically to people [of that particular race/who like spicy food]" (*targeted*). Finally, participants rated the fairness of the plan. We observed a simple effect of condition in the *race-based* condition (p<.001), and a significantly attenuated simple effect of condition in the *preference-based* condition (p=.018). This attenuation was confirmed by a significant interaction (p<.001).

Study 4c employed a 2 (advertising: *broad* vs. *targeted*) × 2 (reason: *biology* vs. *taste*), between-subjects design. Participants read that for "a new line of snacks…initial testing showed that, due to the taste and texture" (*taste*) or "vitamin and nutrient profile" (*bi-*

ology), they "are better suited to the [preferences/biological needs] of their female customers." The company planned to "advertise the snacks" either "broadly to the general public" (*broad*) or "to women directly" (*targeted*). Finally, participants rated fairness. We observed a simple effect of condition in the *taste* condition ($p<.001$), and a reversal in the *biology* condition ($p=.019$). This reversal was confirmed by a significant interaction ($p<.001$).

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Trust Us, We Use AI: Disclosing Information to AI Decreases Consumers' Trust in Brands

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EXTENDED ABSTRACT

Trust has been traditionally considered as an asset that is gradually built on former interactions with brands (Albert & Merunka, 2013), and it is an important predictor of sharing information. As consumers trust more, they disclose more (Dinev & Hart, 2006; Hoffman et al., 1999). However, in today's world, this route may not be the only route consumers take. Many companies require consumers to share personal information even before they have a chance to build trust. In this study, we explore the reverse relationship between trust and information disclosure, and the consequences of disclosing information to AI (vs humans).

Research has shown that compared to humans, artificial agents are considered as less of social agents (Gray et al. 2007; Lefkeli et al. 2020). Building on these findings, we suggest that when consumers disclose information to agents that are not considered as social counterparts, they infer that there should be other social actors, humans, in this communication episode. In other words, consumers think that AI is only working at the surface level. As actual human beings operate at the background, AI shares consumers' information with other people. Thus, the audience consists of the AI and several people. On the other hand, when they disclose to humans, they think the information will be known by that person, indicating a difference in audience size.

As the number of people that the information is shared increases, consumers tend to disclose less (Barasch & Berger 2014). We propose that broadcasting gives rise to a feeling of exploitation. The larger the audience size with which personal information is shared, the higher the probability of someone taking advantage of the information is. The sense of exploitation decreases consumers' trust in brands (CTB).

In Study 1a, participants (N= 188) were asked to imagine that they called their bank, and shared information regarding their savings with a human (artificial agent) representative. They completed the brand trust scale (Chaudhuri & Holbrook 2001). As predicted, participants in the AI condition trusted the brand less than the ones in the human condition (M_{AI} = 5.07, M_{Human} = 5.57, $F(1, 186)$ = 6.346, p=.013). Study 1b (N=199) replicated these results using a scenario about disclosing contact information to a new brand.

In Study 2, participants (N=302) imagined disclosing their contact information to an artificial agent (vs. human) and reported the anticipated audience size (adapted from Barasch & Berger, 2014) and completed the sense of exploitation scale (Clark & Waddell, 1985). Results revealed that participants in the AI condition trusted the brand less than the ones in the human condition (M_{AI} = 4.04, M_{Human} = 4.54, $F(1, 300)$ = 9.922, p=.002). A serial mediation analysis showed disclosing information to AI increased the anticipated audience size, which increased the consumers' sense of exploitation, decreasing CTB. The direct effect was still significant (β =-.35, p=.012, 95%CI -.61,-.08) and the indirect effects were significant (index=-.16, 95%CI (-.29,-.04))

Employing a 2 (Agent Type: Human, AI) x 2(Audience Size: Narrowcasting, Control) between-subjects design, Study 3 (N=463) provided additional support for the mechanism. Participants in the narrowcasting condition were informed that the information they shared with the agent would not be shared with anyone else. All participants imagined disclosing financial information to their bank and completed the measures of Study 2. There was a significant interaction between agent type and audience size ($F(1, 459)$ = 4.397, p=.037). In the control condition, consumers thought that the information would be shared with less people when the agent was human ($M_{AI-Control}$ = 3.51, SD = 1.73 vs. $M_{Human-Control}$ = 2.76, SD = 1.36). When consumers disclosed information to AI, narrowcasting information decreased the audience size ($M_{AI-Narrowcasting}$ = 2.78, SD = 1.64 vs. $M_{AI-Control}$ = 3.51, SD = 1.73). Replicating our findings, participants in the AI (vs. human) had lower CTB ratings (M_{AI} = 4.85, M_{Human} = 5.51, $F(1, 461)$ = 28.329, p=.000). The interaction of agent type and audience size was not significant. However, when we examined the mediating processes, we found evidence consistent with our hypothesis. Analysis revealed that disclosing information to AI increased the anticipated audience size when narrowcasting information was not provided, which increased the sense of exploitation, decreasing CTB. The direct effect was still significant (β = −.55, p = .000), and the moderated serial mediation model was significant (Index = .183, 95%, CI = -.37, -.01). These findings suggest that informing consumers about the privacy of data is not enough to compensate the negative influence of disclosing information to artificial agents on brand trust.

Study 4 had a 2 (Agent Type: Human, AI) x 2(Medium of Communication: Phone, App) between-subjects design. Participants (N=400) were asked to imagine that they called their bank [opened the application] and provided financial information to a human [artificial agent] representative. Afterwards, they completed the measures of Study 2. Results revealed that consumers trusted brands less when they disclosed information to AI (vs. human) both on the phone ($M_{AI-Phone}$ = 4.59, $M_{Human-Phone}$ = 5.57) and on the app (M_{AI-App} = 5.02, $M_{Human-App}$ = 5.45). Interestingly, consumers who disclosed information to artificial agents on the phone (vs. app) trusted the brand less ($M_{AI-Phone}$ = 4.59, M_{AI-App} = 5.02) Mediation analysis revealed that disclosing information to AI increased the anticipated audience size when consumers do it on the phone, which increased the sense of exploitation, decreasing CTB. The direct effect of agent type on trust was still significant (β= -.69, 95%, CI= -.74 to -.31), and the moderated mediation model was significant (index= .18, 95%, CI= .01 to .39).

We show that algorithm aversion is not limited to the evaluation of the agent; it spillovers to the brands and damages CTB. Consumers may be in need of a human touch especially in the formation of relationships with brands. We also showed for the first time that consumers make attributions about the audience size and sharing information with AI is considered as a form of broadcasting. Brands should create a sense of privacy; however future research can identify the contexts in which broadcasting would be desirable.

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The Customization Premium: Consumers Value Custom Bundles More than (Better) Standard Bundles

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EXTENDED ABSTRACT

When companies want to create value for consumers, one common strategy is to provide additional products/features. After all, adding such utility for consumers can be attractive (Nowlis & Simonson 1996). Consider a cable TV bundle. If the bundle does not include a desired channel (e.g., TBS), customers may not purchase it. Adding channels increases the possibility that bundles "fit" more consumers, allowing companies to capture a greater market share.

But providing more is not always better. Undesirable additions (e.g., a promotional plate when purchasing cake mixes) can decrease purchase likelihood by causing negative inferences about product quality (Simonson, Carmon, & O'Curry 1994) or by creating aversive unused utility (i.e., physical waste; Bolton & Alba 2012).

One potential fix is to ask consumers to customize products. Customization should remove the possibility that a bundle includes undesirable items.

In the current paper, we tested whether (objectively inferior) custom bundles could be valued higher than non-custom bundles. Across 5 studies (N=3,799), we demonstrate that allowing consumers to customize product bundles by removing items can increase valuations, a phenomenon that we refer to as "the customization premium."

Study 1 (N=998) participants were assigned to either the Custom or Standard condition. Participants considered the purchase of a 10-item snack bundle. In the Custom condition, participants removed items they did not want. In the Standard condition, participants instead simply indicated which items they did not want. Then, all participants reported willingness-to-pay [WTP] for their respective bundle.

We established the customization premium: Participants were willing to pay more for Custom bundles (*M*=\$31.61, *SD*=\$16.73) than for Standard bundles that included additional items (*M*=\$28.35, *SD*=\$17.09), $t(996)=3.04$, $p=.002$.

Study 2 (N=507) aimed to conceptually replicate Study 1 with a different bundle (a 10-item cable TV package) and a different measure: choice deferral.

In the Custom condition, participants removed channels they did not want. In the Standard condition, participants instead indicated which channels they did not want. Then, all participants indicated likelihood of purchasing their bundle (versus looking for others).

Conceptually replicating Study 1, participants were more likely to purchase the Custom (*M*=4.10, *SD*=1.82) than the Standard bundle (*M*=3.66, *SD*=1.88), $t(501)=2.65$, $p=.008$.

Studies 1-2 provided evidence for the customization premium. One alternative explanation is that by highlighting items they did not want, Standard participants devalued the standard bundle, rather than Custom participants valuing the custom bundle. *Study 3* (N=1,004) tested whether our effect holds when Standard participants simply reviewed the bundle, rather than considering unwanted items. Furthermore, we attempted to have all participants consider the *same* package.

To do this, we first recruited self-identified Democrats. In the Custom condition, participants removed exactly one item in an 11-item bundle. We expected that most participants would remove the 11th aversive item: FOX News. Participants in the Standard condition instead evaluated a 10-item bundle that did not include FOX

News. Then, all participants reported WTP for their bundle, which we expected would be the same 10-item bundle. Indeed, most participants (68.3%) removed FOX News (but results remained the same in direction and significance level whether including all participants or only those who removed FOX News).

Participants in the Custom condition were willing to pay significantly more for the TV package (*M*=\$20.09, *SD*=\$15.21) than participants in the Standard condition (*M*=\$16.43, *SD*=\$13.10), $t(1002)=4.09$, $p < .001$.

Why does the customization premium arise? We hypothesized that it was because people average (rather than add) their liking for bundle items. Thus, custom bundles (with only liked items) would seem more valuable than non-custom bundles (with liked and disliked items). *Study 4* (N=598) tested this proposed mechanism. Participants were randomly assigned to either the Custom or Standard condition. Participants considered a 10-channel cable TV package. In the Custom condition, participants removed channels they did not want. In the Standard condition, participants instead indicated which channels they did not want (but channels were not removed). Then, all participants reported their WTP for their respective bundle. After reporting WTP, participants rated liking for each channel, which we averaged for bundle liking.

Indeed, we found that liking for Custom bundles was higher (*M*=4.88, *SD*=1.06) than that for Standard bundles (*M*=4.17, *SD*=1.01), $t(590)=8.33$, $p < .001$. Moreover, this mediated the effect of Condition on WTP.

Study 5 (N=898) examined a possible consequence. Though people exhibit the customization premium when presented separately (between-subjects), people likely understand that additional items are more valuable when presented jointly (within-subjects). Ultimately, this should lead people to pay more for standard bundles after first reporting WTP for custom ones. Participants were assigned to either the Custom First or Standard First condition.

In the Custom First condition, participants removed channels they did not want. In the Standard First condition, participants simply indicated which channels they did not want. Then, participants reported WTP for their respective bundle. After reporting this first WTP, participants reported WTP for the other bundle they did not yet evaluate (Custom First participants evaluated the standard bundle; Standard First participants evaluated the custom bundle in which the channels they indicated they did not want were removed).

Examining first WTP only, we again found that participants were willing to pay more for custom (*M*=\$44.49, *SD*=\$25.00) than for standard bundles (*M*=\$41.04, *SD*=\$25.11), $t(896)=2.06$, $p=.040$.

Comparing WTP for bundles within condition, however, people were rational: Participants stated higher WTP for additional items (Custom First participants were willing to pay more for the standard bundle (*M*=\$46.61, *SD*=\$25.78) after reporting WTP for the custom bundle, $t(456)=3.69$, $p<.001$) and lower WTP for fewer items (Standard First participants were willing to pay less for the custom bundle (*M*=\$39.63, *SD*=\$25.02) after reporting WTP for the standard bundle, $t(440)=2.46$, $p=.014$).

Consequently, participants were willing to pay more for the standard bundle in the Custom First condition—i.e., after reporting WTP for the custom bundle—than in the Standard First condition, $t(896)=3.28$, $p=.001$.

Together, these studies demonstrate a novel effect and suggests that offering customization can have considerable benefits for companies' pricing strategies. Future research will explore the contexts in which the customization premium holds.

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Precursors and Impact of Mindful Consumption

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EXTENDED ABSTRACT

Mindful consumption, defined by Milne et al. (2020, p. 4) as "the application of mindfulness to inform the choices consumers make," has been proposed as an approach that might bring about this change. Undertaking mindfulness and religious practices have often been associated with mindful consumption (Bahl et al., 2016; Harris, 2011; Lim, 2017). Yet, to date, the relationships among mindfulness, religious faith, and mindful consumption remain largely conceptual or descriptive. While some marketers do encourage mindful consumption (e.g., Levi's Buy better, Wear longer" or Patagonia's "don't buy this jacket" advertisements), most marketers do not, thereby resulting in mindless buying. Thus, if marketers or policy makers turn to encourage consumers to undertake mindful consumption (Sheth et al., 2011), it is important to understand the precursors of mindful consumption and effect of mindful consumption appeals on consumer buying (Geiger et al., 2019; Jain & Gupta, 2018; Wamsler, 2019).

This paper contributes (1) to theory, by clarifying whether mindfulness and religious faith encourage mindful consumption, and if they do, whether they are independent, and (2) to practice, by equipping marketers and policy makers with strategies to encourage consumers to practice mindful consumption. We hypothesize -

Hypothesis 1:	*Mindfulness encourages mindful consumption.*
Hypothesis 2:	*Religious faith encourages mindful consumption.*
Hypothesis 3:	*Mindfulness and religious faith correlate and interact to encourage mindful consumption.*
Hypothesis 4:	*Mindful consumption appeals lead to change in consumer buying attributes.*

Methodology

Study 1

Study 1 is a longitudinal experimental research using comparable student samples (n=94, 59% females, all students, 18-24 years, 43 in treatment group and 51 in control group) and analyzed using analysis of variance to establish the effect of mindfulness on mindful consumption using a mindfulness intervention (Kabat-Zinn, 1982) that occur over a period of two months, to ascertain if we could encourage mindful consumption by encouraging consumers to practice mindfulness (H1). The questionnaire administered before and after the intervention consists of adopted items on mindfulness (Brown & Ryan, 2003) and mindful consumption (Gupta & Verma, 2019).

Study 2

Study 2 is a cross-sectional correlational research ($n = 603$, 52% females, all above 18 years, and 47% students), analyzed using SEM with multi-group analysis (MGA) and seeks to test if a) religious faith also encourages mindful consumption (H2), b) possibility of interaction between mindfulness and religious faith (H3), and c) if study 1 findings can be generalized across consumers of different genders, occupations, and household incomes (H1). Participants recruited online using snowball sampling (Basiouka & Potsiou, 2014) complete an online questionnaire with adopted items on mindfulness, religious

faith (Plante & Boccaccini, 1997), and mindful consumption (Gupta, 2019). We changed the last measure for evaluating conceptual replication (Crandall & Sherman, 2016). Most participants have annual income higher than the minimum taxable income (88%), access multiple communication media (96%), participate actively in online social networking (86% spend more than two hours daily) and therefore, suitable for this study on mindful consumption (Gupta, 2019).

Study 3

Study 3 is an online study using MTurk that compares the impact of mindful consumption appeal with that of non-mindful consumption appeal in advertisement on attitude towards the brand, attitude towards the ad, and purchase intention. It randomly collects data from 400 participants out of which 200 see an ad promoting mindful consumption and 200 see the ad without mindful consumption focus.

Results

Study 1

In contrast to the pre-intervention analysis, the post-intervention analysis indicates significant differences between treatment and control group participants, whereby participants in the treatment group report significantly higher mindfulness ($F(1, 78) = 24.27$, $p = .00$; $M_{Treatment} = 4.60$, $S.D._{Treatment} = .54$; $M_{Control} = 3.89$, $S.D._{Control} = .73$) and disposition to mindful consumption ($F(1, 78) = 11.59$, $p = .00$; $M_{Treatment} = 4.59$, $S.D._{Treatment} = .50$; $M_{Control} = 4.21$, $S.D._{Control} = .48$) as compared to participants in the control group. These results suggest that the mindfulness intervention stimulates mindfulness and encourages mindful consumption (H1).

Study 2

For the measurement model having three latent variables- mindfulness, religious faith, and mindful consumption, we ascertain that two approaches for detecting common method variance do not indicate the presence of common method variance (Hulland et al., 2018). Convergent validity (using two ways of CR>.70 and SR weights >.50), discriminant validity (using three methods of AVE>MSV, inter-correlations below .70, and the HTMT ratios below .85), and reliability (CR of all scales >.70) are established (Ab Hamid et al., 2017; Hair et al., 2017; Malhotra & Dash, 2016).

Model fit of measurement and structural models are established through several model fit indices of $χ^2/df<3$, CFI≥ .90, TLI≥ .90, SRMR≤.08, and RMSEA≤.08 (Hair et al., 2017). The structural model (10,000 bootstrap samples) indicates that mindfulness ($β = .27$, $p < .01$) and religious faith ($β = .26$, $p < .01$) significantly influence mindful consumption positively. MGA explores potential differences due to socio-demographics such as gender, occupation, and household income.

Our results offer empirical support to suggest that mindfulness and religious faith encourage mindful consumption without the interaction between religious faith and mindfulness. This finding remains true (1) regardless of gender and occupation, and (2) for low-income and high-income households, but not for middle-income households, wherein religious faith had no impact on mindful consumption. Thus, H1 is supported, H2 is partially supported, and H3 is not supported.

Study 3

We use path analysis using Process plugin (Hayes, 2018) to evaluate multiple mediation and moderation models. Our results offer support to the impact of mindful consumption appeal on different consumer characteristics like attitude towards the brand, attitude towards the ad, and purchase intention.

Discussion

Our multi-study approach examines the relationships between mindfulness, religious faith, and mindful consumption, resulting in three important implications. First, we establish that the impact of mindfulness transcends beyond specific instances of consumption, influences overall consumption, and remains stable across different conceptualizations of mindful consumption. Second, this paper reconciles the extant debate on mindfulness and religious faith. Mindfulness, as a practice, has often been the target of religious criticism (Brown, 2019; Ville & Cotter, 2019), possibly due to the lack of research. The current research addresses this controversial issue with empirical evidence, that mindfulness and religious faith are, in fact, not associated. Finally, we show that mindful consumption have the potential to impact consumer behavior as measured through multiple measures of attitude towards the brand, attitude towards the ad, and purchase intention. We encourage replication studies in other countries that have more Christian-Judaic foundations (like the US), or other Eastern religious foundations (like China) and thus extend these results.

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When Identity Comes with Strings: Nonvoluntary Identity Maintenance and Conflicting Identities

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First author (woman):	"Good morning. How are you?"
Second author (man):	"Fine, I guess. I just woke up and I have to teach in 15 minutes. So, I rushed in."
First author:	"You just woke up? I have been up for 2 hours getting ready to teach this morning."
Second author:	"Woah. I just rolled out of bed and put on pants and a shirt."
First author:	"That's bull---t."

The first author feels compelled daily to style her hair, shave her legs, and apply make-up. Despite feeling conflict between her feminist identity and the societal expectations surrounding her woman identity, she continues to perform these tasks. In this work, we investigate how holding conflicting identities impacts routine consumption associated with *nonvoluntary identity maintenance* (henceforth, NIM)—consumption practices required to signal/maintain an identity.

Using a behavioral study, a secondary dataset, and three experiments, we are the first to direct empirical attention to routine NIM consumption practices. We provide evidence that consumers who feel obligated to practice NIM but do not hold an identity that conflicts with that maintenance report lower valuations of related products. Ironically, consumers who feel obligated to practice NIM and simultaneously hold an identity that conflicts with that NIM report higher valuations of related products. This effect is mediated by intrinsic motivation and is mitigated when the conflict between the two target identities is eliminated.

Studies

Study 1a

We assigned participants (n=239 women; M_{age}=43.1, SD=16.96; Prolific Academic) to either report how many NIM tasks associated with the woman identity or tasks socially expected but not tied to a specific identity they engaged in regularly. We measured degree of identity conflict and participants made selections from a list of 16 personal care products for a hypothetical subscription box. An OLS regression revealed that the interaction of NIM and degree of identity conflict was a significant predictor of the number of premium NIM products chosen in the subscription box task, b=.25, SE=.10, F (1, 238) = 6.32, p=.013; $\eta^2_{partial}$=.03.

Study 1b

We created a secondary dataset by cataloging the price and type (NIM vs non-NIM) of tagged products posted in one month for 92 Instagram influencers (46 feminists, 46 non-feminists). We observed a significant feminist*product type interaction (**β**=.64, $p < .010$), whereby feminist influencers promoted significantly more expensive NIM-related products than non-feminist influencers.

Study 1c

Women (n=57, M_{age}=24.83, SD=10.8) brought their make-up bags into the lab and sorted the contents into three groups based on how much value (low, high, miscellaneous other products) they placed on each product. An OLS regression revealed that the inter-

action of degree of identity conflict (feminist identity strength) and beliefs that the expectation to wear make-up is the result of coercion from the cosmetics industry was a marginally significant predictor of the number of high value products a woman had in her possession (b=.36, SE=.20, F (1, 56)=3.17, p=.081; $\eta^2_{partial}$=.06).

Study 2

To generalize our effect beyond woman/feminist identities, we recruited gay men (n=196, M_{age}=33.43, SD=12.08; Prolific Academic) because research suggests that they feel physical appearance-related pressures that demand NIM (Siever 1994). We assigned participants to a list of either NIM or non-NIM tasks. We measured intrinsic motivation for the tasks and assessed value placed on associated products. We measured Internalized Homophobia (Herek et al. 1997; Martin and Dean 1987; α=.86) and reverse coded this measure so that a high score represents high identity conflict.

To test whether the relationship between the NIM and degree of identity conflict interaction on valuation of nonvoluntary maintenance products was mediated by intrinsic motivation, we used model 8 of Hayes (2013) PROCESS macro. We observed a significant index of moderated mediation (b=.14, SE=.06, CI 95% [.0379, .2792]). For individuals in the NIM condition, as individuals' degree of identity conflict increased, participants' intrinsic motivation increased (b=.53, 95% CI [.1862, 0.8709]). As intrinsic motivation increased, participants' valuation of NIM-related products also increased (b=.26, 95% CI [.1339, .3859)].

Study 3

We assigned women (n=484, M_{age}=30.76, SD=12.00) to a 2 (identity maintenance: nonvoluntary vs. voluntary) x 2 (identity conflict: eliminated vs. present) x continuous (degree of identity conflict) between-subjects experiment. We manipulated perceptions of shaving one's legs as nonvoluntary or voluntary. We manipulated identity conflict using a writing task where we asked participants to describe why the feminist and women stereotypes are (conflict present condition) or are not (conflict eliminated condition) in conflict. We assessed intrinsic motivation, shaving-related product valuation, and degree of identity conflict.

Using model 12 of Hayes' (2013) PROCESS macro we tested the 2 (identity maintenance: nonvoluntary vs. voluntary) x 2 (identity conflict: present vs. absent) x continuous (degree of identity conflict) impact on product valuations through intrinsic motivation. We found a significant index of moderated mediation (b=.09, 90% CI [.0459, .1668]). Specifically, we observed a positive indirect effect of identity maintenance on product valuation through intrinsic motivation in the conflict present condition when degree of identity conflict was high (+1 SD; b=.15, 90% CI [.0109, .2947]). Importantly, this effect was significant and negative when degree of identity conflict was low (-1 SD; b= -.20, 90% CI [-.3370, -.0724]. In other words, as identity conflict increased for participants who felt that the woman identity and feminist identity are (not) conflicting, we found that NIM increased (decreased) participants' intrinsic motivation for shaving ($b_{interaction}$=.27, 90% CI [.0640, .4715]). As this intrinsic motivation increased, so did participants' valuation of shaving related products (b=.34, 90% CI [.2812, .3929].

General Conclusion

Our research highlights the impact of societal expectations on the identity signaling. We hope that by exposing this type of non-voluntary consumption, consumers may be awarded the ability to choose to spend their money in any purchase category they wish rather than those demanded by societal forces over which they have no control. Thus, we hope that our research is a catalyst for future researchers to investigate and provide solutions to inequalities in consumption expectations.

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Insights into Identity Formation: How Differences in Ethical Orientations Predict Affiliation with Individual and Group-Based Identities

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EXTENDED ABSTRACT

Despite the importance of identity formation within consumer behavior (Klein, Lowrey, and Otnes 2015; Reed et al. 2012; Venkatesh et al. 2010), little research has explored the predictors for the differences in the types of identities with which people prefer to affiliate. Consider two intelligent, ambitious women who live in the United States – one may primarily identify as an American Female while the other might choose to identify as intelligent and ambitious. While the former bases her identity on two group affiliations (females, Americans), the latter bases it on individual attributes. The current research explores a novel predictor for the importance placed by people on such group-based versus individualized identities. Specifically, we assert that whether people care more about group or individual identities is related to differences in their ethical standards of judgment (cf. Love, Salinas, and Rotman 2020).

Extensive prior research, including work on self-construal (Markus and Kitayama 1991), has shown that people differ in their propensity to form group-based versus individualized identities. It is also known that these types of identities are important as they shape consumer decision-making in a variety of contexts such as charitable giving (Freeman, Aquino, and McFerran 2009). Consider a consumer who identifies as being kind and generous while placing little importance on a referent group in designating their self-concept. This consumer is thus likely to decide on giving to a charity due to these individualized identity attributes without experiencing any group normative influence. However, a consumer identifying socially as a Christian would probably refer to the behavior of other Christians or seek to donate to Christian charities when deciding whether and where to donate.

There exist two preeminent standards of ethical judgment in moral philosophy: deontological formalism and teleological consequentialism (Brady 1985; Kant 1785/1998; Reynolds 2006). Formalism is concerned with the duty to follow moral principles and rules (Kant 1785/1998; Love et al. 2020). Given that moral authority of a society may be found in its heritage, tradition, authority figures or group memberships, the rules on which formalists base their moral judgment are likely to be dictated by the groups with which they are affiliated. A formalist will likely draw their moral rules from their nation, religion, or political party and should thus exhibit a stronger identification with these groups. Further, we propose that formalists will be more persuaded by donation requests coming from in-group members and should also be willing to donate more to help those whom they consider part of their in-group than to out-group members.

On the other hand, consequentialism focuses on the consequences of one's actions on other people or on society at large (Love et al. 2020; Reynolds 2006). Since consequentialists do not derive their morality from group norms, we propose that they should be less likely to form group identities. Because they are focused on individual needs, consequentialists should show stronger identification with their individual, abstract-ideal attributes (e.g., kindness, intelligence). Further, we hypothesize that they look inwardly to their individual identities to make donation decisions without caring whether the donation request source or the donation recipient is from an in-group or an out-group.

We propose a positive relationship between consequentialism and individual-identity affiliation and another correlation between formalism and group-identity affiliation. We test these two relationships and their effects on donation decisions in three studies.

In Study 1, 201 US-based MTurk workers completed the Ethical Standards of Judgment Questionnaire (EJSQ; Love et al. 2020) and the Social and Personal Identities scale (Nario-Redmond et al. 2004), in a counter-balanced order. In line with our hypotheses, we found that consequentialism was positively related to individual-identity importance ($\beta = .18$, $p = .009$), but formalism was not. Similarly, formalism was positively related to group-identity importance ($\beta = .48$, $p < .001$), but consequentialism was not.

In Study 2, we examine how activating a giving norm differently affects donation decisions of formalists and consequentialists. Participants (MTurk workers) were presented with an opportunity to donate to a charity. We randomized whether they got to know of this charity from a flyer (control condition) or from their favorite NFL team (group-identity condition). We measured Psychological Commitment to Team (PCT; Mahony, Madrigal, and Howard 2000), as a proxy for NFL team identification. In line with study 1, we found that formalism was correlated with team identification ($\beta = .29$ $p < .001$) but consequentialism was not. We also found a 3-way interaction of consequentialism, formalism, and identity condition on donation amount ($F(1,130) = 7.73$, $p = .005$). Specifically, in the group-identity condition, when consequentialism was low, formalism had a boosting effect on donation ($t(128) = 3.60$, $p < .001$), but not when consequentialism was high. In the control condition, there was no interaction of formalism and consequentialism. Examining PCT as a mediator, we found a significant indirect effect of formalism on donation amount in the group-identity condition ($\beta = .24$, SE = .13; 95% CI: .03, .55) but not in the control condition. The effect of consequentialism on donation amount was not significantly mediated via PCT in either of the conditions.

In Study 3, participants first completed ESJQ and were then asked to donate to a needy child in Middle East (dissociative outgroup) or another part of the world (control). Across both conditions, we found a positive effect of consequentialism on donation intent ($\beta = .12$, $p = .004$) but no main effect of formalism. However, a 3-way interaction ($F(1,585) = 8.72$, $p = .003$) revealed that, in the dissociative-outgroup condition, when consequentialism was low, formalism had a negative effect on willingness to donate ($t(593) = -2.13$, $p < .05$) but a positive effect in the control condition ($t(593) = 3.94$, $p = .001$), and when consequentialism was high, there was no effect of formalism in either condition. Relatedly, consequentialism did not interact with condition.

This research helps explain how moral principles influence the importance placed by people on different identities. Specifically, we show that formalists care more about their group identities while consequentialists are more affected by their individual identities.

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The Interactive Effect of Social Crowding and SES on Moral Judgement

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EXTENDED ABSTRACT

Individuals' moral standards can be more flexible than they think (Sharma et al., 2014). Recent research shows that people's perceptions of the ethicality of an immoral action can be shaped by environmental factors incidental to the immoral behavior (e.g., financial constraints, and exposure to variability; Ding & Savani, 2020; Sharma et al., 2014). The research presented herein examines how another prevalent environmental factor, social crowding, interacts with perceivers' SES to influence their moral judgments.

Social crowding is defined as a situation in which a group of people is gathered together so that physical proximity between individuals is increased (Maeng et al., 2013). Prior research has documented a variety of psychological and behavioral consequences stemming from social density (Consiglio et al., 2018; Maeng et al. 2013). In the current research, we predict that social crowding leads to harsher moral judgment for high SES, but not low SES individuals. We argue that it is because an unstable social environment caused by social crowding is particularly threatening to individuals with high (vs. low) SES, who are more likely to become prime targets for immoral or even criminal behavior (Abbink et al., 2011; Zizo, 2003). Therefore, crowding may compel them to judge and even punish unethical behavior more harshly so as to minimize potential transgressions (Ding & Savani, 2020). A set of three studies provides support for our theorizing.

Study 1

Method

We used a large cross-cultural survey (World Values Survey; Inglehart et al., 2014) to examine our hypothesis. 157,875 responses were available from 80 countries and covered 35 years.

Four 10-point items (e.g., "avoiding a fare on public transport"; 1 = never justifiable, 10 = always justifiable, reverse coded) to which more than 90% of participants responded acted as the dependent variable. The World Value Survey collected respondents' relative household income on a 10-point scale, with a higher score indicating a relatively higher income level (1 = lower step, 10 = tenth step), which acted as the moderator. Finally, we used population size of the town in which respondents lived, which was observed and coded by interviewers, as a proxy for social crowding. This item was scored on an 8-point scale (1 = 2,000 inhabitants or fewer, 8 = 500,000 inhabitants or more). We also controlled for variables such as education and employment status.

Results

We z-scored all continuous predictive and control variables and conducted a random-coefficient multilevel regression analysis, with individuals nested within countries and years. The analysis yielded a significant interaction between town size and relative income ($p = .001$). As we theorized, for respondents whose relative income was one SD above the mean, a larger town size was positively associated with harsher moral judgments, $p < .05$. However, for respondents whose relative income was one SD below the mean, such positive association was not supported.

Study 2

Method

This study employed a 2 (crowding: human crowding vs. animal crowding) × continuous (measured SES) between-subjects design. In the human- (vs. animal-) crowding condition, participants were asked to read an article highlighting the growing density of humans (vs. squirrels) in the United States (Sng et al., 2017) and to summarize the main content of this article.

Next, all participants read about four unethical behaviors (e.g., "over-reporting one's travelling expenses") and indicated how justifiable they deemed each behavior along a 7-point scale (1 = never justifiable, 7 = always justifiable; reverse coded). Afterward, participants provided demographic information, embedded in which were three 7-point items assessing their SES (e.g., "I have enough money to buy things I want"; 1 = strongly disagree, 7 = strongly agree; Mittal & Griskevicius, 2014).

Results

We regressed moral judgment on the crowding condition (1 = human crowding, 0 = animal crowding), z-standardized SES, and the interaction between these two variables. The analysis yielded a significant interaction effect, $p < .05$. Specifically, for participants with high SES (i.e., one SD above the mean), human (vs. animal) crowding had a positive impact on how harshly participants judged others' immoral behavior ($p < .01$). By contrast, for participants with low SES (i.e., one SD below the mean), the effect of human crowding on moral judgment was not significant.

Study 3

Method

Participants completed several independent surveys. In the first survey participants responded to four items assessing the crowdedness of their living environment (e.g., "In general, how crowded are the places you usually stay?"; 1 = not at all, 7 = extremely). Next, they were presented with three scenarios (adapted from previous research; Ding & Savani, 2020; Sharma et al., 2014) describing people's unethical behavior (e.g., cheating in an interview). In each scenario, participants made moral judgments of the protagonist by responding to two questions (e.g., "How unethical was [the person described in the scenario]'s action?"; 1 = not at all, 7 = extremely).

Then, participants completed five items that measured their perceived threat level (e.g., "I face many threats these days"; 1 = strongly disagree, 7 = strongly agree), which were adapted from previous literature (Ding & Savani, 2020). Finally, participants responded to the same three items measuring SES as in Study 2, followed by demographic items.

Results

The regression analysis yielded the hypothesized interaction between crowding and SES ($p < .05$). For respondents whose SES were high (i.e., one SD above the mean), crowding led to harsher moral judgments ($p < .001$). Conversely, for respondents whose SES were low (i.e., one SD below the mean), the effect of crowding on moral judgment was not significant.

Next, we examined the mediating role of perceived threat using the SPSS Process Macro (Model 8, Hayes 2012). A 5000-sample bootstrapped analysis showed that the interactive effects of human

crowding (z-transformed) and SES (z-transformed) on moral judgment were mediated by the perceived threat (z-transformed), 95% CI = [.02, .12]. Specifically, the perceived threat mediated the effect of human crowding on moral judgments for respondents with high SES (i.e., one SD above the mean), 95% CI = [.07, .26]; however, the mediation was not significant for respondents with low SES (i.e., one SD below the mean).

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Just Teasing: Can Brands Build Strong Relationships by Making Fun of Their Consumers?

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EXTENDED ABSTRACT

In 2019, Wendy's launched a Twitter campaign (#NationalRoastDay) designed to tease their followers. #NationalRoastDay went viral, spawning positive media coverage, praise by industry experts (Bryan, 2019), and 350,000 new Twitter followers for Wendy's (Beltis, 2018). The popularity of #NationalRoastDay contrasts prior work finding that teasing is (at best) unrelated to brand attitudes (Roehm & Roehm, 2014) and at worst a serious risk of offending consumers and lowering brand attitudes (Warren & McGraw, 2016). How might these opposing viewpoints be reconciled?

We suggest two ways that teasing leads consumers to connect with brands. First, teasing exists on a continuum from antisocial (i.e., provoking) to prosocial. Prosocial teases are teases about non-threatening domains, are common in interpersonal relationships (Kowalski, 2004) and lead to positive outcomes (Haugh, 2011). Thus, advertisements that use prosocial teases should not generate the negative effects that have previously been associated with teasing.

Second, previous research suggests that people anthropomorphize agents when an agents' behavior is unpredictable and resembles a human schema (Epley, Waytz, & Cacioppo, 2007). Consequently, we suggest that brand teasing causes anthropomorphism because teasing is a uniquely human behavior but is unexpected in brand communication.

Combining these ideas, we assert that when brands use prosocial teases, they will benefit from anthropomorphism which leads to improved self-brand connection. However, when brand teases are deployed in more sensitive domains, this positive effect of teasing on consumer-brand relationships should be attenuated.

In Study 1 we analyzed tweets (n=309) from Wendy's on #NationalRoastDay, which included teases and Wendy's normal non-teasing Twitter activity. MTurk workers (N=1533) rated the extent to which tweets from this sample were funny and teasing. Controlling for tweet funniness and the number of followers of the tease target, Teasing was a positive predictor of retweets (β = .315, t(1529)=9.95, p<.001), replies (β = .217, t(1529) = 6.65, p<.001), and favorites (β = .382, t(1529) = 12.57, p<.001). We replicate these findings using Wendy's tweets that did not occur on #NationalRoastDay.

In Study 2 we replicate the observed effect in a controlled experiment. Prolific workers (N= 1147) viewed an online banner ad where Wendy's teased or was merely funny. Participants completed measures of Wendy's. Wendy's was significantly more anthropomorphized when using a teasing (M = 4.81, SD = 1.57) than a funny ad (M = 4.23, SD = 1.63; t(1145) = 6.05, p < .001, d = .36) and that participants reported higher self-brand connection after viewing a teasing ad (M = 2.94, SD = 1.49) vs. a funny ad (M = 2.74, SD = 1.43; t(1145) = 2.32, p = .02, d = .14). Anthropomorphism significantly mediated the effect of ad condition on self-brand connection (B [95% CI] = .29[.19, .39]).

In Study 3, MTurk workers (N=819) watched one of twelve television ads for the food delivery brand Postmates. Then participants evaluated how anthropomorphic Postmates seemed, their level of self-brand connection with Postmates, and how funny and teasing the advertisement was. Controlling for funniness and advertisement dummies, teasing positively predicted anthropomorphism (β = .12, t(805) = 2.95, p = .003) and for self-brand connection (β = .12, t(805) = 3.29, p = .001). Anthropomorphism mediated the effect of teasing on self-brand connection (B[95% CI] = .06 [.02, .10]).

In Study 4, we sought to explore the boundary conditions where teasing no longer leads to positive relationship outcomes by deploying teases in sensitive domains. In a pretest, participants rated romantic relationships as significantly more sensitive than cooking ability. Therefore in Study 4, participants viewed online banner ads for the dating app Bumble. Participants either saw a teasing ad, a purely funny ad, or a neutral control. After viewing the ad participants evaluated anthropomorphism, self-brand connection, and funniness and teasing manipulation checks. When Bumble used a teasing ad, they were significantly more anthropomorphized (M = 3.97, SD = 1.57) than when they used a funny ad (M = 3.62, SD = 1.56) or a control ad (M = 2.96, SD = 1.48; F (2, 642) = 24.03, p <.001, η^2 = .07). We did not observe an effect of condition on self-brand connection (F (2, 642) = .27, p = .76, η^2 = .001). Despite the null main effect, anthropomorphism mediated the effect of condition on self-brand connection: teasing vs. funny (B[95%CI] = .54[.39, .71]); teasing vs. control (B[95%CI] = .54[.38, .70]).

In study 4 we observe the previously established mediation effect of teasing on self-brand connection through anthropomorphism, however, in the more sensitive domain of romantic relationships we no longer observe a main effect of teasing on self-brand connection. Thus far, we have suggested that this observed null effect of teasing on self-brand connection is due to the provoking nature teased used in a sensitive domain.

In Study 5 we test meanness as an offsetting parallel mediator between teasing and self-brand connection. Single Prolific workers (N=444) viewed a teasing or a funny ad for Bumble depending on their assigned condition. Participants then evaluated how mean the advertisement was, as well as how anthropomorphic Bumble seemed, their level of self-brand connection with Bumble. Participants rated Bumble as significantly more anthropomorphized after a teasing message (M = 3.81, SD = 1.52) versus a funny message (M = 3.24, SD = 1.55; F(1,438) = 15.31, p<.001, d = .37). Participants rated the teasing message as meaner (M = 2.42, SD = 1.37) than the funny message (M = 1.62, SD = 1.01; F(1, 438) = 49.25, p <.001, d = .66). As expected, there was no significant difference in self-brand connection between the teasing and funny condition (F(1, 438) = 2.92, p = .09, d = .16). Both anthropomorphism (B[95%CI] = .29[.14, .44]) and meanness (B[95%CI] = -.17 [-.26, -.10]) mediated the effect of condition on self-brand connection.

In summary, we find that teasing consistently leads to increased anthropomorphism over and above funny advertisements and that this anthropomorphism leads to increased self-brand connection. When teases are deployed in sensitive domains however, the effect of teasing on self-brand connection is attenuated by the activation of a secondary 'meanness' mediation path.

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'Not Having Enough' Can Safeguard Privacy: Resource Scarcity and Willingness to Share Personal Information

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EXTENDED ABSTRACT

Consumers today face several requests to share personal information when they go online. Cookie-requests, registration webforms, location-sharing requests are examples of techniques used by online firms to collect consumer-level data. The reason this consumer-level data is important for firms is because this data helps them understand the consumers better and target efficiently. However, as much as companies attempt to capture consumer-level information, individuals also have concerns about sharing personal data, as misuse of individual-level data following data breaches often occurs online.

Therefore, the question is, what makes consumers share their personal information online? Past research has investigated several factors that contribute to varying levels of information-disclosure. Some of these factors are website-related (e.g., website appearance, Jarvenpaa, Tractinsky, and Saarinen 1999), and some are consumer-related (e.g., age and education, Smit, Van Noort, and Voorveld 2014).

The present investigation extends this literature by identifying a novel driver of consumers' willingness to share personal information, namely the extent to which the consumers' resources are scarce. These resources can be money, time, or a digital resource such as a phone battery. Consumers often feel they don't have enough resources available to them. We hypothesize that this feeling of not having enough can lead to reduced willingness to share personal information.

THEORETICAL DEVELOPMENT

Resource scarcity has been defined as a discrepancy between one's current level of resources and a higher, more desirable reference point (Cannon, Goldsmith, and Roux 2019). This gap in resources or a feeling of not having enough often arises in today's world, such as not having enough money to buy desirable products or not having enough time to go on a vacation.

Extant research in scarcity has explored how resources influence individuals' feelings of security and perceived threat levels. For example, researchers found that people with more money feel more protected from unforeseen events (Johnson and Krueger 2006). Similarly, researchers (Pitesa and Thau 2014) reported that individuals with fewer material resources felt more vulnerable to threat. Taken together, these findings indicate that not having enough resources can make individuals feel less secure and more vulnerable to threats, which then motivates people to generate a coping response to find comfort and security. One such coping response could be exercising increased sensitivity to an external threat.

In the context of online browsing, one of the biggest threats is potential data misuse. Online users are aware of this threat and identify sharing data online as a potential financial and reputational threat (Martin, Borah, and Palmatier 2017). In our research, we envisage that people experiencing scarcity are likely to consider the threat related to potential data-misusage to be higher than the others due to their increased threat sensitivity. Thus, we predict such users to be more reluctant to share information online.

Hypothesis 1:   *Resource scarcity leads to decreased willingness to share personal information (WTSPI).*

Hypothesis 2:   *The relationship between resource scarcity and WTSPI is mediated by perceived threat of data misuse.*

OVERVIEW OF STUDIES

We have tested the proposed hypotheses across three studies. Study 1 was designed to test H1 using a one-factor between-subject design (N=197, 104 male, M_{Age} = 41.57, SD=12.43). We manipulated resource scarcity using an episodic recall task previously used in the literature (Roux, Goldsmith, and Bonezzi 2015). Participants in scarcity condition (control condition) were asked to think of 2-3 times when they felt like they didn't have enough of something (2-3 movies watched). Following the recall task, the participants were asked to imagine browsing a chocolate boutique website named *chocolatedayandnight.com* and were shown a cookie request. After this, the participants indicated their WTSPI. Participants in the resource scarcity condition showed lower WTSPI (M = 3.74, SD = 1.96) than participants in the control condition (M = 4.25, SD = 1.83; $F(1, 195)$ = 3.63, p = .058, h_p^2 = .018) with marginal significance, supporting H1.

Study 2 was designed to test H2 using a one-factor between-subject design (N=130, 79 male, M_{Age} = 37.91, SD=11.73) similar to study 1. We manipulated resource scarcity using a scenario-based task varying money available to participants across conditions. WTSPI was measured using a cookie request on ZARA website.

Participants in the resource scarcity condition showed lower WTSPI (M=2.73, SD =1.37) than participants in the control condition (M=3.21, SD=1.59; $F(1, 134)$=3.59, p=.06, h_p^2 = .026) with marginal significance, which supports H1. We also found that participants in scarcity condition reported a higher perceived threat to data-misuse (M = 4.88, SD = 1.45), compared to participants in control condition (M=4.26, SD=1.69; $F(1, 134)$ = 5.31, p=.018, h_p^2 = .038). Following ANOVA, a mediation analysis (PROCESS model 4, Hayes 2013) supported H2, i.e., that the relationship between resource scarcity and WTSPI is mediated by perceived threat of data misuse, as the 95% CI of the indirect effect through perceived threat as the mediator did not include 0 (.032, .466).

Study 3 was designed to test the underlying mechanism by varying perceived threat of data misuse. A 2X2 between-subject design (N=250, 109 male, M = 45.94, SD = 13.54) was employed to test our prediction. Resource scarcity was manipulated using the same approach as in study 1. Perceived threat was manipulated by comparing food-commerce industry's yearly data-breach number with other industries. WTSPI was measured similarly to study I on the *Chocolatedayandnight* website.

Replicating our previous results, we show that resource scarcity had a significant effect on WTSPI ($F(1, 246)$=7.69, p=.006, h_p^2 =.03). Furthermore, planned contrasts revealed that participants in the high perceived threat-scarcity condition showed lower WTSPI (M=2.63, SD=1.60) than participants in high threat-control condition (M=3.64, SD=1.65; $F(1, 246)$=12.17, p=.001, h_p^2 = .047). However, there was no significant difference in WTSPI between participants in low threat-resource scarcity condition (M=3.03, SD=1.81) and low threat-control condition (M=2.89, SD=1.47; $F(1, 246)$=.21, p=.65, h_p^2 = .001). These findings provide support to our predicted mecha-

nism. We further expect the nature of information disclosure to moderate the main effect.

The current research contributes to the literature on privacy by identifying a novel driver of willingness to share personal info, i.e., resource scarcity, and helps marketers understand when best to request consumers for personal information.

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Perceived Financial Constraints and Purchase Happiness

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EXTENDED ABSTRACT

Perceived financial constraints are ubiquitous, and research suggests that consumers who feel financially constrained are especially likely to engage in compensatory consumption (Cannon, Goldsmith, and Roux 2019). However, it is unclear whether spending confers greater happiness when consumers feel financially constrained. In seven studies (N = 7,228), we find that perceived financial constraints decrease the happiness consumers derive from spending. This effect occurs because consumers who perceive greater financial constraints are more likely to spontaneously consider opportunity costs when evaluating their purchases.

Opportunity costs refer to the value of alternatives that a person does not choose. While consumers generally neglect opportunity costs (Frederick et al. 2009), those who are resource-constrained are more likely to consider opportunity costs when making decisions (Spiller 2011). We hypothesize that this relationship extends to situations in which consumers evaluate their purchases. This prediction is supported by prior research showing that thoughts about money are more likely to arise spontaneously in the minds of individuals who are financially constrained (Shah et al. 2018).

We further hypothesize that considering opportunity costs will decrease purchase happiness. This proposed relationship is consistent with the finding that satisfaction is reduced when other alternatives are more salient (e.g., Schwartz et al. 2002; Iyengar and Lepper 2000). Thus, we predict that (a) perceived financial constraints will increase spontaneous consideration of opportunity costs when consumers evaluate their purchases, and (b) this will result in lower purchase happiness.

In study 1 (n = 738), natural variation in perceived financial constraints among a nationally representative sample was negatively correlated with purchase happiness across a wide range of purchases ($r = -0.10$, $p = .008$). This effect remained significant after controlling for all the purchase characteristics and demographic variables we collected ($b = -0.09$, $p = .013$). Additional studies suggest that this effect is not due to mood or to financially constrained individuals being less satisfied with life in general.

Studies 2A (n = 1,087) and 2B (n = 1,089) manipulated perceived financial constraints and examined the role of opportunity cost consideration in mediating the effect by explicitly measuring it (2A) and by coding open-ended responses for spontaneous activation of opportunity cost consideration (2B). When financial constraints were made salient, consumers reported lower purchase happiness (2A: $t(1085) = 2.62$, $p = .009$; 2B: $t(1087) = 2.68$, $p = .007$), and this effect was partially mediated by consideration of opportunity costs.

Study 3 (n = 1,488) provided further evidence for the proposed mediator by directly manipulating opportunity cost salience. While increasing the salience of opportunity costs reduced purchase happiness overall ($p = .014$), this effect was attenuated for consumers who perceived greater financial constraints ($p = .412$). This result is consistent with our proposition that perceived financial constraints decrease purchase happiness because consumers who perceive greater financial constraints are more likely to consider opportunity costs spontaneously.

Study 4 (n = 988) demonstrates that the effect is attenuated for planned purchases, a boundary condition consistent with our proposed mechanism. Specifically, this attenuation occurred because (a) perceived financial constraints have a smaller effect on consideration of opportunity costs of planned ($b = .01$, SE = .08, $p = .848$) than unplanned ($b = 0.23$, SE = .08, $p = .004$) purchases, and (b) opportunity cost consideration has a smaller effect on purchase happiness for planned ($b = -0.04$, SE = .03, $p = .181$) than unplanned ($b = -0.21$, SE = .03, $p < .001$) purchases.

Studies 5A-5B tested a downstream consequence: more negative online reviews. We found that because perceived financial constraints decrease purchase happiness, consumers who perceived greater financial constraints write more negative reviews for their purchases. We observed this effect in a unique dataset of consumer reviews on Yelp (n = 852, study 5A, $p = .047$), and in a controlled experiment where we manipulate perceived financial constraints and measured their effect on the reviews consumers write for their purchases (study 5B, n = 986, $p = .014$). This effect emerged both when the content of the review was coded by research assistants and by The Evaluative Lexicon (Rocklage, Rucker, and Nordgren 2018), an automated text analysis software.

To estimate the size of the effect and its robustness across several purchase types, we meta-analyzed our file drawer (25,765 participants; 42 studies). The results suggest an effect size of $r = -0.12$, 95% CI: [-0.14 to -0.10], $p < .001$. This effect was attenuated for purchases that were planned (vs. unplanned), discretionary (vs. necessity), more likely to be used with others (vs. alone), and used frequently (vs. infrequently).

This research demonstrates a novel consequence of perceived financial constraints and shows that financial resources may limit happiness not only by restricting desired consumption, but also by reducing the utility consumers derive from spending.

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Understanding Consumers' Well-Being: Moving Consumption from Materialism towards Happy Hedonism

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EXTENDED ABSTRACT

How many of us never experienced pure pleasure out of owning specific objects? This pleasure might be related with owning an expensive product as a sports car or a technological gadget, but also with possessing rather inexpensive products like a cosmetic that comes in a special wrapping or buying a special type of cookies that come in an exquisite kraft paper box. In fact, many of our purchases are not guided by the functional aspects of the product but instead by the multisensory experience of owning and using the products (Hirschman and Holbrook 1982). And many of these products that elicit pleasure are not conspicuous in nature but rather are related with the satisfaction or value that consumers extract out of small details, such as the rubber-grip handle of the potato peeler or the fact that the colour of the tea shines so nicely through the glass. This suggests that the possession and use of objects, or the consumption of unique experiences, even when not triggered by a specific need, may have a powerful effect on consumer's satisfaction and well-being. But this also suggests that the simple possession of objects or the consumption of unique experiences can have a power effect on consumer's satisfaction and well-being, providing overall a nice feeling (Alba and Williams 2013; Keinan and Kivetz 2010).

This is an interesting proposition because the act of consuming without a specific need, typically associated with materialistic goals is considered by many authors to be associated with negative characteristics/ outcomes (Kasser 2002; Kasser et al. 2014; Richins, 2004). In fact, as stressed by Belk in his seminal work (1985) two of the issues related with materialism that deserved a special look was if (1) materialism is an egoistic trait that impairs altruistic and prosocial behaviors, and (2) materialism would negatively affect interpersonal relationships. In a similar vein, Kasser (2002) argued that consumers high on materialistic values (those who, according to the authors, aim for financial success, aim for social recognition through product owned, and aim for an appealing appearance) tend to exhibit low self-actualization and vitality, high significant levels of depression and anxiety, and alcohol and drugs abuse. In a more recent study Kasser and colleagues (2014) highlighted again a negative relationship between the importance given to materialistic goals and consumers' psychological well-being (mental health).

The hidden assumption in these prior works appears then to be that the act of consuming without need and to achieve specific aspirational goals is something bad, a behavior that people should prevent from exhibiting and that typically impacts negatively on consumers' well-being (Jaspers and Pieters, 2016, Kasser 2016, Richins 2004). However, some consumers may also hold *values* towards hedonism, consuming products for the pleasure of it and reaching *intrinsic* compensation out of those consumption acts (and not *extrinsinc* as proposed by Kasser and colleagues). In fact, hedonism, i.e., the tendency to approach pleasure and avoid pain as ultimate life goals, has had many supporters in the history of the social sciences, but seems to have lost its platform (Bramble, 2016; Monro, 1950).

The present research studies happy hedonism, analyzing its relationship with consumer well-being. Ownership and consumption of products often gives us pleasure over and above the instrumental value of product use. This pleasure can stem from owning an expensive and luxurious product, say a novel technological gadget or a limited-edition product. But the pleasure may also come from owning inexpensive products, such as an insulated transparent tea glass.

We build on the fact that, to our knowledge, there are no validated instruments to assess the likelihood of people that use consumption (of both possessions and experiences) for self-enjoyment and well-being enhancement. We propose then to develop a measurement instrument to assess what we defined as *hedonistic consumption values*, testing its impact of a variety of different measures. This idea that people may consume simply for the pleasure of owning a specific object of experience is especially relevant nowadays because the new generation of millennials seem to be less worried about the ownership of long-term tangibles (as owning a house or an expensive car) as previous generations. Instead, millennials seem to be enthusiasts of the short but highly intense experiences, moving around between occupations, always searching for enjoyable and self-pleasurable consumption moments.

Based on research conducted in the Netherlands and in Portugal, we developed first a short-version scale of hedonistic consumption values, following the basic steps of Richins and Dawson (1992), that we later use to assess the extent to which it relates with other multiple variables as life satisfaction, extraversion characteristics, prosocial behavior, likeability by others, life satisfaction, positive attitude towards life, among many other variables.

We studied this phenomenon across four experimental studies. Study 1 (n=138) goal was the development of a happy hedonism scale, asking participants to generate examples of "happy hedonism" from their own experience, in the form of statements ("items") for a formal instrument. Content analysis of these crowd-sourced items led to a two-facet instrument: enjoyment of consumption independent of its market price, and enjoyment of shared consumption. Study 2 (n = 504) validated the instrument and facet structure vis-à-vis consumer materialism and established its positive association with consumers' well-being. Study 3 (n=159) asked participants to evaluate a materialistic vs hedonistic person and results show that although both persons were presented as heavy consumers/shoppers, hedonic people are perceived to be more concerned about others and to be expected to experience higher well-being than materialistic people. Study 4 (n=259) went one step further and tested for the impact of individuals holding materialistic versus hedonistic characteristics on a battery of personality traits and personality characteristics.

Overall, findings suggest that people that hold hedonistic consumption values may enjoy owning and consuming objects or experiences without this negatively affecting their well-being. Our results also highlight the distinction between happy hedonism and consumer materialism. These findings are a first, small step towards re-appraising the phenomenon of happy hedonism and perhaps towards new theories on the role of consumption in improving people's lives.

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Creeping Objectivity: Prior Exposure Makes People More Likely to Believe Claims Are Factual Statements Rather Than Opinions

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EXTENDED ABSTRACT

People encounter claims on a daily basis about issues in the world around them. Some claims are objective, they are either accurate or inaccurate, and other claims are subjective, reflecting varying views and opinions. The perceived objectivity of claims has important downstream consequences on collaboration (Liberman et al., 2012), interpersonal conflict (Ross and Ward, 1995), consumer behavior (Spiller and Belogolova, 2016), political polarization (Skitka and Morgan, 2014), and misinformation (Penney, 2020). But perceived objectivity is a malleable construct, affected by how claims are presented. People disagree regarding whether various claims are objective factual statements (subject to verification as true or false) or subjective opinions (not subject to verification) (Mitchell et al., 2018). Previous research has found that prior exposure increases the perceived veracity of objective factual statements (the illusory truth effect) as well as agreement with subjective opinions (the mere exposure effect) (Hasher et al., 1977; Cacioppo and Petty, 1979). The present research bridges these two literatures to investigate the novel question of whether prior exposure affects the perceived objectivity of claims as either objective factual statements or subjective opinions.

Prior work on naïve realism indicates that people sometimes treat their subjective assessments as though they are objective assessments (Griffin and Ross, 1991). Moral objectivity also varies across people, cultures, and modes of social interaction, suggesting that a claim's perceived objectivity is malleable, subject to the way in which it is presented (Goodwin and Darley, 2008; 2012). Given that prior exposure is associated with increased agreement with claims, and strength of agreement is associated with believing that claims are objective, we hypothesize that prior exposure to a claim increases the likelihood of believing it is an objective factual statement rather than a subjective opinion.

In five preregistered experiments (N=3,412 online participants), we find that prior exposure to claims makes people more likely to believe those claims are objective factual statements rather than subjective opinions. These five experiments constitute all of the data we have collected in which we manipulated prior exposure and measured beliefs that the claims were factual statements. All data, materials, and preregistrations are available at https://researchbox.org/44&PEER_REVIEW_passcode=AAOJXL.

We recruited a convenience sample of participants from Amazon Mechanical Turk. All sample sizes were large enough to provide at least 80% power to detect a within-subject difference of at least 0.15 standard deviations. Each experiment was composed of three stages. The first stage was an initial exposure stage, where half of the claims were presented to participants who were then asked to rate the claims for relevance to current events, interestingness, or to categorize them by topic, depending on the particular experiment. The second stage was a filler stage; its primary purpose was to separate initial exposure from our measures of whether participants believed claims were factual statements or opinions. During this stage, we also measured several individual difference variables. The third stage was a classification stage, providing our key measures. Participants were presented with the full set of claims one at a time. Half of the claims were repeated from the initial exposure stage and half of the claims were novel, counterbalanced across participants. Participants were asked to classify claims based on whether they believed them to be objective factual statements or subjective opinions.

For each experiment, we regressed the within-subject difference between percentage of old claims classified as objective factual statements and percentage of new claims classified as objective factual statements on an intercept and a contrast coded variable reflecting the counterbalanced assignment of claim set. When considering pooled analyses across experiments, we accounted for experiment and counterbalancing effects. Across all five experiments, we consistently observe that previously exposed statements are more likely to be classified as factual statements rather than opinions; the pooled effect size was just under a 1 percentage point difference between previously exposed statements and novel statements (exp1:$t(399)$=2.07, p=.039; exp2:$t(601)$=1.94, p=.053; exp3:$t(398)$=1.85, p=.064; exp4:$t(998)$=0.57, p=.566; exp5:$t(1004)$=2.37, p=.018; pooled:$t(3400)$=3.70, p<.001).

Consistent with prior work on the mere exposure and illusory truth effects, we find that claims are more likely to be endorsed (i.e., agreed with when classified as opinions or marked as accurate when classified as factual statements) when participants had been exposed to them during the initial exposure stage than if participants only saw the claim during the classification stage. Difference in endorsement was a significant predictor of difference in classification of claims as objective factual statements rather than as subjective opinions.

We also examined the relationship between individual difference measures and (i) the difference in percentage of old vs. new claims classified as objective factual statements, (ii) the total percentage of claims classified as objective factual statements, and (iii) total percentage of claims accurately classified. Overall, we find none of these individual difference measures moderate the effect of prior exposure on perceived objectivity. Cognitive reflection (a proxy for analytic thinking), political liberalism, and political awareness were positively related to accurate classification of claims.

Across five experiments, we found a replicable influence of prior exposure on the belief that claims were factual statements. Perceived objectivity has important downstream consequences on collaboration, conflict, consumer behavior, political polarization, and misinformation. Moreover, we frequently encounter the same claims multiple times. Sometimes repeated exposure to claims is a result of issues becoming focal points of discussion, debate, or disagreement, and claims reflecting those issues are repeated by our friends, co-workers, and media outlets. Other times repeated exposure to claims may be the result of a marketing or political campaigns or popularized slogans. Repeated exposure to a claim affects the way in which it is processed and understood. We uncover a persistent effect of exposure on perceived objectivity, repeatedly finding that prior exposure to a claim makes it more likely to be classified as an objective factual statement rather than as a subjective opinion, in addition to being more likely to be endorsed. The current research bridges prior findings in the illusory truth and mere exposure literatures, reinforcing the importance of the finding that whether a claim is perceived as objective or subjective is itself a malleable construct.

How Using a Foreign Language Influences Perceived Fairness

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EXTENDED ABSTRACT

Previous research on foreign language has demonstrated that using a foreign language can influence various types of choices or judgements (Costa et al. 2014; Hayakawa et al. 2016). In the current research, we extend the effect of using a foreign language to the fairness domain, which is a hallmark of human beings' ability to maintain their relationships with others (McAuliffe et al. 2017). We propose that when using a foreign language, people are more likely to accept an unfair treatment than when using a native language.

Due to the autobiographical memory (Marian and Neisser 2000), native language (foreign language) words automatically trigger an emotional echo from previous native language (foreign language) experiences. Foreign language, in general, is acquired in less emotional environments, such as classrooms. Hence, successive bilinguals tend to experience words in a native language as more emotionally intense than the same words in a foreign language (Pavlenko 2005). Therefore, when facing unfair offer, people who are using a foreign language have less negative affect than people who are using a native language. This reduced negative affect increases the level of perceived fairness in an unfair situation. The higher level of perceived fairness further increases the likelihood of accepting the unfair offer.

Methodology

Study 1A The Effect of Language Native-Ness on Fairness Expression

This study uses a dataset, which includes 65180 English language written reviews of 309 U.K. hotels, ranging from August 2015 to August 2017. We labeled reviews that were written by reviewers from the countries whose primary natively spoken language is English as reviews written in a native language. All other reviews were labeled as reviewed written in a non-native language.

We used pre-trained word embedding vectors that were trained with the *fastText* algorithm and the Common Crawl corpus. The association between the fairness construct and each review is the dependent variable. We followed the procedure of the DDR method (Garten et al. 2018) to retrieve the numerical values for the review contents and fairness construct. The analysis also included control variables (e.g., the rating score of that review or the rule of law index provided by the World Justice Project).

Our findings revealed that the content of reviews that were written in the native language had stronger association with the fairness construct than reviews that were written in a non-native language.

Study 1B The Effect of Language Native-Ness on Acceptance

A 2 (language: native (Chinese) vs. foreign (English)) between-subjects design was used in this study. 153 Chinese students were randomly assigned to one of the two conditions. Participants in a Chinese university played the Ultimatum Game, as the responder, with a pie of 100 yuan. Participants could either accept or reject the unfair offer they received (i.e., 20 yuan). Results revealed a significant relationship between the native-ness of language and participants' choice. Participants were more likely to accept the unfair offer when using a foreign language.

Study 2 The Effect of Language Native-Ness on Perceived Fairness

Study 2 (N=111) had a 2 (language: native (Chinese) vs. foreign (English)) between-subjects design. Participants from a Chinese university read a scenario about the security deposit of an apartment. We asked participants about how fair they felt the scenario was (1=unfair; 5= fair). The results showed people perceive the unfair treatment in the scenario as fairer when the language is a foreign one.

Study 3A and 3B The Effect of Language Native-Ness on Perceived Fairness and Acceptance

Study 3a (N=109) had a 2 (language: native (Chinese) vs. foreign (English)) between-subjects design. The procedure was similar to study 1b except both perceived fairness (1=unfair; 7=fair) and choice were asked. The results showed that perceived fairness mediates the relationship between native-ness of language and acceptance of the unfair offer. When using a foreign language, participants felt a higher level of fairness, which increased the likelihood of accepting the unfair offer.

Study 3b (N=99) had the same study design as study 3a except the participants' native language was English and foreign language was Spanish. U.S. residents were the participants in this study. The results showed the same pattern as study 3b.

Study 3C The Effect of Language Native-Ness on Perceived Unfairness and Acceptance Intention

Study 3c (N=110) had a 2 (language: native (English) vs. foreign (Spanish)) between-subjects design. Participants were recruited via an online website. We asked them to read a scenario about student loan. Then, participants answered how unfair they felt the scenario was (1=a little bit unfair; 7= very unfair) and how likely they were to oppose against the policy change (1=very unlikely; 7=very likely). The results showed perceived unfairness serves as the mediator of the relationship between language native-ness and acceptance.

Study 4 The Effect of Language Native-Ness on Affect and Perceived Fairness

Study 4 (N=306) had a 2 (language: native (Chinese) vs. foreign (English)) between-subjects design. Participants answered questions of affect (1=very negative; 5=very positive) and perceived fairness (1=unfair; 5=fair) after reading a purchase scenario. The results showed affect mediates the relationship between the native-ness and perceived fairness. When using a foreign language, participants felt less negative affect, leading to a higher level of perceived fairness.

General Discussion

Contributions

First, this research contributes to the foreign language literature. We extended the effect of a foreign language into a new area: fairness. In this research, we used text analysis, economic games, and hypothetical scenarios to explore the effect of foreign language usage on perceived fairness. Second, the current work contributes to the fairness domain. We introduced language native-ness as a new factor that influences people's processing of fairness-related information. Last, we provided an underlying mechanism underlining the relationship between language native-ness and acceptance, affect.

This research could provide evidence to policymakers about how people perceive fairness when they face unfair treatments in different languages. When using a foreign language, people are less sensitive to fairness. Hence, to help people more fully understand some situations, native language versions should be provided. This research also helps managers to understand how consumers may react to unfair treatments.

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The Moralization of Debt: Causes and Consequences

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EXTENDED ABSTRACT

People are regularly contacted about time-barred or "zombie" debt (i.e., debt for which the statute of limitations on repayment has expired). They are no longer legally required to repay such debts, and yet the Consumer Financial Protection Bureau (CFPB) estimates that every year debt collectors reach out to millions of people to try to collect (CFPB 2017). Previous research has largely focused on explaining why consumers incur debt in the first place (Hadar, Sood, and Fox 2013; Howard, Hardisty, Sussman, and Knoll 2018; Sussman and Alter 2012; Ulkumen, Thomas, and Morwitz 2008). Other work has explored how consumers manage the repayment of debt once incurred (Amar et al. 2011; Brown and Lahey 2015; Gal and McShane 2012; Gathergood, Mahoney, Stewart, and Weber 2019). The literature, however, has yet to address the important theoretical and practical question: What happens when consumers view the repayment of borrowed money as an ethical duty?

We aim to fill this gap. Specifically, we find that a nontrivial percentage of people (i.e., roughly half, across our studies) exhibit a willingness to pay back debt when it is clear there is no formal, legal, or otherwise binding imperative to do so. And we moreover demonstrate that this propensity for what we call discretionary repayment can be predicted by the extent to which people *moralize* debt—that is, view borrowing as an ethical obligation.

In Pretests A–B (MTurk; *N*=381), we presented participants with scenarios in which they decided whether to pay back delinquent credit card, mortgage, and medical debt, and we made it clear "there will be no negative consequences if you never pay the money back" (for example, because the relevant statute of limitations had expired). Across scenarios, 51% and 42% of participants (Pretests A–B, respectively) nevertheless chose to "unnecessarily" pay back their debt. Propensity to repay was positively correlated with moralization (e.g., "Is paying back debt a moral obligation?"; *p*s<.001).

In Study 1 (MTurk; *N*=466) we asked participants to read news articles that described strategically defaulting on an underwater home mortgage in either moral or economic terms. We then presented a scenario in which participants decided whether to pay back a time-barred credit card debt (see Pretests A–B). Discretionary repayment was higher when participants were first prompted to think about mortgages in moral terms (M=2.97) than economic terms (M=2.41, *p*=.004).

In Study 2 (Prolific; *N*=499) we asked participants to write a short essay about why either morality (*moral* condition) or intelligence (*nonmoral* condition) is important. We presented them with the delinquent credit card scenario (see Study 1). We then asked participants whether they believed their decision said anything about their personal identity. Discretionary repayment was higher in the *moral* condition (M=4.03) than in the *nonmoral* condition (M=3.49, *p*=.011). And participants believed these repayment decisions were more self-diagnostic (M$_{moral}$=4.27, M$_{nonmoral}$=3.76, *p*=.004). Moreover, these attributions mediated the effect (95% CI: [.125, .733]).

In Study 3 (Prolific; *N*=993) we asked participants to write a short essay (see Study 2). We then presented the same credit card scenario from previous studies in the *self-diagnostic* condition. In the *non-self-diagnostic* condition, we asked participants to make the repayment decision as a legal guardian for a grandparent. Discretionary repayment was higher in the *moral* condition when the decision was *self-diagnostic* (M$_{moral}$=4.09, M$_{nonmoral}$=3.49, *p*<.001), but not when it was *non-self-diagnostic* ((M$_{moral}$=2.64, M$_{nonmoral}$=2.65, *p*=.986); interaction: F(1, 989)=5.49, *p*=.019).

In Study 4 (MTurk; *N*=1,115), we manipulated psychological distance between lender and borrower—for example, by manipulating whether a loan was offered by a large international bank (*high* psychological distance) or a local credit union (*low* psychological distance). Participants were less likely to pay back debt when there was more psychological distance between the lender and borrower (*F*(1, 1,176)=17.80, *p*<.001), further implicating self-diagnosticity as the mechanism (e.g., by making the relationship between borrowers and lenders feel less personal).

Finally, in Study 5 (MTurk; *N*=331) we "loaned" participants $5.00, which they "invested" in a stock market simulation, ultimately earning a $2.50 profit. We then told participants they did not have to repay the loan (and thus could pocket a $7.50 bonus), but half of participants were additional told: "Many people use their sense of morality and ethics to guide their financial decision making." Discretionary repayment among these participants was higher (48%) than among those in the control condition (35%, χ^2(1)=5.72, *p*=.017).

In short, while past research exploring the psychology of debt has largely focused on explaining why consumers incur it and how they manage its repayment, we draw from work on morality to demonstrate causes and consequences of treating debt as an ethical obligation.

We also believe our findings yield important practical implications for policymakers. For example, there have been recent calls for regulation of unscrupulous and sometimes even criminally misleading attempts to coerce consumers into settling time-barred debt (Debt Collection Practices 2020), any repayment of which can reflect a "windfall to collectors" (McAllister 2018, p. 449).

In this research, we set out to answer: What happens when consumers view the repayment of borrowed money as an ethical duty? We found that it increases the discretionary repayment of debt by increasing the self-diagnosticity of these decisions. As such, we believe our framework yields numerous implications for marketing theory and practice. For example, this novel psychological insight not only fills an important gap in the consumer financial decision making literature, but also potentially implicates millions of people and billions of dollars.

Undermining Desire: The Persuasive Power of Short-Term (vs. Long-Term) Consequences of Indulging

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EXTENDED ABSTRACT

A major struggle facing consumers is how to avoid temptations and instead pursue long-term goals. Consumers want to eat healthier, exercise more, and drink less. Yet they are often tempted by immediate, short-term desires that prevent them from acting in line with these goals (Ariely & Wertenbroch, 2002; Baumeister, 2002; Fujita, 2011; Hoch & Loewenstein, 1991; Hofmann et al., 2008; Myrseth & Fishbach, 2009)2009. Self-control conflicts – dual motive conflicts between superordinate, long-term goals and subordinate, immediate temptations – involve choosing whether or not to engage in behaviors that provide immediate benefits with (often disproportionately large) delayed consequences. For example, eating candy provides benefits in the moment, but harms long-term health, whereas forgoing candy means sacrificing immediate pleasure for improved health in the long-term.

The importance of these conflicts has generated an interdisciplinary research effort to provide a wide array of strategies for overcoming temptations. For one, consumers can focus on the long-term costs that temptations carry (Donnelly et al., 2018). Additionally, consumers can highlight the benefits of the long-term goal (Kuhl & Beckmann, 1985; Mischel et al., 1989), and make the immediate pursuit of long-term goals more enjoyable to increase persistence (Milkman et al., 2013; Woolley & Fishbach, 2016)2016. Thus, focusing on the long-term consequences of temptations or the positive aspects of goal pursuit can motivate consumers.

We suggest an alternative. Rather than focusing on benefits of goal pursuit or long-term costs of indulgence, the present research investigates an often-overlooked component of many temptations: short-term costs. Eating candy, for instance, carries negative consequences that are realized in the short-term – on the order of minutes and hours rather than months and years – such as consequences of a sugar spike and crash (e.g., feeling jittery, losing focus, becoming moody). While long-term costs are believed to be motivating because of their severity, short-term costs may be motivating because they are felt immediately. Specifically, although short-term consequences of indulging are less severe than long-term consequences, we suggest that a focus on short-term consequences can systematically reduce consumers' likelihood of indulging compared with a focus on long-term consequences. We propose that this occurs because short-term consequences undermine the attractiveness of the temptation, making consumers anticipate enjoying the indulgence less.

We tested our hypotheses across eight experiments and three prototypical self-control conflicts: consuming alcohol, high-fat foods, and high-sugar foods. We choose these because engaging in these behaviors has deleterious consequences for consumers' long-term health (Duckworth et al., 2018), and because many consumers struggle with these temptations. First, we find that consumers are less interested in engaging in these unhealthy behaviors when focusing on short-term (vs. long-term) consequences (studies 1a-1c). Further, they are less interested in consuming alcohol or sugary foods when focusing on short-term consequences compared to both long-term consequences or no such focus (study 2a), which holds when making real decisions in an incentive compatible design (study 2b). Holding the consequence of indulging constant (i.e., indigestion), framing the consequences as more (vs. less) immediate further reduced interest in indulging (study 3).

Examining our proposed process, we demonstrate that considering short-term (vs. long-term) consequences reduces indulgence because doing so decreases anticipated enjoyment, a primary driver of these behaviors. As such, reduced anticipated enjoyment mediated the effect of consequence timing on actual choice of a sugary snack in an incentive-compatible design (study 4). As further process evidence, this effect is moderated by the presence of an enjoyment (vs. a charity) goal: focusing on the short-term (vs. long-term) consequences of sugar consumption decreased interest in purchasing candy when consumers held an enjoyment goal, which attenuated when their candy purchases were driven by their goal to support charity (study 5).

Overall, these results provide converging evidence that short-term consequences can undermine the attractiveness of temptation, leading consumers to be less likely to indulge. These results have several practical and theoretical contributions. First, for consumers who would like to indulge less often, our results suggest a readily implementable intervention: consideration of short-term consequences. Second, for marketers of health products, these results suggest that using short-term consequences can sometimes be more effective than comparatively more severe (but less connected) long-term consequences. Third, our results suggest a new avenue for self-control research: targeting the attractiveness of temptations. In other words, rather than focusing on effortful control strategies or situation selection, the present work suggests the utility of making temptation less appealing to begin with.

Consumers often see the world in terms of stark black-and-white tradeoffs. Self-control is no different: we overwhelmingly view indulging in temptation as a tradeoff between immediate and delayed gratification – a tradeoff we too often accept. This black-and-white, good-now/bad-later conceptualization obscures the many consequences that indulgences can carry in the short-term. By sensitizing consumers to these consequences, we can more effectively reduce the attractiveness of temptation, allowing people to better stick to a healthy lifestyle.

Buying More but Paying the Same? Retrofitting an Unplanned Purchase into the Shopping Budget

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EXTENDED ABSTRACT

The majority of consumers strive to control spending yet often make unplanned purchases. Body of literature has studied factors present *before* consumers make an unplanned purchase, such as hedonic motivations (Hoyer 1984) and sales promotions (Suher and Hoyer 2020). We complement this literature by examining what happens *after* consumers decide to make an unplanned purchase. Specifically, we demonstrate that consumers "retrofit" an unplanned purchase into their shopping budgets.

Consumers often use shopping lists to restrict their spending to planned items (Inman, Winer, and Ferraro 2009) and monitor their spending relative to the shopping list. However, consumers often underestimate their spending (Van Ittersum, Pennings, and Wansink 2010) and buy more items than planned (Block and Morwitz 1999). Such estimation inaccuracy has been attributed to consumers' limited cognitive ability for mental calculations (Luna and Kim 2009; Van Ittersum et al. 2010).

We demonstrate that motivational bias can also contribute to spending underestimation. Specifically, we argue that consumers strategically underestimate the price of the planned items on their shopping list, so that they can fit the unplanned item into their shopping budget, justifying the unplanned purchase. As a result, consumers who make an unplanned purchase would report the same total spending as consumers who did not.

Study 1 tested the main proposition with a 3-cell design (control vs. unplanned purchase_toilet_paper vs. unplanned purchase_soap). Participants imagined doing grocery shopping and listed out all the items they plan to purchase. Participants in the unplanned purchase conditions further imagined buying a pack of toilet paper or soap, based on conditions, as an unplanned purchase. All participants estimated the total price for all their purchases in this shopping trip (basket price). Participants who made an unplanned purchase did not estimate a higher basket price than participants who did not ($M_{control}$=57.08 vs. $M_{toiletpaper}$=46.00 vs. M_{soap}=54.27, F(2, 119)=1.44, p=.24), suggesting that consumers did not sufficiently adjust the basket price after unplanned purchases.

Study 2 tested the underlying process with a 2-cell design (control vs. unplanned purchase), by measuring participants' estimates of planned (shopping list) items and total spending separately. All participants imagined buying groceries from a given list and participants in the unplanned purchase condition imagined buying a pack of toilet paper in addition. All participants indicated the price for the total spending, the planned items, and the toilet paper (order counterbalanced). Replicating study 1, the estimated total spending did not differ between conditions ($M_{control}$=62.23 vs. M_{unplan}=59.44, F(1, 153)=1.06, p=.30). Importantly, the estimated cost for planned items was lower in the unplanned condition ($M_{control}$=62.23 vs. M_{unplan}=56.53, F(1, 153)=4.29, p=.04), suggesting that the no difference in total spending was driven by the underestimation of the price of the planned items. The estimated price for the toilet paper was significantly larger than zero and did not differ between conditions ($M_{control}$=7.05 vs. $M_{unplanned}$=6.90, F(1, 153)=.15, p=.70), suggesting that the effect was not driven by the discounting of the unplanned item.

We then test the motivational nature of the observed effect. If the effect is driven by consumers' motivation to "retrofit" the budget, but not driven by their cognitive bias of ignoring the small item price, then consumers should estimate a lower basket price when they subtract an item from the total spending. Study 3 employed a 3-cell design (control vs. unplanned purchase vs. unplanned non-purchase). We constructed two shopping lists based on pre-test. The first list included a pack of KitKat candy, and the second list replaced the candy with peanut butter at a similar price. Participants in the control and unplanned non-purchase conditions were presented with the first list, while participants in the unplanned purchase condition were presented with the second list. Participants in the unplanned purchase condition bought a pack of KitKat candy in addition to the shopping list and participants in the unplanned non-purchase condition missed the KitKat candy that was on the list. The results showed a significant main effect ($M_{control}$=24.37 vs. $M_{unplanned\_add}$=25.75 vs. $M_{unplanned\_subtract}$=20.55, F(2, 296)=8.67, p<.001). Specifically, participants who made an unplanned purchase did not estimate higher total spending than participants in the control condition (p=.29). By contrast, when consumers did not buy KitKat candy, they estimated lower total spending than participants in the control condition (p=.003).

Study 4 tested the motivational bias by varying the time of unplanned purchase. We expect that when an unplanned purchase is made in the early period of a shopping trip and consumers have not yet accumulated planned spending, they would gradually incorporate the extra expense associated with the unplanned purchase into their total spending, resulting in higher estimated spending. The study employed a 3-cell design (control vs. unplanned early vs. unplanned late). All participants shopped by a given list on a computer-simulated shopping task. Participants in the control condition shopped 11 items on the shopping list. Participants in the early unplanned condition purchased a chocolate bar after they shopped the first item from the list, and participants in the late unplanned condition purchased the same chocolate bar after they have shopped ten items from the list. All participants indicated their total spending and the price for the chocolate bar. The results showed a marginal main effect ($M_{control}$=53.44 vs. M_{early}=59.95 vs. M_{late}=55.61, F(2, 438)=2.47, p=.086). Specifically, participants who made the unplanned purchase at the end of the shopping trip did not estimate higher total spending than participants in the control condition (p=.46). By contrast, participants who made an unplanned purchase at the beginning of the shopping trip estimated higher total spending than participants in the control condition (p=.029). Further, there is no difference in the estimated price for the chocolate bar in three conditions (F(2, 438)=.021, p=.98).

This research demonstrates that, when consumers make unplanned purchases, they underestimate the cost of the planned items when calculating total spending. We further show that this estimation bias is driven by consumers' motivation to retrofit the unplanned purchase to the shopping budget and is not explained by price insensitivity. Our work complements prior research by expanding our understanding of how consumers justify unplanned purchases and how motivational bias affects spending estimations.

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I Am Authentic and You Said It: Analysing Brand Authenticity on Social Media

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EXTENDED ABSTRACT

Being authentic has become increasingly critical for brands to differentiate themselves in a saturated marketplace (Davis et al., 2019). Brand authenticity (BA) has many positive semantic meanings associated with it, such as naturalness, individuality, originality, truthfulness, integrity, and credibility (Napoli et al., 2014; Nunes, Ordanini, & Giambastiani, 2021). Authenticity as a social construct, however, can be contextual and dynamic that is undergoing constant development. In this research, we argue that BA can be seen as an aspect of brand identity, for it is "a unique set of brand associations" that brands aspire to create and maintain (Aaker, 1997).

Many have attempted to conduct text analysis using linguistic cues to classify and identify personalities for individuals and brands (e.g., Hu et al., 2019). Textual cues can convey a great deal of information about the sender and have been proven helpful in distinguishing between personalities (Wang & Chen, 2020). We aim to extend the method into looking at the specific word choices to chracterise BA. Prior research has examined linguistic style to assess the degree of authenticity in text (e.g., Hwong et al., 2017). We suggest that authenticity as a brand identity should be assessed with brand communication, similar to other brand personality traits. What happens when a brand repeatedly claims itself to be authentic?

While the definition of BA can vary, it is agreed that authenticity lies in the eye of the beholder. Most prior studies focus on creating scales and dimensions to measure perceived authenticity by consumers (e.g., Nunes, Ordanini, & Giambastiani, 2021). Consumers look for proofs of authenticity by examining detailed information about the brand, such as ingredients, performance, or communication (e.g., Beverland, Lindgreen, & Vink, 2008; Grayson & Martinec, 2004). However, not all consumers perceive the brand associations as intended.

Especially in social media, much brand meaning and value are co-constructed with the users (Schembri & Latimer, 2016). Some consumers become active content creators by sharing genuine brand-related content and interacting with brand content. The characteristics expressed in the online posts and comments become part of collectively enacted brand identities and associations. Prior research in social media and online communication has observed style matching among users (e.g., Ludwig et al., 2013). If BA can be communicated effectively through verbal cues, it may be expected that the users would also adapt similar words in their comments. This would be one way where brands can manage the co-construction process of the brand identity. There has been no empirical evidence in the literature to prove this to be a feasible approach. Will the consumers buy into the descriptives and portray the brands similarly? We aim to explore the possibility in this study.

Building on the previous effort in extracting human and brand personalities from unstructured textual data, we developed a framework to analyze and compare the perceived and communicated BA. As many of the prior studies established the construct of BA using luxury brands, we tested ours in the similar context. Specifically, we analyzed the branded contents and the users' comments published in 2019 on Instagram for three luxury watch brands (Rolex, Omega, and Audemars Pique). To analyze the textual contents, we developed a dictionary based on the six BA dimensions identified in the previous literature: brand heritage (e.g., Napoli et al., 2014), brand continuity (e.g., Bruhn et al., 2012), originality (e.g., Portal, Abratt, & Bendixen, 2019), credibility, symbolism (e.g., Morhart et al., 2015), and quality commitment (e.g., Ilicic & Webster, 2014). Word vectors that capture the context of a word in a document, semantic and syntactic similarity and the relationship to other words were created. The synonyms and other related words to the keywords per dimension were included so that the variations that occur in ordinary language use can also be represented. In total, the dictionary includes 1754 keywords across all BA dimensions. We then followed a standard process to prepare all the textual data for the text analysis (Palmer, 2010) and used the dictionary to count the frequency and the co-occurrence of each keyword in both the comments and the brand posts.

The results suggest that the dictionary can distinguish the authenticity communication in both the branded messages and the comments. The most commonly communicated BA dimension by the three brands was brand heritage which was not surprising considering the focus on luxury brands. However, the distributions for the rest of the dimensions differ across the three brands. For example, Rolex has quality commitment and originality as the two-second most communicated characteristics. Omega, on the other hand, communicated more on brand continuity and symbolism. The results also show that communicated BA influences the perceived BA at the respective dimensions, albeit with only a small effect.

The result signifies the importance of continuously investigating the perceived brand identities, especially in social media where brand meaning co-construction is inevitable. The main contribution of the research is that text analysis can be a practical tool to monitor and analyze BA conveyed in verbal communication. It can complement the previous attempts in determining BA expressed online (e.g., Shirdastian, Laroche, & Richard, 2019) that were either based on the sentiment analysis using a manual assessment process or focusing on the writing style using existing tools, such as Linguistic Inquiry and Word Count (Pennebaker, Booth, & Francis, 2007).

Future research should consider testing the dictionary on different brands to validate the generalisability of the dimensions. To verify the results, survey research on perceived BA using the previous scales can be helpful. It would also be interesting to use the BA dimensions to predict user engagement and other branding performance metrics to improve the relevance of the textual analysis approach of measuring the BA.

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How Time (vs. Money) Salience Enhances Price-Unfairness Aversion

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EXTENDED ABSTRACT

Engaging in price differentiation is a profitable proposition. Being able to charge different prices across different customers/times/channels results in significant revenue and profit gain (Phillips 2005). However, there are potential downsides to this price differentiation strategy. Consumers react negatively to being charged prices different from other customers (Feinberg, Krishna & Zhang 2002). Negative downstream consequences of such price-unfairness perception may more than offset any revenue gains attributable to this strategy.

While several papers have dwelled into the issue of price-unfairness, relatively few consumer researchers have examined situational factors which may moderate this phenomenon. In this paper, we examine how the activating time (vs. money) in the consumer's mind can amplify price-unfairness effects.

Consumers often deal with time and money in consumption decisions (Becker 1965). They behave differently when dealing with time than with money (Okada & Hoch 2004). Money is implicitly linked with more market-exchange norms (Vohs, Mead & Goode 2008; McGraw & Tetlock 2005). Merely introducing monetary payoffs in a situation shifts focus from communal to exchange considerations (Kreps 1997, Heyman & Ariely 2004) and dilutes adherence to social norms (Gneezy & Rustichini 2000). In contrast, time leads to lower "value-maximization" concerns and more emotional/social considerations (Liu & Aaker 2008). Gino & Mogilner (2014) demonstrated that priming people to think of time, instead of money, leads to more ethical behavior. Overall, the sense one gets from a holistic analysis of these findings is that time salience leads to more communal concerns, while money salience leads to greater self-interest concerns, value-maximizing and transactional thinking.

Grounded on the above discussion, we propose that time (vs money) salience will activate a more communal (vs exchange) relationship norm, which in turn will lead to enhanced negative reactions to price-unfairness. We further posit that this will happen even across unrelated domains. Five studies have tested the propositions.

Study 1 tested whether time (vs. money) can influence consumer's perception of price-unfairness differently. 223 MTurk participants were randomly asked to think about three activities requiring spending time (vs. money) for their vacation preparation. All participants then read the same price-unfairness scenario where they were told that during the time they met with other tourists in hotel and found out that they were offered a 40% lower price. Following this, their price-unfairness perception was measured. To ensure that our results were not attributable to a perceived value-difference between the time and money conditions, , we measured the subjective value of the time or money spent in the vacation preparation.

Results revealed that time- (vs. money-) activation generates higher perception of price-unfairness ($p = 0.03$). Responses to the subjective resource value question did not show a significant difference among the two resources, ruling out the possibility that the perceived greater value of time explains these results.

Previous research has shown that activating time (vs. money) may evoke variable positive affect (Mogilner & Aaker 2009). This could have caused the observed time-money difference in Study 1. Study 2 examined the proposed effect through a different setting to test this alternate explanation. 218 participants were randomly asked to recall a time that they had to spend money (or time) on fixing a product, which eventually didn't work and they ended up purchasing a new one to replace this broken product. They were then asked to imagine that they later they found out that the same product they had purchased was offered at a 40% lower price to other customers. Subsequent to this, their price-unfairness perception was measured. Similar to Study 1, time/money value perception question was also asked.

As expected, the results revealed that the time (vs. money) activation was more likely to cause stronger price-unfairness perception ($p = 0.004$). More importantly, it ruled out the positive affect as the reason for people to have stronger aversive feelings towards the price-unfairness.

Study 3 tested the underlying process and ruled out other alternative explanations. The manipulation of time and money was evoked by creating a scenario where participants had spent extra time waiting (vs. extra money) to procure front seats at SeaWorld's dolphin show. To induce price-unfairness, they were informed that they were being charged higher prices (vs. back-row customers) for the same snacks. Then they responded to the price-unfairness measure. Along with this, they were asked several questions to measure the proposed underlying mediator and several other potential mediators: (i) communal (vs. exchange) norm activation,(ii) personal connection and (iii) intuitive thinking.

A parallel mediation analysis confirmed that only communal norm activation mediates the relationship between time activation and price-unfairness perception (-0.20, 95% CI [-0.42, -0.06]). The other two accounts were ruled out (personal connection 95% CI [-0.25, 0.01]; intuition measure 95% CI [-0.12, 0.03]).

Study 4 explored a moderating factor. Extant research shows that people may feel less discriminated when a plausible reason is provided to justify the price difference (Ashworth, 2012). In this study, we used 2(time vs. money) × 2(justification-offered vs. justification not offered) between-subject design to test this moderation hypothesis. The results showed that under justification-offered condition, people in time (vs. money) condition were more likely to lower their aversion towards price-unfairness ($p = 0.05$). However, under the "justification not offered" condition, people in the time (vs money) condition still hold greater aversion towards price-unfairness ($p = 0.02$).

Could the results of all our previous studies be driven by some sort of a currency-compatibility effect – because price unfairness is a monetary construct? Along with ruling out this alternate account, study 5 also enhances the generalizability of our finding by examining unfairness-aversion in non-price domain: flight upgrades. Results show that time activation causes people to have a stronger perception about unfairness even in non-price contexts ($p = 0.02$).

Across five studies, we demonstrate that time-activation evokes a communal (vs. exchange) norm which causes consumers to have a stronger aversion towards price-unfairness, and this persists even in non-price contexts. Providing justification of price discrimination moderates this effect.

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How Evaluative Nutrition Cues Promote Consumer Response for Unhealthy Foods

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EXTENDED ABSTRACT

Consumers rely on nutrition labels to infer the healthiness of packaged foods, but many find it difficult to interpret them. This has led to the introduction of interpretive front-of-package (FOP) labels which provide the evaluation of the product's overall healthfulness (Newman, Howlett, and Burton 2016). A health star rating (HSR) is a good example of FOP labels; HSR evaluates the healthiness of foods from 0.5 (unhealthy) to 5 (healthy) stars. Placing FOP labels is voluntary; as it is not a mandate, only 16% of HSR-labeled products displays the ratings of 0.5 to 2.5 stars (Mhurchu, Eyles, and Choi 2017). This finding indicates that food manufacturers and marketers are unwilling to place such evaluative nutrition cues for unhealthy foods, presumably because displaying low ratings may undermine sales and brand image. In the current research, we observe how such evaluative nutrition cues influence consumer response to unhealthy foods.

Nutrition labels not only assist consumers in making food choices but also facilitates access to health-related thoughts (Barreiro-Hurle, Garcia, and De-Magistris 2008). This suggests that the exposure to evaluative nutrition cues may offer individuals a greater access to health-related thoughts in unhealthy eating. Offering evaluative nutrition cues for unhealthy foods is also expected to lead consumers to make positive brand inferences. Specifically, the brand's decision to disclose negative product information (i.e., unhealthy) is expected to help consumers generate positive inferences about the brand and its commitment to consumer awareness (e.g., Isaac and Grayson 2017). Further, we argue that the proposed effect will be pronounced for consumers who believe that they are less (vs. more) knowledgeable about nutrition. As consumers lower in subjective nutrition knowledge (hereafter, SK) are more likely to need help in making food choices, they are more likely to appreciate the brand's decision to place evaluative cues on the front of package for unhealthy foods when other brands do not. As only a fraction of consumers believes that they are knowledgeable about nutrition (Goyal and Deshmukh 2018), it is worth investigating whether they exhibit favorable response to unhealthy foods accompanied by evaluative cues.

Study 1 tested the hypothesis by observing individuals' actual product choice. Participants first reported their SK on nutrition (Moorman et al. 2004). We then introduced them to two chocolate granolas from mainstream brands with and without the evaluative cue. They further learned that it is a food manufacturer's decision whether to adopt the cue or not. We then asked participants to choose the brand they want to try between the two options. When the product with (vs. without) the cue was chosen, the response was coded as 1(vs. 0). A logistic regression analysis showed that participants with lower (vs. higher) SK were more likely to choose the product with the evaluative cue ($\beta = -.45$, $\chi^2 = 3.88$, $p = .049$).

Study 2 aimed to offer evidence for the mediating roles of a greater access to health-related thoughts and positive brand inferences. The study was a two-group (Evaluative cue: present vs. absent) between-subjects design, with SK measured on a continuous scale. We first measured participants' SK. Next, as in Study 1, participants imagined a shopping scenario. In the cue-present condition, the product displayed a HSR of 2.0 on the front of package. In the cue-absent condition, participants were not exposed to the evaluative cue. Participants then indicated their willingness to purchase

the product. Subsequently, participants reported the extent to which they made positive inferences about the brand (Kim and Han 2020) and their desire to consider health effects (Bless and Fiedler 2006). We found the hypothesized interaction on purchase intention ($\beta = -.24$, $t(195) = 2.06$, $p = .04$); among participants with lower SK, purchase intention was higher when the cue was present (vs. absent) ($p = .052$). For those higher in SK, purchase intention was not affected by the presence of the cue. On the desire to access health-related thoughts, we also found a two-way interaction ($\beta = .23$, $t(196) = 2.03$, $p = .04$) but failed to find one on positive brand inferences. We revisit this issue in study 3. A bootstrap analysis with participants' access to health-related thoughts as a single mediator (Hayes 2013; Process model 8) revealed a significant mediation effect (.04, 95% CI = .001 to .116).

Study 3 focused on testing the hypothesis in an environment where the role of positive brand inferences is better observed. If positive brand inferences play an important role in the proposed relationship, introducing a factor that makes it unnecessary to make brand inferences should mitigate the observed effects. Thus, we manipulated the labeling into either mandatory or voluntary. The procedure was similar to that of Study 2, but while half of the participants was told the labeling was voluntary, the other half viewed the label and was told it was mandated by law. As predicted, the SK by evaluative cue (voluntary vs. mandatory) interaction on purchase intention emerged ($\beta = -.24$, $t(126) = 1.98$, $p = .049$). Among participants with lower SK, purchase intention was higher when the label adoption was voluntary (vs. mandatory) ($p = .052$). Those higher in SK was not affected by the labeling practice. We also found the hypothesized interactions on the access to health-related thoughts ($\beta = .27$, $t(127) = 1.93$, $p = .056$) and on positive brand inferences ($\beta = -.22$, $t(127) = 2.29$, $p = .02$); both did mediate the proposed relationship (Process Model 8; access to health related thoughts: .05, 95% CI = .005 to .145; positive brand inferences: -.11, 95% CI = -.237 to -.017).

The current research contributes to the evaluative cues literature by demonstrating when and how evaluative cues offering negative product information enhance consumer response. Our work also adds to the new stream of persuasion knowledge literature that consumers are not always skeptical to marketing activities. Our research provides practical implications for food manufacturers that placing interpretive FOP labels for unhealthy foods can be an effective way to improve brand image and sales.

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Reserved For You: Implied Selectivity as a New Tool of Choice Architecture

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EXTENDED ABSTRACT

Imagine you received the following email: "[Name], we know you saw Bob Dylan last time he came to town. He is coming again this summer, and tickets go on sale next week. **As a special opportunity, we have reserved 2 tickets for you to purchase.**" Consider how likely you would be to buy the tickets after receiving this message compared to a more generic message alerting you to the opportunity. We suspect that the simple choice of framing the tickets as *reserved for you* would considerably increase sales.

When consumers see a good as scarce (Lynn, 1989), or when they perceive unmet market demand for some good (Imas & Madarasz, 2020), they come to value that benefit more. Explaining this phenomenon, Imas and Madarasz argue that people's utility for a good is partly a function of their belief that others want that good but cannot acquire it. Likewise, we hypothesized, labeling an opportunity as "reserved" will cause people to infer that they have exclusive access to a coveted opportunity and thus come to value it more. This was recently confirmed in two mega-studies of messages encouraging flu vaccination (Milkman et al., 2021a, b). In this project, we introduce a new, general-purpose social influence tactic to the choice architecture toolkit: the implied exclusivity effect. Here, we test both the effect of "reserved" framing and the proposed inferred exclusivity mechanism across four studies.

Study 1: The Behavioral Science and Policy Association (BSPA) hosted its annual conference in May 2021. BSPA was offering a discount to anyone who registered for the conference before March 2021. For the final three weeks of February, the lead story in BSPA's weekly newsletter was a promotion of this discount. Members of the listserv were randomly assigned to receive one of two messages promoting this early-bird discount:

- **Control**: 2021 BSPA Virtual Conference: Early registration discount. Early bird sign-up discounts are available to subscribers of this newsletter.
- **Treatment**: 2021 BSPA Virtual Conference: Early registration discount reserved for you. We have reserved an early-bird discount for you as a subscriber of this newsletter.

As expected, there was a significant positive effect of the "reserved" language on conference sign-up (p=.02).

Study 2: After completing a decoy task, participants in this study were randomized to see one of two messages: "As an additional thanks, a copy of *Frankenstein* is available [reserved] for you." Participants were then taken to a page where they could either click a button to download an e-book copy of *Frankenstein* or they could advance to the end of the study. Unbeknownst to participants, we observed whether they clicked the button to download the book.

As expected, framing the opportunity for participants to download the e-book as "reserved for you" significantly increased downloads compared to the subtly different "available for you" framing by nearly 10 percentage points (p=.03). It is worth noting a few things about this effect. First, the opportunities are identical, there is just a one-word difference in the *framing* of the opportunity. Second, participants were offered something free—indeed, *Frankenstein* is part of the public domain and thus freely available to anyone who wants it—but not something tangible that they could possess. They were merely offered the *opportunity* to download the book. As such, while participants in the Reserved condition came to value this opportunity more highly than those in the Available condition—as evidenced by their increased take-up—this was a purely psychological effect.

Study 3. While ownership of a discount coupon (as in Study 1) makes no more sense than ownership of a $20 bill, it is possible that participants in Study 2 felt a sense of ownership—either metaphorical ownership of the book, or literal ownership of a digital file—which would be inflating the effects of the "reserved" language. In Study 3, we sought to test the generalizability of this phenomenon by extending it to a domain where formal or legal ownership could not be possible: signing up for a listserv. We replicated the design of Study 2, this time offering participants a chance to join a listserv we started discussing ways to improve your standing as an MTurker and tips for finding good jobs. Once again, this time with a more abstract opportunity, the "reserved" framing caused considerably more participants to sign up for the listserv than the "available" language (p=.003).

Study 4. We hypothesized that part of the effect of framing a benefit as "reserved" is to create the sense that this is a special, coveted benefit that others might seek but the recipient has exclusive access to. In Study 4, we crossed the typical "reserved" or "available" framing manipulation with mention that the offer to join the listserv was reserved [available] for you and "a select group of other workers" (exclusive) or "anyone else who wants to join" (non-exclusive). We hypothesized that "reserved for you" connotes exclusivity whereas "available to you" connotes non-exclusivity. We call these combinations "compatible." However, we expected that reversing these combinations (i.e., "available for you and a select group of other workers" or "reserved for you and anyone else who wants to join") would eliminate the Reserved--Available difference. In fact, that is what we find. The interaction between reserved framing and compatibility is highly significant (p=.004). Further, while there is a significant effect of "reserved" in the compatible frame (b=.21, t=4.13, p<.001), the effect entirely disappears using incompatible language (b=.01, t=0.20, p=.84 *NS*).

Across six studies in multiple domains, we document a phenomenon that framing a benefit as "reserved" for someone substantially increases the chances that they claim the benefit compared to merely informing them that the benefit is available. Moreover, we provide evidence that the effect of "reserved" framing may be driven by an automatic association connoting exclusivity of the offer. From flu vaccines to savings accounts, from gym memberships to financial aid applications, the canonical domains of nudging could all seem to benefit from employing this framing manipulation. As such, we offer this tactic as a new tool of choice architecture.

When and Why Targeted Products for Underserved Consumers Backfire

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EXTENDED ABSTRACT

Products often fail to accommodate certain consumer groups' needs. In the present research, we refer to consumer groups who have historically felt excluded in the marketplace as underserved consumers, such as women and people of color. However, as the marketplace has become more diverse and consumers have increasingly called for more inclusion, companies have started offering products tailored to underserved segments. While past research suggests that explicitly identifying the target consumer should lead to positive outcomes (Deshpandé and Staman 1994; Forehand and Deshpandé 2001; Forehand et al. 2002), marketplace observations regarding more inclusive products suggest that this strategy often leads to unintended negative outcomes. For example, in June 2020, Band-Aid announced on Instagram their plan to create bandages "for the Black Community." However, to Band-Aid's surprise, their announcement was met with skepticism and ridicule, especially from the consumers they wished to serve.

We propose that because underserved consumers often must use products that fail to fully meet their needs, once they are given (unexpected) attention (e.g., being offered products with features that meet their needs), they may become uncertain about the true intentions behind the positive treatment after being ignored for so long in the marketplace. Specifically, blatantly indicating (relative to subtly suggesting) an underserved group as the target consumer can raise these consumers' suspicions. In turn, these heightened suspicions negatively impact assessments of the company's intentions and ultimately evaluations of the targeted product. Importantly, given that the needs of mainstream consumers are well served in the marketplace (Patrick and Hollenbeck 2021; Perez 2019), we also argue that a blatantly targeted product will not backfire for well served consumers. In addition, we propose that when suspicion mitigating cues are present (e.g., a product creator comes from an underserved consumer group), blatant relative to subtle targeting will be less likely to elicit negative reactions from underserved consumers.

In study 1 (N=83), we tested our predictions with Asian Americans. Because Asian Americans tend to have lower nose bridges (Farkas et al. 2005), they often find that regular glasses slide down their faces. Therefore, we examined Asian American participants' reactions to glasses that solve this problem. Asian American participants were shown an advertisement promoting a pair of glasses. In the blatant (subtle) targeting condition, participants saw the reading glasses labeled as "Asian fit" ("low bridge fit"). In the blatant targeting condition, Asian Americans evaluated the product and brand more negatively ($M_{blatant}$ = 4.22 vs. M_{subtle} = 4.78; $t(81)$ = 2.01, p = .048), felt more suspicious ($M_{blatant}$ = 3.88 vs. M_{subtle} = 2.70; $t(81)$ = -2.99, p = .004), and inferred less positive intentions from the firm ($M_{blatant}$ = 4.68 vs. M_{subtle} = 5.20; $t(81)$ = 2.01, p = .048). Additionally, suspicion and inferred positive intentions mediated the relationship between product targeting and evaluations (B = -.31, 95% CI [-.59, -.08]).

Study 2 (N=401) replicated the negative targeting effect with another underserved consumer group: women. Importantly, we showed that products only backfire when companies target underserved consumers (women) but not when they target mainstream consumers (men). Depending on their gender, participants in the blatant targeting condition saw an advertisement for a tea blend labeled as "Her Tea" or "His Tea" that helps women or men sleep better. All participants in the subtle targeting condition saw the same tea blend advertisement except the product was labeled as "Sleep Tea". Then, participants responded to the same measures as in study 1. We found a targeting x gender interaction ($F(1, 397)$ = 9.89, p = .002) such that women evaluated Her Tea (M = 4.84) more negatively than Sleep Tea (M = 5.51; $F(1, 397)$ = 11.00, p = .001). However, men did not evaluate His Tea (M = 4.91) and Sleep Tea differently (M = 4.72; $F(1, 397)$ = 1.07, $p > .30$). Suspicion and inferred intentions also revealed similar results. Supporting our hypotheses, suspicion and inferred intentions negatively mediated the relationship between targeting and evaluations for women (B = -.19, 95% CI [-.35, -.06]), but positively mediated the relationship for men (B = .13, 95% CI [.002, 28]).

Study 3 (pre-registered; N=876) tested the prediction that the negative targeting effect will be attenuated when the company's founder belongs to the targeted underserved consumer group. Specifically, we should replicate the negative targeting effect with female consumers when the founder of the company is a man but not when the founder is a woman. As in study 2, women in the blatant (subtle) targeting condition saw an advertisement for a tea blend labeled as "Her Tea" ("Sleep Tea") that improves sleep. For those who were in the female (male) founder condition, women read that the product was created by Stephanie (Steve) Wakefield. Then, participants completed the same measures as in previous studies. We found a two-way interaction on evaluations ($F(1, 872)$ = 4.59, p = .032) such that when the company's founder was male, women evaluated Her Tea (M = 4.57) more negatively than Sleep Tea (M = 5.13; $F(1, 872)$ = 15.50, $p < .001$) but when the founder was female, they did not differ in their evaluations ($M_{Her\ Tea}$ = 4.85 vs. $M_{Sleep\ Tea}$ = 5.00; $F(1, 872)$ = 1.41, $p > .23$). Suspicion and inferred intentions also revealed similar results. A moderated serial mediation further revealed that suspicion and inferred intentions only mediated the relationship between targeting and evaluations when the founder was male (B = -.14, 95% CI [-.21, -.07]) but not when the founder was female (B = -.05, 95% CI [-.10, .01]).

Our research makes several important contributions to the literature. First, we distinguish between two targeting approaches, namely blatant and subtle targeting. Our work also highlights how to the extent that underserved consumers view targeted products with distrust, heightened suspicions and negative assessments of a company's intentions can undermine the positive effects of inclusive design in the marketplace. Additionally, we offer a feasible solution to marketers to mitigate this negative effect: marketers can incorporate cues, such as featuring an ingroup product designer, to effectively reduce suspicions among underserved consumers.

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Are Critics Credible? Negative Sources are Perceived to be Less Credible

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EXTENDED ABSTRACT

In today's changing world of alternative facts and fake news, the need to understand the role of source credibility in consumer psychology has only increased. Source credibility, or a source's overall believability, is the combination of expertise and trustworthiness (Petty & Cacioppo, 1981; Petty & Wegener, 1998), and it has important implications for consumers' attitudes, belief formation, and consumption decisions (e.g., Chaiken & Maheswaran, 1994; Petty & Cacioppo, 1984; Sternthal, Dholakia, & Leavitt, 1978). In order to understand the consequences of source credibility, it is important to understand its antecedents—what leads consumers to perceive a source as credible. Although source credibility is one of the most studied variables in the persuasion literature, most of that attention has focused on consequences and less on antecedents.

In this research, we propose and demonstrate that the message itself can affect how a consumer perceives a source's credibility. Traditionally, source credibility and message valence are treated as independent factors that affect message persuasion. However, given the extensive research on valence asymmetries (Baumeister et al., 2001; Fazio et al., 2015) it is possible that the valence itself could affect credibility. On the one hand, negative messages are associated with expertise (Amabile, 1983), which may increase credibility. On the other hand, negative messages may be unexpected and violate norms, thus decreasing credibility. For example, 68% of Yelp reviews are either four or five stars (Yelp, 2020), suggesting that consumers expect positive messages most of times. Negative messages disconfirm such expectations, which may lead consumers to be more skeptical about the source (Ditto & Lopez, 1992; Nickerson, 1998). We propose that this skepticism will lead consumers to infer lower source credibility.

Four studies provide evidence that negatively valenced messages lead consumers to infer lower source credibility than positively valenced messages.

Study 1

In study 1, participants were presented with either positive or negative review of a wine, holding the word count, topic, and consumption vocabulary constant. In the positive message condition, a 5-star review said "smooth, bits of prune, vanilla, strawberry, and cherry are present. Well balanced and with depth." In the negative message condition, a 2-star review said "way too much prune in the palate almost overpowering the bits of vanilla, strawberry and cherry that are also present. Unbalanced and without much depth." Participants indicated their perceived credibility of the source by responding to source credibility measures that tapped into both expertise (e.g. "To what extent do you think this reviewer is an expert?") and trustworthiness (e.g., "To what extent do you think this reviewer is trustworthy?") on 7-point scales. All participants were then presented with another wine and a 5-start review by the same reviewer, and were asked to indicate how interested they would be in trying this second wine. Participants perceived the source less credible when the message was negative (M_{neg}=5.06) compared to positive (M_{pos}=5.33, p=.017). Further, this effect led consumers to be more likely to follow a source's recommendation on a subsequent recommendation (i.e., an indirect effect on interest to follow a recommendation through source credibility, 95%CI=[-.15,-.01]).

Study 2

Study 2 shows that the effect holds regardless of whether the source chose the product. In a 2(message valence: positive vs. negative) x 2(product choice: by-source vs. not-by-source) between-subjects design, participants were presented with a wine review as in study 1 except that additional information also explicitly stated that the product was chosen by the source ("I am delighted [disappointed] that I chose this wine.") or not chosen by the source ("I am delighted [disappointed] that I won this wine from an event."). Again, participants perceived the source less credible when the message was negative (M_{neg}=4.96) than positive (M_{pos}=5.17, p=.016). Further, this decrease in credibility led to lower intentions to follow the source's recommendation (indirect effect 95%CI=[-.10,-.01]). Whether the source choose the product or not did not moderate the effect (p=.882).

Study 3

Study 3 provides further evidence, replicating the effect for multiple products and showing a stronger effect for utilitarian versus hedonic products. In a 2(message valence: positive vs. negative) x 2(product type: utilitarian vs. hedonic) x 3(product replicates of each type) mixed design, participants were presented with one review of each of 6 products. Multi-level linear regression (Judd, Westfall, & Kenny, 2017) showed a significant fixed effect of the message valence on source credibility. Participants perceived the source more credible when the message was positive rather than negative (b=.18, p<.001). There was a significant interaction between review valence and product type (b=.05, p=.010), indicating that the effect was stronger for utilitarian products, but the simple effects were significant for both hedonic (p<.001) and utilitarian products (p<.001).

Study 4

Study 4 tests our theory and identifies a boundary condition in a 2(message valence: positive vs. negative) x 2(expectation: baseline vs. low) between-subjects design. In the low expectation condition, participants expectations for the brand were lowered so that positive reviews would be less expected; participants were told that the product was, "from a brand you've never heard of before. It seems they just entered the market and this is their first and only product." The baseline condition did not receive any information about expectations. Participants perceived the source less credible when the message was negative (M_{neg}=3.92) than positive (M_{pos}=4.24, p=.042), but this was moderated by expectation (p=.003). In the baseline condition, participants perceived the source less credible when the message was negative (M_{neg}=3.60) than positive (M_{pos}=4.41, p=.001) as in our previous studies. However, in the low expectation condition, there was no difference in source credibility perception (M_{pos}=4.07 vs. M_{neg}=4.22, p=.515).

Genernal Discussion

In summary, we find that consumers infer less source credibility from negative messages compared to those that are positive, and this lower credibility decreased a message's persuasiveness. We find this effect across various products and situations. The findings suggest that negative messages may not always be so negative because they can lead consumers to lower the credibility of the message source.

Finally, the findings should caution the overly critical critic, who may be putting their own credibility at risk.

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Managing Daily Lives Through A Pandemic: I Shop Therefore I Am

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EXTENDED ABSTRACT

Introduction

Research shows that individuals' behaviors change during a crisis in different ways. A coherent research effort about how a crisis such as a global pandemic impacts an individual's psyche is lacking. Therefore, the goal of current exploratory research is to investigate how people perceive the pandemic and identify their different emotions and thoughts during the pandemic, in addition to coping processes that are used by individuals to manage their lives.

Current research is built upon the self-affirmation theory (Steele, 1988), which suggests that each individual has a self-system to maintain the perceived integrity of the self instead of addressing each particular threat (Steele, 1988). The objective of this system is to sustain a self-concept that is consistent over time and has the capacity to adapt. Based on this theory, individuals have more than one way to respond to threats. They can try to eliminate the threat itself, but also, they tend to make changes in other areas in their lives to diminish the threat (Steele, 1988). These efforts will enhance their perception of self-adequacy in the different areas of their lives, which is the goal of self-affirmation system.

Methodology

A qualitative study design was used to explore consumer feelings and their responses to the pandemic. Interviews were conducted virtually via either Webex or Zoom. Audio-recorded interviews were fully transcribed and the transcripts were coded. Responses within and between respondents were compared through an iterative process until the authors achieved "saturation" (Glaser and Strauss, 1967). Various themes were developed through coding of transcripts.

Results

Results showed that individuals experience various negative feelings through a pandemic such as denial, uncertainty, and anxiety. Also, our results showed that people try to cope with these feelings through some of the following ways: changes in priorities, hope, taking control/being in charge, and self-awareness.

Consumers' feelings at the time of a crisis

Negative events are likely to be met with denial from individuals since they try to avoid thinking about unpleasant consequences (Norgaard, 2006). The results from the interviews in this study showed that most people were involved in implicatory denial by assuming that the COVID-19 pandemic will not have any effect on their lives.

It is clear from the responses that one of the major struggles brought to light by this pandemic is the feeling of uncertainty. Uncertainty is shown to be a powerful cause of stress and anxiety (Badia, McBane, and Suter 1966).

Consumers' coping mechanisms

Change in priorities. Self-affirmation theory posits that individuals tend to take actions that would help them regulate their emotions. Our results showed that consumers might shift their priorities so they can deal with uncertainties and stress.

Hoarding behavior has been linked to mechanisms such as anxiety, depression, and stressful life events (Halperin and Glick, 2003; Frost et al., 2009). For example, one of the interviewees mentioned she felt anxious when she got text messages from her boyfriend and friends that she needs to stock up on products. But after spending a lot of time and money on going to different stores and purchasing an overwhelming number of products, she felt proud of her achievement and felt more prepared for the unknown.

Hope. According to Snyder et al. (1991), hope is defined as "an overall perception that goals can be met" (Snyder et al. 1991, p. 570). Hope is powered by a feeling of agency and control over outcomes and defining pathways to achieve goals (Snyder et al. 1991). This hope is shown in the interviews in terms of believing that there would be a vaccine, that leadership will be more transparent, that communities will get closer, and through becoming more spiritual. Some participants demonstrated hope by trying to *stay positive about the future.*

Taking control/Being in charge. According to Cannon, Goldsmith, and Roux (2019), when consumers feel threatened by losing their personal control, they choose control-restoration techniques to achieve that sense of agency in their life again. At the time of a pandemic, consumers state they are uncertain about several issues. These psychological threats lead consumers to try to take control in other domains to offset the negative effects (Cannon et al., 2019).

Our observations and interviews show control-restoration happens in this period through different activities such as *quarantining themselves* to feel in control of their own health.

Since many consumers do not feel safe shopping in person, they have been compensated by *shopping online* and taking control of their purchase decisions. These effects are also widely reported in the industry.

Self-awareness. In order to manage life during uncertain times, sometimes people assess their own strengths and weaknesses to figure out whether they are fit for a difficult future. For example, our interviewees try to identify whether they are introverts vs. extroverts and how they can manage their *social activities.*

General Discussion

The COVID19 pandemic changed the ways people perceive themselves and their environment in drastic ways. By employing self-affirmation theory, we show how consumers manage their daily lives through a pandemic crisis by taking on different initiatives such as changing priorities by saving instead of spending money, staying hopeful through finding silver lining, maintaining a sense of agency/being in control, and self-awareness. As previous research showed the fluidity of behavior in order to keep balance (Ma-Kellams and Zhang, 2017), our results showed that individuals can focus on behaviors that would put them in a position to manage the pandemic outcomes that would strengthen their sense of self-adequacy and is consistent with self-affirmation theory.

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The Rivalry Effect: The Influence of Emotional Intensity and Confrontational Interactions on Purchase Intentions

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EXTENDED ABSTRACT

Rivalries are common among consumer brands and companies. Classic brand rivalries include Coke vs. Pepsi, General Motors vs. Ford, Apple vs. Microsoft, Canon vs. Nikon, and Visa vs. MasterCard. In recent years, new rivalries have emerged, such as Apple vs. Samsung, or Dunkin vs. Starbucks. Notably, rivalries are prevalent across industries and countries. Yet, despite their prevalence, surprisingly, little research has examined how brand rivalries are formed, how they differ from comparative strategies and their subsequent impact on consumer perceptions and choices.

This article explores the dimensions of rivalries and their influence on consumer choices. We make five main contributions. First, we introduce rivalries and its consequences in marketing research. Second, we provide a novel definition of a rivalry and conceptualize it using a model with two dimensions: emotional intensity and confrontational interactions. Third, we develop unique measures for testing rivalries. Fourth, we reveal critical downstream effects of rivalries on consumer decisions. Finally, we uncover the process explanation for the rivalry effects. We show that the rivalry effect on purchase intentions is greater for consumers who have higher needs for external stimulation (NES) and fully attenuated for consumers who have lower NES. These findings suggest that brand rivalries are persuasive because they appeal to consumers' optimum stimulation needs (Raju 1980).

Rivalries

Rivalries have been explored in a variety of fields. However, while past research has attempted to conceptualize and define rivalries, perhaps due to the diversity of research fields, different researchers use a diversity of factors to accomplish their goal. Similarly, there has been little agreement on the dimensions or essential precursors of a rivalry. Due to the lack of a clear understanding of rivalries and their definition, as well as the absence of consistency across researchers of its theorization, in this research, we take a unified approach to provide a parsimonious and operational definition of the construct by exploring its dimensions. Toward this end, a pilot study using an open-ended elicitation procedure was conducted to define a rivalry from a consumer standpoint and develop a brand rivalry scale. We first reviewed rivalries in films and sports and identified the characteristics of rivalries. Then, 119 were asked to define what a rivalry is in their own terms. From their responses, two independent coders blinded to this study chose the responses that were most prevalent among participants. We clustered these items into two dimensions:

Confrontational interactions(CI). That is every event in which one entity engages with an adversary in aims to gain an advantage. CI can have the form of comparative advertising, social media interactions, or point of purchase placement, among others. Thompson (1995) suggests that rivalry confrontations are more predisposed to conflict escalations, which could, in turn, reinforce the rivalry. Furthermore, research demonstrates that narrowly decided conflicts increase rumination, counterfactual thinking, and emotional reactions (Medvec, Madey, and Gilovich 1995; Medvec and Savitsky 1997).

Emotional Intensity (EI). Competition, confrontations, and social comparison have been found to elicit several negative emotions such as anger, resentment, envy and *Schadenfreude* (Feather and Nairn 2005; Feather and Sherman 2002), as well of feelings of threat to social identity (Wann and Grieve 2005), that often result from perceptions of dominance and unfairness within a rivalry (Ambrose and Schnitzlein 2017; Tyler and Cobbs 2015). Other research finds that there are also positive emotions related to competitive relationships, such as pleasure (Converse and Reinhard 2016), and achievement (Abrams and Hogg 1988, 2006). Also, research in sport and political sciences finds that joy (Goldstein 2012; Havard et al. 2013), admiration (Oren 2003), and excitement (Ambrose and Schnitzlein 2017; Tyler and Cobbs 2015) are universal emotions among confrontational relationships.

In this research rivalries are defined as a competitive relationship between two actors built on emotionally intense confrontational interactions. We examine CI, EI and their interaction as possible dimensions of a rivalry. These two factors defining a rivalry can be configured to yield four cells in a 2 x 2 matrix, contained in Figure 1.

Downstream Effects

Rivalries may have an effect on consumers' interest in the rival brands. Luellen and Wann (2010) suggest that sport managers increase rivalry perceptions as a way to increase fan interest and media exposure. Also, according to Madeiro (2007), sport rivalries increase media attention and fan interest, which ultimately leads to more fan expenditure and even changes in stock prices. Moreover, research shows that conflicts and confrontations foster seeking information behavior (Lowry and Johnson 1981), due to increased curiosity, interest and controversy (Berlyne 1960; Chen and Berger 2013).

Similarly, activities that are emotionally loaded are also found to sparkle people's interest (Izard 1977). For example, Allport (1961) suggests that interest and creativity are accompanied by tension and excitement. Furthermore, Koo and Ju (2010) find that emotions such as pleasure and arousal, are correlated with curiosity and interest, which ultimately has an effect on intentions. Also, Oosterwijk (2017) demonstrates that emotional events, especially those high in arousal and negative in valence, increase attention, curiosity and interest, while other research found that disturbing events intensify unpleasant emotions, but at the same time, make people more interested (Turner Jr and Silvia 2006).

Thus, we predict that brand rivalries will increase consumers' interest in the rival brands. Likewise, since interest is the most frequently experienced positive emotion as well as the most prevalent motivational condition (Izard 1977), it is likely that as consumers become more interested in rival brands, their purchase intentions for both brands in the relationship will also surge.

Optimum Stimulation Level

We propose that rivalry effects are driven by consumers' needs to regulate their optimal stimulation level (OSL) (Hebb 1955; Leuba 1955). Raju (1980) suggests that people prefer a certain level of stimulation, which they may find in their environment. When the environmental stimulation is below optimal, individuals will attempt to increase stimulation, and when it is above optimal, they will strive to reduce it (Hebb 1955; Leuba 1955). Therefore, when consumers feel less internally stimulated, they might engage in exploratory behavior with hopes of finding something optimally stimulating.

Overview Of Studies

The rest of this article is organized as follows. Three studies examine the effect of brand rivalries on brand interest and purchase in-

tentions. Study 1 demonstrates the power of the two dimensions in constructing a rivalry and provides support for the mediating role of brand interest in fostering purchase intentions. Study 2 decomposes brand rivalries into its two components - confrontational interactions (vs. non-confrontational) and emotional intensity (vs. lack of emotions) and demonstrates their individual and joint effects on consumer choices. Finally, study 3 investigates the moderating effect of OSL in the effects of brand rivalries on brand interest and purchase intentions.

Study 1

Participants, Design, and Procedure. 115 participants were randomly assigned to one of two conditions (rivalry, indifferent). After answering the brand rivalry scale (6 items, α .96), participants answered questions about their perceived rivalry (3 items, α .98). Then, participants were asked about their interest (3 items, α .89) and purchase intentions (4 items α .93). Finally, participants filled some demographic questions.

Results. A t-test confirmed that the manipulations were successful. A linear regression was performed with confrontational interactions and emotional intensity as independent variables and the perceived rivalry items as the dependent variable. Both factors were significant predictors of rivalries (p < .001) and provided a strong explanation power for rivalries (R^2 = .85, F(2, 114) = 322.06, p < .001). A t-test also confirmed that the rivalry manipulation, which included explicit high emotional intensity and confrontational interactions, fostered greater perceptions of a rivalry than the indifferent manipulation, which contained low emotional intensity and confrontational interactions (M_{rival} = 5.88, SD = .93; $M_{Indifferent}$ = 2.55, SD = 1.94; t = 11.82; p < .001). A one-way ANOVA was conducted with brand interest as the dependent variable. As predicted, the results indicate that the manipulation is significant (M_{rival} = 5.05, SD = 1.24; $M_{Indifferent}$ = 4.53, SD = 1.29; F(1, 113) = 4.85; p < .05).

Study 2

Participants, Design, and Procedure. 237 participants were randomly assigned to one of four conditions about a relationship between two brands (rivalry, plain competition, non-confrontational relationship, and indifference). The manipulations were similar to those in study 1 but included two more quadrants that result from the two rivalry dimensions.

After answering the brand rivalry scale (6 items – 3 for confrontational interaction, α .95; and 3 for emotional intensity, α .94), participants also answered questions about their perceived rivalry (3 items α .97). Then, participants were asked about their interest (3 items α .86) and purchase intentions (4 items α .95). Finally, participants filled demographic questions.

Results. Manipulation checks on confrontational interactions and emotional intensity were significant in the predicted direction. Ratings of perceived rivalry were analyzed using a two-way between-subjects ANOVA with confrontational interactions and emotional intensity as the independent factors. The overall model was significant (R^2 = .59). The analysis revealed a significant main effect for both confrontational interactions (F(1, 233) = 249.98, p < .001), and emotional intensity (F(1, 233) = 68.06, p < .001), as well as a significant interaction of both dimensions (F(1, 233) = 6.48, p = .01). These results provide additional support about how rivalries are formed by both dimensions and their interaction. Also one way ANOVA was conducted with brand interest as the dependent variable, the rivalry condition as the dependent factor. As predicted, the results indicate that the manipulation was significant (F(3, 233) = 9.84, p < .001). Then, a post-hoc analysis with Tukey revealed that brand interest for rivalries (M = 5.39, SD = .80) is significantly higher than the non-confrontational relationship (M =

4.79, SD = 1.25; p = .03), plain competition (M = 4.67, SD = 1.69; p < .001), and indifferent (M = 4.27, SD = 1.27; p < .001) conditions.

Study 3

Participants, Design, and Procedure. 190 students were recruited to participate in a 4 (relation between brands: indifferent, non-confrontational relationship, plain competition, rivalry) x 2 (need for external stimulation: high vs. low) online between-subjects experiment. Participants were first randomly assigned either to the high or the low need for stimulation (NES) conditions. To create the manipulation, we relied on a technique that uses different measurement scales. Then, we measured perceived need for external stimulation by asking participants questions adapted from Raju (1980), (7 items, α .86). After answering the brand rivalry scale (6 items – 3 for confrontational interaction, α .68; and 3 for emotional intensity, α .93), again participants answered questions about their perceived rivalry (3 items, α .98), brand interest (9 items; α .97), and purchase intentions (8 items; α .98). Finally, participants filled demographic questions.

Results. Manipulation checks for confrontational interactions and emotional intensity were found significant in the predicted direction. Also, a t-test confirmed that the need for external stimulation manipulation was significant and in the direction we expected. Furthermore, ratings of brand interest were first analyzed using a two-way between-subjects ANOVA with the relationship between brands and NES as the two independent factors. The model is significant (F(7,176) = 4.46; p < .001). The analysis reveals a significant main effect for the relationship between brands (F(3,176) = 5.98, p < .001), no significant effect for the need for external stimulation condition (F(1,176) = .00, p = .96), and a significant interaction between the two independent factors (F(3,178) = 3.54, p < .02).

Planned contrast reveals that when participants were in the High NES condition, their brand interest was significantly higher when participants were exposed to the rivalry condition (M = 5.88, SD = .28) relative to participants who were exposed to the indifferent condition (M = 3.69, SD = .30; 95% CI [1.38, 3.01], p < .001), the plain competition condition (M = 4.47, SD = .31; 95% CI [.59, 2.24], p < .01), and the non-confrontational relationship condition (M = 4.91, SD = .31; 95% CI [.154, 1.80], p < .01). However, participants in the low NES condition, reported no significant differences in brand interest for the rivalry condition (M = 5.02, SD = .336) in comparison to participants who were exposed to the indifferent (M = 4.70, SD = .30; 95% CI [-.57, 1.20], p = .48), plain competition (M = 4.65, SD = .28; 95% CI [-.50, 1.23], p = .40), and non-confrontational relationship conditions (M = 4.53, SD = .27; 95% CI [-.36, 1.35], p = .26).

General Discussion

Even though brand rivalries are prevalent across product categories, this phenomenon has yet to receive significant attention in consumer behavior literature. In this research, we explored how brand rivalries can affect consumer choices. More specifically, we show that brand rivalries could have a positive impact on consumers' interest and purchase intentions. Consumers' need for external stimulation explains this positive effect.

The results of study 1 provide initial evidence about the effect of emotional intensity and confrontational interactions on the development of rivalries. Furthermore, this study shows that rivalries, established on these two dimensions, have significant downstream effects on consumer choices, fostering brand interest, which ultimately leads to higher purchase intentions. Study 2 deconstructed the two dimensions of a rivalry to examine the individual effect of each dimension in the development of rivalries and replicate the downstream effects found in study 1. In doing so, this study finds that, even though each

dimension on its own is essential, their combination yields into a brand rivalry. Finally, this research also reveals the underlying mechanism of the rivalry effect as a way to regulate consumers' optimum stimulation level. That is, when people have high needs for external stimulation, brand rivalries yield higher interest and purchase intentions. However, when consumers have low needs for external stimulation, the rivalry effects are fully attenuated. This study also replicates the findings of the two previous studies.

Theoretical Contributions

This research makes several contributions. First, it provides the first empirical analysis of the dimensions of a rivalry and is one of the first studies to look at brand rivalries and their effects in marketing. While rivalries have been examined in the past, surprisingly, their psychology and its effects on consumer research are limited.

Also, we demonstrate that brand rivalries have two underlying dimensions - confrontational interactions and emotional intensity - that together generate perceptions of a rivalry. Rivalries are also defined based on these two dimensions as competitive relationships between two actors built on emotionally intense confrontational interactions. This new definition of rivalries, as well as its measures, can help consumer researchers do further investigations of this phenomenon.

This work also unveils the rivalry effects on consumers' brand interest and purchase intentions. Finally, this research explains the underlying mechanisms driving the rivalry effect.

Future Research

Several questions deserve future exploration. First, it would be helpful to understand how rivalries affect consumers in different cultures. It is possible that a past of confrontation and violence in culture may lead to increased interest in rivalries, while cultures without a violent past may have less interest in such relationships.

Research might also examine how brand interest, fostered by rivalries, changes in the future. One possibility is that a rivalry between two brands becomes too familiar and no longer increases brand interest. However, the opposite could also occur. Brand rivalries could foster new confrontations and more emotional intensity, driving consumers to seek more information about the involved brands.

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The Effect of COVID-19 Pandemic on Consumers' Online Shopping Behavior

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EXTENDED ABSTRACT

The rise in online shopping during the pandemic era raises an important question: Other than increasing the tendency to shop online, how else did the Covid-19 Pandemic influence consumers' online shopping behavior? The current research is an attempt to answer this question. In this paper, we argue that the Regulatory Focus Theory (Higgins 1997), the Heuristic-Systematic Model (hereafter HSM; Chaiken et al. 1980), and the insights from the pricing literature could shed light on consumers' online shopping behavior in the pandemic era.

Extant evidence in the literature suggests that priming- or a natural tendency for prevention-orientation will increase the effect of online review volume (rather than valence) on consumers' online shopping behavior (Kordrostami *et al.,* 2020). A global pandemic is likely to prime a prevention-orientation mindset in most consumers. Therefore, we propose that the effect of online review volume on sales may have increased during the pandemic. Similarly, we contend that the pandemic may have rendered online shopping a high-involvement activity. Subsequently, consistent with the HSM theory, we argue that consumers may be more prone to pay attention to a wider range of available information rather than relying on simple heuristics when they engage in online shopping behavior during a pandemic.

Finally, although millions of Americans lost their jobs during the current pandemic, due to the CARES Act and other government-sponsored relief programs, the average income and net wealth of American families significantly increased during the same period (Irwin and Cai, 2021). The evidence in the pricing literature suggests that an increase in the average income may result in a lower level of price sensitivity and a higher willingness to pay premium prices (Kübler et al. 2018). Therefore, we argue that the Covid-19 pandemic may have resulted in a higher willingness to pay a price premium for products.

Method

We followed a multi-step approach to create a representative sample of all of the "Prime" eligible products that were sold on Amazon in men's and women's jeans product categories (N_{women} = 2,000; N_{men} = 2,000). The data set that was created in this process included 4,000 products, 224,000 products/days, and 1,257,088 products/ days/sizes observations from before (September 7 - October 4, 2019) and during the COVID-19 pandemic (September 7 - October 4, 2020).

Model specification

The dependent variable of this study is the sales rank of the products in the "clothing, shoes, and jewelry" category on Amazon. To test the research hypotheses, we devised a hierarchical linear model depicted below:

$$r_{ibd} = \beta_{0ibd} + \beta 1_{ibd}\, y_{ibd} + \beta 2_{ibd}\, X_{ibd} + \beta 2_{ibd}\, X_{ibd}\, y_{ibd} + i_{ibd} + b_{bd} + t_d + e_{ibd}$$

In the above model, r_{ibd} denotes the sales rank of product i, brand b, in day d. Following the guidelines in the literature (Chevalier and Mayzlin, 2006), we transformed the sales rank into the natural logarithm of sales rank and standardized the dependent and all the independent variables in our model. To facilitate the interpretation of the results we multiplied the standardized log-rank by minus 1. y_{ibd} is a dummy variable coded with 2019 as 0 and 2020 as 1. X_{ibd} is the vector of all the independent variables in our model. Finally, we controlled for all the endogenous variation caused by individual product characteristics (i.e., i_{ibd} ranging from 1 to 4,000), the brand name (i.e., b_{bd} denoting brand b in day d; n = 140), and the day of the data collection (i.e., t_d ranging from 1 to 56).

Results

To test the model, we utilized a hierarchical linear modeling analysis. The interaction terms between the year and other variables in the model delineate the changes in consumers' online shopping behavior in 2020 compared to 2019. The interaction between year and online review volume was positive and statistically significant (β = 0.032, p <0.01). In other words, the main effect of volume on sales rank was significantly higher in 2020 than in 2019.

Findings also revealed a significant and positive interaction between year and the number of answered questions (β = 0.031, p <0.001), number of available sizes (β = 0.029, p <0.001), number of available colors (β = 0.028, p <0.001), and number of words in product description (β = 0.269, p <0.001). These findings indicate that a greater amount of available product information resulted in higher revenues during the pandemic than before the pandemic.

Finally, the interaction between the year dummy variable and the average price was positive (β = 0.165, p <0.001). This finding indicates that although the price had a negative effect on sales volume in 2020, the effect size significantly diminished (β_{2019} = -0.400 vs. β_{2020} = -0.235). This counter-intuitive finding reveals that consumers were indeed less price-sensitive during the pandemic than they were before the pandemic.

In summary, the results of this study show that compared to 2019, during the COVID-19 pandemic in 2020, consumers who shopped online for jeans, paid more attention to the available online review information, were more influenced by online review volume, and were less price-sensitive.

Conclusions and Managerial Implications

Our findings offer several imperative practical implications: First, companies should provide extensive product information on their website to satisfy their customers' need for information during a pandemic. Second, companies should encourage their customers (by offering discounts or other promotional offers) to post their honest reviews online. A higher number of reviews could potentially lower the average rating of the product as it reflects a greater variation of consumer experiences. Nevertheless, considering the greater influence of online review volume than valence on consumers' purchase decisions, such strategies are likely to increase sales and revenues during a pandemic. Finally, instead of "diluting" the products to lower their prices during a pandemic, companies should strive to increase product quality and build trust through various promotional campaigns, which may result in higher prices.

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Does Customer Loyalty = Faithful Partner? Inferences from Consumers' Relationship with Brands Affect Romantic Attraction

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EXTENDED ABSTRACT

Individuals' consumption choices can inform beliefs about their traits and characteristics that are relevant in interpersonal settings, including romantic relationships. For instance, conspicuous luxury purchases can increase romantic attraction, at least when they are being evaluated in the context of a short-term romantic relationship (Sundie et al., 2011). Similarly, men who purchase green products are viewed as more altruistic and, consequently, more desirable as a long-term romantic partner (Borau, Elgaaied-Gambier, & Barbarossa, 2020). Although these findings suggest that particular purchases can influence observers' perceptions about a consumer's suitability as a romantic partner, no research has examined whether a consumer's relationships with a non-personal entity, such as a brand or organization, might also have diagnostic value for observers seeking to understand what this person may be like in a romantic relationship. Therefore, the current work aims to investigate whether aspects of consumer-brand relationships are capable of informing observers' beliefs about consumers' relational qualities more generally.

Existing research has shown that consumers attribute personalities to brands (Aaker, 1997), and form relationships with brands and organizations that have characteristics similar to the relationships they have with other people (e.g., Aaker, Vohs, & Mogilner, 2010; Kervyn, Fiske, & Malone, 2012). Fournier (1998) was one of the first to suggest that brands can be "*viable relationship partners*" and, consequently, that consumer-brand relationships may be guided by the same social norms that guide interpersonal relationships. Considering that individuals are attentive to available cues about the way a potential mate reacts and interacts in their social relationships to form accurate first impressions (e.g., Berger & Calabrese, 1974; Berger, 1979), we propose that the way a potential mate interacts with a brand or organization may be also viewed as indicative of how the same person would act as a partner in a romantic relationship, which, in turn, influence their romantic appeal. More specifically, building on the "*brands as people*" paradigm, we hypothesize that loyal (vs. non-loyal) consumers are perceived as more attractive, mediated by inferences about their likelihood to remain faithful to a relationship partner.

Nevertheless, we still expect observers to be sensitive to factors that influence the diagnosticity of the behavior (loyalty) to draw such inferences. This is because people discount attributions in the presence of information that suggests an alternative explanation for the focal behavior (e.g., Gilbert & Malone, 1995). One feature of consumer loyalty that should influence the diagnositicity of this behavior for dispositional inferences is the distinction between behavioral loyalty and attitudinal loyalty (Dick & Basu, 1994). Consumers may repeatedly purchase from the same brand for reasons unrelated to a genuine commitment to the brand (Jacoby & Kyner, 1973) – for example, a lack of alternatives or for cost or convenience-related reasons. This form of loyalty is also referred to as "*spurious loyalty*" (Day, 1969) because repeat purchase behavior in this case is not motivated by genuine feelings of commitment to the organization and a desire to maintain the relationship, as oppose to attitudinal loyalty. As such, we predict that the observation of behavioral loyalty in the absence of a genuine commitment to the brand should be less likely to enhance a consumer's romantic appeal through inferences of relationship fidelity.

Overview of Studies

We conducted three studies involving a hypothetical scenario about a potential romantic partner. In all scenarios, we manipulated brand loyalty by describing the target as loyal (vs. not) to a particular company. **Study 1** demonstrated the basic effect: Participants reported stronger romantic desire toward the target depicted as a loyal (vs. non-loyal) consumer (4.94 vs. 4.67; $p = .041$). Participants also inferred that the target depicted as a loyal (vs. non-loyal) consumer was more likely to remain faithful in a romantic relationship (5.22 vs. 4.38, $p = .000$), which mediated the relationship between consumer loyalty and romantic attraction [.15, .50].

Study 2 tested if attitudinal loyalty (more so than behavioral loyalty) increases romantic attraction through inferences of fidelity to a relationship partner. Consistent with our theorizing, participants reported stronger romantic desire toward the target if depicted as a loyal consumer who was genuinely connected to the brand (attitudinal loyalty) than either a loyal consumer due to convenience (behavioral loyalty) or not loyal to any brand at all (control) (5.16 vs. 4.59 vs. 4.60; ps = .000). The same pattern was observed for inferences of relational fidelity (5.43 vs. 4.33 vs. 4.32; ps = .000). Mediation analysis showed that attitudinal loyalty increased romantic attraction through inferences of relational fidelity relative to both behavioral loyalty [.34, .67] or the no loyalty (control) [.33,.68]. Behavioral loyalty (vs. control) did not improve romantic attraction through inferences of relational fidelity [-.08, .09].

Study 3 provided process evidence via moderation. As trustworthiness is more important to partner evaluation when assessing suitability for long-term relationships (Fletcher et.al, 2004), we predicted that the effect of consumer loyalty would be greater within observers currently looking for a long-term (vs. short-term) relationship. We replicated the effect of consumer loyalty in the previous studies. More importantly, however, participants' level of interest in a serious, long-term relationship significantly moderated the effect ($p = .023$). There was also a significant moderated-mediation [.01, .08]: Although loyal (vs. non-loyal) consumers were always considered more desirable romantic partners via inferences of relational fidelity, the indirect effect was stronger for participants who were currently interested in a serious, long-term relationship (1-SD-above-mean, indirect effect = .40) than participants who were more interested in a casual, short-term relationship (1-SD-below-mean, indirect effect = .26).

Overall, the current research shows that loyalty to a brand partner may provide interpersonal benefits. Across three studies, we found a stronger romantic preference for loyal (vs. non-loyal) consumers, mediated by participants' inferences of fidelity to a relationship partner. We also found that the romantic advantage loyal consumers possess was mitigated when their loyalty was motivated by reasons other than feelings of genuine connection to the brand (e.g., convenience) and when they were considered in the context of a casual, short-term relationship.

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Smartphone Bias: When Consumers Unnecessarily Avoid Smartphones

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EXTENDED ABSTRACT

Smartphones are a ubiquitous part of consumers' lives and increasingly offer the capabilities of a personal computer (PC). Despite this, consumers avoid using them for some decisions. For example, while the advantages of smartphones (e.g., greater portability) facilitate higher traffic to retailer websites (56.2%) than from PCs (34.5%), the conversion to purchase rate for smartphones (2.25%) is less than half that of PCs (4.81%; Charlton 2019). However, to date, there is no clear understanding of why or whether this avoidance is merited.

This research identifies a "smartphone bias"; consumers expect their performance on a smartphone to be worse than on a PC, even in situations where there is no impact of device. We show that the smartphone bias has attitudinal (e.g., decision-making confidence) and behavioral (e.g., choice deferral) consequences.

We proffer that, like many biases (e.g., negativity bias), the smartphone bias is "both multidetermined and overdetermined" (Rozin and Royzman 2001). However, we identify one key driver of the effect, consumers feel that being on a smartphone makes them less thoughtful than being on a PC. Moreover, a pilot study identifies this lower perceived thoughtfulness results from three types of sources: (1) usage situations (e.g., more often use smartphones when in a rush, in public, less for work), (2) physical differences (e.g., screen size, interaction mode), and (3) psychological feelings (e.g., feel more easily distracted and less in control on a smartphone). While these differences exist and, moreover, some of them have been shown to negatively influence behavior (e.g., smaller screens; Ghose, Goldfarb, and Han 2013), we predict and show that consumers overweight the impact of these forces on their decision-making. Then, relying on the lay theory that careful thought leads to more accurate judgments (Barden and Petty 2008; Tordesillas and Chaiken 1999), the result is an incorrectly negative perception of performance on a smartphone. In sum, like many heuristics that may be valid in some situations, consumers overapply this "device-based heuristic," leading to a bias. Formally, we hypothesize:

Hypothesis 1: *A smartphone bias exists such as, all else equal, the device used will influence consumer task evaluation such that consumers on smartphones will predict lower task performance and be less confident than consumers on PCs.*

Hypothesis 2: *Smartphone bias is mediated by lower perceived induced thoughtfulness on smartphones (vs. PC).*

Hypothesis 3: *When actual performance does not vary across devices, smartphone bias will lead consumers to underpredict their performance on smartphones while consumers are more accurate in predicting their performance on PCs.*

We examine this in five studies involving random assignment to device (except 1A) and all using 7-point scales unless otherwise specified. In Study 1A, participants saw information about several sets of earbuds and predicted their performance on a product evaluation task. Even though participants on a smartphone (vs. PC) had higher actual performance ($M_{Smartphone}$ = 6.94 vs. M_{PC} = 5.94 out of

8, $t(160.584)$ = 3.397, p =.001), they predicted their performance to be lower than those on a PC ($M_{Smartphone}$ = 5.11 vs. M_{PC} = 6.09; $t(190)$ = 3.485, p =.001, H1), resulting in an underprediction ($F(1,190)$ = 26.01, p < .001; Wilk's Λ =.880, partial η^2 =.12, H3) .

Study 1B replicates Study 1A and also shows the effect on real choice deferral. Participants on smartphones were more likely to defer choice than those on a PC (27.8% vs. 17.4%; $X^2(1, 287)$ = 4.451, p = .035, H1), despite performing better on the product evaluation task ($M_{Smartphone}$ = 6.85 vs. M_{PC} = 6.11, $t(282.459)$ = 2.905, p =.004).

Study 2 considers product choice rather than evaluation. Participants saw information on dental insurance plans. Those on a smartphone were less confident in choosing and buying an option versus those on a PC ($M_{Smartphone}$ = 4.51 vs. M_{PC} = 5.13; $t(294.096)$ = 3.355, p =.001) and were more likely to defer choice (25.7% vs. 11.3%; $X^2(1, 296)$ = 10.494, p =.001, H1). Also, while there was no difference on actual performance across devices ($M_{Smartphone}$ = 5.94 vs. M_{PC} = 5.56 out of 8; $t(293.998)$ = 1.603, p =.110), smartphone users predicted their performance to be lower ($M_{Smartphone}$ = 4.88 vs. M_{PC} = 5.48; $t(294)$ = 2.600, p =.01, H1), resulting in underprediction ($F(1, 294)$ = 9.210, p =.003; Wilk's Λ =.970, partial η^2 =.030, H3).

Study 3A examines the underlying process (H2). Participants completed two separate studies (order counterbalanced): (1) a micro-investing platforms study and (2) an electronic devices study. For (1), after seeing information on micro-investing platforms, participants rated their confidence in opening a new investment account. For (2), we measured general perceptions of the device, including perceived induced thoughtfulness and alternative accounts (e.g., privacy concerns). As predicted, smartphone participants were less confident than PC participants ($M_{Smartphone}$ = 3.94 vs. M_{PC} = 4.42; $t(295)$ = 2.348, p =.02), which is mediated by perceived thoughtfulness (b = -.69; 95% CI from -.9930 to -.4268), but not mediated by any alternative accounts.

Lastly, Study 3B replicates Study 3A except that half of the participants were first asked to complete an evaluation and choice task of the three micro-investing platforms (thus: 2 device [smartphone vs. PC] X 2 role [predictors vs. performers]) between-subject design. This study reveals that consumers hold the bias, regardless of whether they have performed the task or not and even after performing it. Regardless of performance, those on a smartphone were less confident ($M_{Smartphone}$ = 3.57, M_{PC} = 4.06; $F(1, 440)$ = 7.588, p =.006), and this was mediated by perceived thoughtfulness (b = -.19; 95% CI from -.3231 to -.0916).

By identifying a "smartphone bias," the corresponding device-based heuristic, and the causes of this bias, this research offers an explanation for the difference in decision-making behavior identified across various research disciplines (e.g., marketing, finance). Further, this research contributes to the limited research on mobile consumer behavior consider the difference between smartphones and PCs – the two dominant technology devices – from the point of view of consumers' perceptions of the device. Lastly, this research draws practitioners to the important role of device perceptions in their mobile marketing strategies.

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Why Recipients Don't Appreciate Expensive Gifts: The Role of Suspicion

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EXTENDED ABSTRACT

Gift-givers frequently appear to misunderstand what recipients will appreciate about gifts. One of the more puzzling misunderstandings relates to gift expense. Givers often rely on the signaling value of gift price to convey the importance of their relationship with recipients (e.g., Cheal, 1987; Wang & Van Der Lans, 2018). Yet recipients appear to put little weight on the amount spent (Flynn & Adams, 2009). This is surprising—not just because of givers' misprediction—but because more expensive gifts are both an objectively higher investment and provide greater value to recipients. The current research investigates why recipients seem to put so little weight on this feature of gifts. We argue that recipients are not unresponsive to gift expense per se, but that expensive gifts can sometimes cause recipients to become suspicious of ulterior giver motives, counteracting otherwise positive effects of a more valuable gift.

Gift Expense and Suspicion

Gift-recipients can generate a range of explanations for givers' choice of gift, ranging from attributions of sincere motives (e.g., caring about the recipient) to self-serving motives (e.g., an economic or social reward). Although sincerity may be more likely given the inherent other-oriented nature of gift-giving (e.g., Belk & Coon, 1993), we propose that expensive gifts might also lead recipients to entertain the possibility that givers may possess some ulterior motives other than positive sentiments. Two lines of research support our theorizing. First, givers do sometimes pursue self-serving motives (e.g., Sherry, 1983), such as status, wealth, social recognition, and power (Wolfinbarger, 1990; Hyun, Park, & Park, 2016). Some scholars have even characterized gifts as a form of "*indebtedness engineering*" and a *"polite form of bribery"* (Wolfinbarger, 1990). To the extent that recipients are familiar with these motives – perhaps because they have experienced them themselves – we would expect recipients to sometimes consider these reasons for the gifts they receive.

Second, money—as the universal medium of exchange—is strongly and inextricably associated with the concept of "instrumentality", that is, with getting what one wants (Lea & Webley, 2006). As such, money may be capable of activating self-focused goals. Consistent with this, asking people for monetary donations (vs. donations of time) can reduce donations because it leads people to consider what benefits they will receive in return (Liu & Aaker, 2008). Similarly, monetary donations are perceived as less moral and self-expressive than donations of time (Reed, Aquino, & Levy, 2007). Merely reminding people of money seems to make them more self-focused and less communal (e.g., Vohs, Mead, & Goode, 2006, 2008; Wang, Chen, & Krumhuber, 2020). If money leads people to pursue and do things that benefit themselves, it should also increase the likelihood that people consider self-serving motives to explain others' behaviors. Consequently, we theorize that salient gift expense may activate thoughts about givers' self-focused motives (i.e., cause recipients to become suspicious of that givers have ulterior motives) at least partially counteracting the positive effects of a more valuable gift.

Overview of Studies

Four studies test this idea – three involving a hypothetical gift-exchange scenario and one examining reactions to real gifts. ***Study 1*** tested whether expensive gifts were capable of inducing suspicion in the context of a workplace relationship. Participants imagined receiving an expensive (vs. typically-priced) gift from a colleague who may have deliberately revealed the price. Consistent with our theorizing, expensive gifts made participants more suspicious of ulterior giver motives (4.68 vs. 3.75; $p =.000$).

Study 2 examined whether the effect was limited to the specific context of the previous study. It is possible that ulterior motives may be more salient in a workplace relationship than in other interpersonal relationships, such as a friendship, and when there were indications the giver may have deliberately revealed the price. Consequently, in addition to gift expense, we manipulated whether the gift was between colleagues or friends and whether it was plausible the price was deliberately revealed versus not. Participants were more suspicious of expensive gifts whether from a friend (3.60 vs. 2.90; $p =.000$) or a colleague (4.05 vs. 3.52; $p =.000$) and whether the giver appeared to have deliberately revealed how much they spent (3.82 vs. 3.39; $p =.000$) or not (3.83 vs. 3.03; $p =.000$). In short, Study 2 suggested that gift expense could activate suspicion even in settings where ulterior motives were unlikely to be prevalent.

Study 3 examined suspicion in the context of real gifts. We asked participants to recall a recent expensive (vs. typically priced) gift they had received. Again, participants were more suspicious of expensive gifts (2.15 vs. 1.63; $p =.016$). All three of our initial studies also replicated past findings that gift expense did not directly affect gift appreciation (Flynn & Adams, 2009). Notably, the indirect effect via suspicion was significant in all studies (CIs: *Study 1* [-.28,-.03], *Study 2* [-.12,-.05], *Study 3* [-.20,-.01]), supporting the idea that recipients' apparent indifference to price may, in fact, be a consequence of competing effects of gift expense: the positive investment versus the heightened suspicion.

Study 4 provided an experimental test of the mechanism by manipulating whether givers had given the gift anonymously, which should reduce the likelihood recipients would infer the giver had ulterior motives. A significant interaction ($p =.038$) indicated gift expense had a smaller effect on suspicion when the giver was anonymous. Follow-up analyses revealed that gift expense induced suspicion when the giver's identity was known (4.14 vs. 3.61; $p =.000$) but not when the gift was given anonymously (2.58 vs. 2.59; $p =.947$). Suspicion also mediated the relationship between gift expense and gift appreciation when the giver's identity was known [-.12,-.04] but not when it was anonymous [-.06,06]. Finally, these results held when we included a potential confound in the model: feelings of indebtedness.

Overall, four studies provided evidence that recipients' apparent indifference to gift-givers' monetary investment might be due, at least in part, to suspicion of expensive gifts, which reduces gift appreciation. We contribute to research on gift-giving by shedding light on past findings that have suggested a surprising indifference to an important feature of gifts.

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Counterfactual Culpability: Thinking About What You Could Have Done Increases Felt Culpability for Your Action

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EXTENDED ABSTRACT

This paper investigates the causal process underlying the relation between following orders (not having autonomy of choice) and post-outcome feelings of culpability. There is a general understanding in consumer behavior that consumers want and benefit from autonomy of choice (Wertenbroch, et al., 2020), yet there are situations where consumers opt to not choose, and instead prefer to delegate their choice to another person, to an algorithm, or even to chance. Prior research has found that consumers may opt to give up their choice when they anticipate regret for the outcome, want to avoid the negative consequences of responsibility (Steffel and Williams, 2017; Sutan and Vranceanu, 2016), or are conflicted about the tradeoff of potential losses from their choices (Lin and Reich, 2018). In medical decision-making, parents who personally made the choice to end life support for their infants felt worse than when doctors made the decision for them (Botti et al., 2009). Although these parents were conflicted about giving up their autonomy to make this critical choice, Botti et al. found that tragic outcomes reduced parents' desire for autonomy.

Given this preference to relinquish choice, one would expect an actor to feel more culpable for adverse outcomes if they had made the decision themselves rather than simply followed orders. Surprisingly, recent research finds just the opposite, that actors who did not make their own choices and simply implemented the choices of another felt more culpable for negative outcomes than those who were also the decision maker (Malter, Kim, and Metcalfe, 2021). Even though the outcomes were negative, individuals felt relatively better when they made the choice themselves.

The question remains as to why individuals feel more culpable for a negative outcome when they are in a passive role and just dutifully following orders. We follow the metacognition literature and conceptualize choice autonomy as having agency, having "the ability to take intentional action or make choices that influence outcomes, ... or otherwise make things happen in the world" (Bucknoff 2020). In our studies, an actor has high agency if they make the decision and low agency if they simply follow orders. We assume that because low agency actors are randomly assigned to an action option, there is a 50% chance they will be assigned to implement a policy that conflicts with their personal beliefs of which is the better policy. Therefore, we expect:

Hypothesis 1: *Acting against one's own beliefs will increase felt culpability.*

Having to act against one's beliefs will induce upward counterfactual thinking – thinking that a negative outcome could have been better (Rye et al., 2008; Roese, 1994). Counterfactual thinking has been related to moral decisions and blame (Byrne, 2016; Alicke et al., 2008), regret for one's actions and wishing they could be changed (Zeelenberg et al., 1998; FitzGibbon et al., 2021). Therefore, upward counterfactual thinking will mediate the relationship between agency and feelings of culpability for negative outcomes.

Hypothesis 2: *Upward counterfactual thinking will mediate the relationship between acting against one's beliefs and felt culpability.*

To test this theory, we conducted four experiments examining tradeoff decisions that faced American society in 2020 and early 2021: how to safely return to school for Fall 2020, how and when to reopen the economy, and how to allocate scarce vaccine supply. All policy decision scenarios were modeled on the scenarios in Malter et al. (2021) Experiment 5 where participants imagined themselves as a policy maker who must either decide for their community which of two policy options to implement (high agency) or is instructed by their superior which policy to implement (low agency). Note that both policies in the scenarios have a positive and negative aspect which are outlined for the participants, creating a tradeoff decision between competing horizontal values (support the economy vs. support public health). After participants implement the chosen option, they read about a negative outcome resulting from the policy they implemented (the same negative outcome regardless of which policy was implemented) and reported their felt culpability for their actions.

Results from Experiment 1 support H1 that being assigned to act against one's personal beliefs increases felt culpability. Importantly, participants in Experiment 1 were real decision makers who were making this choice for their own children. Experiment 2 replicates Experiment 1 with a larger sample and inferred beliefs (based on political party affiliation). Experiment 2 also tests H2 that counterfactual thinking mediates the relationship between acting against one's beliefs and felt culpability and finds support for this theory. Experiment 3 generalizes the findings from Experiment 2 (school reopening choice) to another context (reopening performance venues). Experiment 4 shows that these findings are not limited to policy decisions that were politically polarized at the time (vaccines) and confirms that the effect reverses for third-person judgements.

These four experiments show that just following orders can lead to more counterfactual thinking about the other option. This finding is important for managers structuring levels of decision making within their organizations. It is also important for society to reassess how we evaluate another person's responsibility and guilt in passive versus active decision-making roles. Although this research focused on the thought process of the low agency participants, future research should investigate why the high agency participants felt lower culpability for outcomes they more directly caused. The findings are also relevant for consumers choosing whether and when to relinquish their autonomy of choice based on expected outcomes. Although distancing oneself from a decision with negative expected outcomes may seem like an easy way out, these findings show that confronting the situation and making the decision oneself may lead to better emotional outcomes for the decision maker.

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How to Encourage Sustainable Consumption? A Construal Level Approach to "Concretize" Sustainability with Circularity

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EXTENDED ABSTRACT

Drawing on construal level theory (Trope & Liberman, 2003), this research shows that framing sustainability as circularity reduces the abstractness of sustainability, which in turn, prompts consumers to behave more sustainably. Four studies document the effects of circular framing on sustainable behavior, including the moderating role of consumers' chronic construal level.

Prompting sustainable behavior with circularity

Construal is a cognitive process that influences people's decisions based on two dimensions: construct construal and individual construal. Construct construal is linked to how distal or proximal something feels from "me, here and now" (Trope & Liberman, 2003) and is a determinant of behavior: abstract construct construal encourages behavior based on values, while concrete construct construal encourages decisions based on feasibility (Trope & Liberman, 2010). Individuals also have distinct chronic levels of construal, which describes how abstractly or concretely they process information (Vallacher & Wegener, 1989). Many people perceive sustainability as abstract because it feels distal: outcomes are uncertain, occur in the future and impact distant places and people. It is possible to influence someone's construal of sustainability and ultimately their sustainable behavior by matching construct and individual construal (Reczek et. al., 2018). This research proposes that circularity, the conceptual basis of the circular economy, is more concrete than the concept of sustainability and as a result, motivates consumers to behave more sustainably.

Research Model and Hypotheses

Based on extant research, we propose that the more concrete the construal of sustainability, the greater the engagement in sustainable behaviors (H1). In addition, individual chronic level of construal is negatively related to engagement in sustainable behaviors such that more concrete individuals engage in fewer sustainable behaviors (H2). We further advance that consumers exposed to a message or intervention with circular framing will have a more concrete construal of sustainability than consumers exposed to a message or intervention without circular framing (H3); that individual chronic level of construal will moderate the relationship between construal of sustainability and engagement in sustainable behaviors (H4) as well as the impact of the circular framing intervention/message on construal of sustainability (H5) such that those effects are stronger for more concrete individuals.

Methodology

Study 1, a cross sectional survey with a national sample, tested H1, H2 and H4. Studies 2 and 3 utilized experimental designs to assess the whole model. Study 4 employed a cross sectional survey to validate whether circular framed marketing messages commonly used in household products are more concrete than sustainably framed messages, and if the effect is stronger for more concrete individuals. All studies were conducted online in the United States.

Results

Study 1 confirmed the need to concretize sustainability. Regression analysis showed that more concrete individuals behaved less sustainably, as predicted by H2. As construal of sustainability became more concrete, engagement in sustainable behaviors also increased, per H1. This main effect was qualified by a significant interaction with individual chronic level of construal but, contrary to H4, the effect was stronger for more abstract individuals.

In study 2, we compared consumers' responses to two between-subjects message conditions: circular packaging claims ("100% Recyclable Packaging and 100% Renewable Ingredients") and sustainable packaging claims ("100% Eco Friendly Packaging and 100% Sustainable Ingredients"), which were validated in a pre-test. This experiment revealed that, although circular framing did not directly affect construal of sustainability, it significantly interacted with individuals' chronic level of construal. Abstract individuals perceived both sustainable and circular framing as equally concrete but, as predicted by H5, circular framing resulted in significantly more concrete message interpretation than sustainable message framing for concrete individuals. In line with H3, more concrete interpretation of the message also led to willingness to pay a higher price for the product. The effect of circular framing on purchase price was mediated through construal of sustainability.

Study 3 also employed a single factorial design with two between-subjects message conditions: an educational video about circularity versus a control video on an unrelated topic. Per H3, the circularity video generated more concrete construal of sustainability, which in turn, per H1, evoked a higher level of donation to charities that support sustainable activities and higher intentions to behave sustainably. One week later, this more concrete construal of sustainability was related to a higher level of reported sustainable behaviors, a lagging effect which was fully mediated sequentially through construal of sustainability and sustainable behavior intentions. Contrary to H4 and H5, these effects were the same regardless of individuals' chronic level of construal.

Study 4 employed an online cross-sectional survey to validate whether circular framed marketing messages used in household products are more concrete than sustainably framed marketing messages (H3), and whether chronic construal also moderates this relationship (H5). Per H3, message circularity was positively related to construal of sustainability and, per H5, we identified an interaction effect: the relationship between level of message circularity and construal of sustainability was stronger for more concrete people.

Conclusion

Across four studies, this research offers encouraging evidence that circularity can concretize consumers' understanding of sustainability and ultimately shift consumption patterns. For marketing messaging and packaging claims, this is valid for more concrete individuals. Reframing sustainability as circularity more broadly with an educational video can motivate more sustainable consumption at all individual chronic levels of construal. Such learnings provide important implications for companies and policymakers in developing strategies to step-change consumer adoption of sustainable behaviors. Our research also makes contributions to theory: we contribute to the body of knowledge that examines ways to prompt consumers to behave sustainably (White et al., 2019) as well as to the stream of research that studies how changing construal linked to sustainability and individual chronic level of construal can impact sustainable

consumption (Goldsmith et al., 2016, Macdonnell & White, 2015, Reczek et. al., 2018) We note that the research should be expanded beyond the U.S. context as well as other messaging formats and contexts. Future research should embrace a greater array of behavioral measures to assess the longer-term impact of circularity framing interventions on consumers' sustainable behaviors.

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Exploding Offers: Consumer Response to Time-Limited Promotional Deals

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EXTENDED ABSTRACT

Promotional offers (e.g., a 10% price discount) vary in the length of their redemption window. Despite the prevalence of such offers in the wild, little is known about how their *duration* affects consumer uptake. At the core of this work is the idea that the interplay between the greater perceived flexibility provided by a longer redemption window and the greater urgency induced by a shorter redemption window is a key driver of consumer response to a promotional offer. We introduce a theoretical framework that identifies circumstances under which longer versus shorter redemption windows are more effective in terms of consumers' uptake of promotional offers. We theorize that consumers' responses to the duration of a redemption window are governed by their action readiness when they encounter the offer (i.e., whether they are in a more deliberative or a more implemental mindset). The essence of our theorizing is as follows. When consumers are in a deliberative mindset, the flexibility of an offer is more important than the sense of urgency it induces, and longer redemption windows thus tend to be more effective than shorter ones. By contrast, when consumers are in an implemental mindset, the urgency induced by an offer is more important than the flexibility it provides, and consequently shorter redemption windows tend to be more effective than longer ones. This interactive effect of mindsets and redemption windows is particularly pronounced when promotional offers are associated with hedonic (vs. utilitarian) consumption. Evidence from five experiments provides support for this theorizing.

Experiment 1A (N=232) provided a first demonstration of the interplay between mindsets and redemption windows in driving promotion uptake. A 2 (deliberative vs. implemental mindset) x 2 (14-day vs. 1-day offer) between-subjects design was used. Deliberative or implemental mindsets were first manipulated in this experiment. To activate a deliberative mindset, participants were asked to list five potentially positive and five potentially negative consequences of switching banks. To activate an implemental mindset, participants were asked to plan the implementation of switching banks and listed five steps required to execute this plan. Next, we presented participants with short (1-day) or long (14-day) redemption window promotions. Then, participants indicated whether they wanted to take advantage of the offered promotion. As hypothesized, participants in a deliberative mindset were more likely to use the promotional offer when it had a longer redemption window (59.9%) than when it had a shorter one (39.6%), whereas those in an implemental mindset were more likely to use the offer when it had a shorter redemption window (61.0%) than when it had a longer one (33.3%, *p*<.001). This pattern of effects was conceptually replicated, in a different different promotion context, in Experiment 1B (N=223; Deliberative-Long=54.3% vs. Deliberative-Short=34.0%, Implemental-Long=41.6% vs. Implemental-Short=62.5%, *p*=.002).

In addition to offering another conceptual replication of the interplay between mindsets and redemption windows, Experiment 2 (N=600) provided direct evidence of the two psychological pathways along which the length of the redemption window affects promotion uptake – one via perceived flexibility and the other via the sense of urgency induced by the offer. The results of a moderated dual-pathway mediation analysis revealed that the positive indirect effect of a shorter redemption window on promotion usage via greater urgency was significantly stronger under an implemental than under a deliberative mindset (b=-.02, SE=.03, CI=[.01, .11]). By contrast, the positive indirect effect of a longer redemption window on promotion usage via greater perceived flexibility was significantly more pronounced under a deliberative than under an implemental mindset (b=.05, SE=.03, CI=[.02, .14]).

Experiment 3 (N=582) examined the moderating role of hedonic vs. utilitarian consumption contexts. The manipulation of deliberative versus implemental mindsets was the same as in the previous experiments. Next, in the hedonic condition, participants were presented with a promotional offer for any Disney Store product. By contrast, in the utilitarian condition, participants were presented with a promotional offer for any HP Ink & Cartridge Store product. As hypothesized, the interactive effect of mindsets and redemption windows on consumer response to promotional offers manifested in hedonic domains (Deliberative-Long=43.4% vs. Deliberative-Short=26.3%, Implemental-Long=27.8% vs. Implemental-Short=45.4%, *p*=.023), but it vanished in connection with utilitarian domains (Deliberative-Long=38.5% vs. Deliberative-Short=25.7%, Implemental-Long=48.7% vs. Implemental-Short=31.3%, *p*<.7).

Finally, Experiment 4 (N=480) demonstrated the interplay between mindsets and redemption windows in an economically consequential setting (involving actual purchases). Moreover, instead of employing a direct manipulation of consumers' mindsets, it used a more ecologically valid approach to activating an implemental (vs. deliberative) mindset in a shopping context by manipulating the extent to which consumers had contemplated their preferences among the available products prior to being presented with the promotional offer. The results showed that, as hypothesized, shoppers in a deliberative mindset were more likely to use the promotional offer when it had a longer redemption window (46.7%) than when it had a shorter one (25.2%), whereas those in an implemental mindset were more likely to use the offer when it had a shorter redemption window (49.6%) than when it had a longer one (33.9%, *p*<.001). In addition, this experiment sheds light on the intertemporal dynamics associated with consumer uptake of promotional offers that arise from the fact that a longer redemption window offers more opportunities for taking advantage of an offer, while at the same providing less of an incentive to do so quickly.

This research advances our understanding of the psychological dynamics that govern consumer response to promotional offers with redemption windows of varying length. It presents and tests a theoretical framework that identifies circumstances under which longer redemption windows tend to be more effective and ones under which shorter redemption windows tend to be more effective.

Do PWYW Labels Affect Internal Reference Prices and Prices Paid?

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EXTENDED ABSTRACT

"Pay What You Want" (PWYW) is a participative pricing mechanism (Chandran & Morwitz, 2005) that gives buyers complete control over the price. PWYW is distinctive from other participative pricing mechanisms because sellers have to accept any price, including zero (Kim, Natter, & Spann, 2009). Research has shown that PWYW can be profitable (Kim et al., 2009, 2010), even in the long run (Schons et al., 2014) and across multiple industries (Christopher & Machado, 2019; Kim, Natter, & Spann, 2014; Schröder, Lüer, & Sadrieh, 2015; Viglia, Maras, Schumann, & Navarro-Martinez, 2019). Consumers do not abuse PWYW offers but pay prices significantly larger than zero compared to what one might expect. In some cases, consumers even pay higher prices than a regular fixed price (Gneezy, Gneezy, Riener, & Nelson, 2012; Kim et al., 2009).

PWYW labels are a relatively new extension of PWYW research. Among the different labels used in literature are "Pay as much as you want", "Reduce the price as much as you want" (both Schröder et al., 2015), Rebate What You Want (Atlas, 2015), "Pay What You Think It Is Worth", and "Pay What You Can" (both Cui & Wiggins, 2017). Overall, studies find that different PWYW labels can significantly affect prices paid. However, only "Pay What You Think It is Worth" (PWYT) and "Pay What You Can" (PWYC) have been identified as economically relevant alternatives to the classic PWYW label (Cui & Wiggins, 2017; Saccardo, Li, Samek, & Gneezy, 2015).

Among the moderators investigated in PWYW research, the degree of anonymity in the payment situations received the most attention (Gerpott, 2017). Anonymity refers to whether others can observe the prices paid (low anonymity) or not (high anonymity). Findings on anonymity and PWYW are mixed, which calls for further research on that matter (Dorn & Suessmair, 2016; Gneezy et al., 2012; Jung, Nelson, Gneezy, & Gneezy, 2017; Kim et al., 2009; Kim, Kaufmann, & Stegemann, 2014; Saccardo et al., 2015). Previous research on PWYW and anonymity usually does not reveal the exact phrase(s) used to communicate the PWYW offer to the subjects. Hence, mixed findings could result from inconsistent labels used to communicate the offer within the same study (e.g., no significant effect) or different labels used across multiple studies (e.g., positive vs. no significant vs. negative effects).

In this paper, we address two research questions. First, does the relevance of anonymity for consumers' behavior depend on the PWYW label used? Second, does consumers' IRP depend on the PWYW label communicated? Since previous research indicates that PWYT might be an economically superior alternative to the classic PWYW label, we include PWYT and classic PWYW in our study.

A field experiment in a restaurant was conducted to address the research questions (n = 166, M_{age} = 37, SD_{Age} = 10.88, 41% female). We used a 2 x 2 between-subjects design. The first factor was the PWYW label and used two levels (PWYW, PWYT). The second factor was anonymity which also used two levels (high, low). The restaurant near Zurich in Switzerland, where the study took place, created a new brunch offer just for the study.

The different PWYW labels were implemented by communicating the offer in the restaurant on a menu as *Pay What You Want* or *Pay What You Think It Is Worth* and by training the waiter to ask consumers to *pay what you want* or *pay what you think it is worth*. Each PWYW condition was conducted on a different Sunday. Guests were randomly assigned to one of the two anonymity conditions once they entered the restaurant. The PWYW offers were neutrally advertised as "Set your own price" in promotion material such as flyers and postings on social media to reduce bias.

To implement anonymity, we drew on experiences and suggestions from previous studies (Gneezy et al., 2012; Kim, Kaufmann, & Stegemann, 2014). The low anonymity condition was implemented by asking consumers to pay directly to the waiter at their table. The high anonymity condition was implemented by asking customers to pay in a separate room without supervision. After payment, the staff asked the paying guest to fill out a questionnaire in another separate room. All data used in this study were collected via the self-reported questionnaire. The guest put the questionnaire into an envelope and threw it into a box. The procedure was implemented with the intent to increase perceived anonymity further.

Regarding prices, we observe that total prices paid in the PWYT treatment groups are much higher versus prices paid in the classic PWYW conditions ($price_{PWYT/total}$ = 45.97, $price_{PWYW/total}$ = 33.23). This also applies to anonymous ($price_{PWYT/anonymous}$ = 43.45, $price_{PWYW/anonymous}$ = 32.93) and personal payment situations ($price_{PWYT/personal}$ = 48.16, $price_{PWYW/personal}$ = 33.47). Also, IRP are much higher in the PWYT vs. PWYW conditions ($IRP_{PWYT/total}$ = 47.13, $IRP_{PWYW/total}$ = 37.04), in the anonymous ($IRP_{PWYT/personal}$ = 44.12, $IRP_{PWYW/personal}$ = 37.04) and in the personal payment situation ($IRP_{PWYT/anonymous}$ = 48.16, $IRP_{PWYW/anonymous}$ = 33.47).

We continued our analysis using ANOVA. Regarding prices paid, we find a significant main effect for PWYW labels ($F(1, 132)$ = 41,13, p = .00, η_p^2 = 0.24). but no significant effect for anonymity ($F(1, 132)$ = 1.78, p = 0.18, η_p^2 = 0.01) or the two factors' interaction ($F(1, 132)$ = 1.12, p = 0.29, η_p^2 = 0.01). About IRP, we find a significant effect of the factor PWYW labels ($F(1, 132)$ = 21.61, p = .00), η_p^2 = .14). and the interaction term ($F(1, 132)$ = 9.34, p = 0, η_p^2 = .07). The second main factor anonymity is not significant ($F(1, 132)$ = .01, p = 0.75, η_p^2 = .00).

Overall, our results show that not only prices paid but also the IRP depends on PWYW labels used. Furthermore, in our experiment, anonymity only affected prices paid when the PWYT label was used. When the classic PWYW label was used (consistently), prices paid in high and low anonymity situations did not differ significantly. Further research is required to understand the underlying processes.

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Retailers' Response to A Racial Reckoning: Analysis of Corporate Social Justice Communication on Social Media

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EXTENDED ABSTRACT

The killing of George Floyd in May of 2020 and the subsequent shootings of other unarmed Black people spurred international protests. Racial equality has emerged as one of the most prominent social values to consumers, and more than half of U.S. consumers believe brands should speak up regarding issues related to equality (Garcia-Garcia et al. 2021). In response to social movements such as this, companies are increasingly engaging in greater brand activism and corporate social justice (CSJ) efforts. Brand activism refers to the efforts of a brand to "promote, impede, or direct social, political, economic, and/or environmental reform or stasis with the desire to make improvements in society" (Sarkar and Kotler 2018, 554). Conversely, CSJ is inclusive of brand activism but incorporates the relationship with the company, its employees, customers, shareholders, and the broader community. Moreover, CSJ focuses on integrating inclusion and equity of oppressed populations at both the macro and micro levels (Zheng 2020).

Companies use a variety of methods to share their support for social and political issues; however, social media has emerged as a critical communication platform where companies can strengthen their brands (Vernuccio 2014) and connect immediately with consumers during a crisis (Eriksson 2018). Some businesses experience difficulties in communicating on social media during a crisis (Li and Li 2014; Parsons 2011) due to consumers perceiving companies' communication as inauthentic. Thus, the purpose of our research is to explore corporations' crisis communication on social media in relation to the racial justice reckoning that occurred in the summer of 2020 following the murder of George Floyd. While there is growing use of CSJ, the academic literature regarding CSJ communication is lacking. Therefore, we sought to answer the following research questions: (1) Of the top 100 retailers, how many made comments on Instagram related to social justice and the Black Lives Matter movement in the wake of George Floyd's murder? (2) What was the content of the social media posts, and what CSJ themes emerged from the data? and (3) What are examples of effective CSJ messaging from retailers, and what are the key components?

To answer the research questions, we employed content analysis. The population consisted of companies included in the National Retail Federation's (NRF) Top 100 Retailers 2020 List (National Retail Federation 2020). The research team collected responses during the first week of June 2020, a week after the murder of George Floyd. A systematic approach was used to analyze the textual content of each message from the 55 retailers who communicated during this time. To analyze the data, we utilized open, axial, and selective coding (Corbin and Strauss 2008). Portions of the responses were deemed as a specific and/or vague acknowledgement and as an action (either external, internal, corporate ability, external safety, internal safety, or inclusivity).

A majority of the messaging included a **vague acknowledgement** where the retailer used words such as *together*, *injustice*, *equality*, *solidarity*, *progress*, and *justice* ($n = 37$, 67.3%), while others also included words such as *action, change, listening, educating,* and *engaging* ($n = 23$, 41.8%). The next largest category used more **specific acknowledgement**. Most prevalently in this category retailers included words denouncing *hatred, racism, stereotyping, bigotry,* and *discrimination* and incorporated more specific terms like *sys-temic oppression, systemic racism,* and *unconscious bias* ($n = 34$, 61.8%). As opposed to the more prevalent use of vague acknowledgement highlighting the need for *justice*, *equality*, and *progress*, fewer companies ($n = 29$, 52.7%) clearly referenced *people of color* or *Black* and *African American* individuals and communities, while even fewer ($n = 19$, 34.5%) explicitly referred to George Floyd or other victims. Only one retailer made specific mention of *police brutality* and *criminal justice reform*. A smaller number of retailers made a commitment to take some type of **action**, with the largest number ($n = 13$, 23.6%) focusing on corporate ability actions (e.g., *commitment to community*, *reopening stores*, and *supporting employees and/or customers*), while a smaller proportion ($n = 10$, 18.2%) committed to taking external action including *donations* and *partnerships*. Additionally, some retailers that committed to taking action also included *internal actions* ($n = 6$, 10.9%) such as strengthening their *diversity, equity, and inclusion (DEI) policies* through better *hiring* and *training* practices and through the use of *internal centers* and *foundations* that improve internal *accountability*. Lastly, retailers committed to actions that would ensure safe and inclusive environments for their employees and customers. Seven (12.7%) retailers emphasized that their stores were *inclusive for all* and *open to everyone*, while a smaller number ($n = 2$, 3.6%) highlighted their focus on ensuring internal safety for their team members.

Finally, to answer research question 3, we identified the vital components of an effective CSJ message. Based on our definition, an effective message included a specific acknowledgement of the issue and actionable items toward employees, customers, stakeholders, and the community. For example, postings from Home Depot and Walgreens contained a specific acknowledgement of the issue by including references to ethnicity, mentioning of the victim's name, and denouncing racism. Additionally, these companies incorporated actionable items both externally and internally and focused on their commitment to the broader community.

To our knowledge, this is the first study to examine messaging related to CSJ. In line with the work of Vredenburg et al. (2020), our findings reveal that some companies demonstrated more effective CSJ messaging strategies that align with authentic brand activism; these retailers used more explicit social justice language and vowed to instigate greater systemic change both internally and externally. On the other hand, most of the analyzed retailers could be perceived as practicing varying degrees of what Vredenburg et al. (2020) referred to as woke-washing whereby they align themselves with social justice issues in a more performative manner rather than committing to integrated change that benefits all stakeholders. True CSJ requires more than mere promises; there must be action that drives solutions for the greater good (Zheng 2020). Therefore, our findings suggest companies are lacking communications approaches that reflect true integration of CSJ, which has important ethical and strategic implications.

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The Impact of a Routine Schedule on an Intervention with Working Midlife Adults to Form a Walking Habit for More Sustained Physical Activity

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EXTENDED ABSTRACT

Despite substantial benefits, most adults are insufficiently physically active (e.g., CDC, 2013). While behavior change is often predicted by motivation-related constructs, such as self-efficacy, actual interventions often fail, and any changes prove hard to maintain (Rhodes et al, 2017). An alternative approach to improve maintenance is to rely on more automatic processes, such as habits, while also identifying contexts that might improve intervention success (Rothman et al, 2009; Sheeren et al, 2017). Habits develop when people perform a behavior repeatedly in a consistent situation, resulting in a mental association between a situation and behavior, resulting in enactment of behavior that is less reliant on explicit motivations and decisions. Globally, individuals' daily schedules often show considerable routine, organized around biological needs (e.g., eating) and social systems (e.g., work; Vagni & Cornwell, 2018). Inserting new behaviors into existing routines can improve habit development (Judah et al, 2013). Therefore, the AIM of the current study is:

To test the impact of this common context, a **routine schedule**, on a physical activity intervention to develop a walking habit. We focus on midlife adults: 1) they are likely to have multiple roles (work, childcare) that impose routine on their schedules, and 2) midlife is a crucial life period to set behaviors for healthy aging (Lachman, 2004).

We conducted a 9-week longitudinal randomized trial (baseline week, 4-week intervention, 4-week follow-up) of a planning intervention to form a daily walking habit with 127 low-activity, working, midlife adults. Outcome variables were weekly measures of habit automaticity (Gardner et al, 2012) during the intervention and at follow-up, and steps measured using accelerometers throughout the study. Participants were randomly assigned to a Consistent context condition or one of two control conditions (Variable context or No plan). To encourage habit development, Consistent context participants planned weekly walking schedules in consistent (recurring) situations. Variable context plan participants planned schedules that varied day-to-day. No plan participants made no plans. All participants received accelerometers, weekly step goals, and similar contact with experimenters. They completed daily, weekly, pre-, post- and follow-up questionnaires, including measures of: schedule, habit, motivation, and demographics.

The planning intervention was successful in forming and maintaining a walking habit. MLM regressions (Condition X Routine X Time) over the intervention, and then during follow-up found that habit automaticity increased for Consistent context participants relative to participants in the control conditions irrespective of schedule routine ($ps < .01$), and their increase in habit from baseline remained at follow-up ($p = .01$).

Having a more routine schedule helped participants who did not make plans (No plan controls) to form a walking habit. Further analyses showed that these effects of routine were mediated by walking in more consistent contexts each week ($\beta=.17$, 95% CI = .0002 to .37), resulting in more habit automaticity.

Similar MLM regressions on steps found that steps increased during the intervention period for participants in *all* conditions, suggesting multiple effects on steps. However, having a routine schedule helped Consistent context participants during the intervention more than participants in both control conditions. Those with more routine schedules walked more (Condition X Routine X Time, $ps < .04$; for Consistent context, simple slopes $ps < .01$). Mediation analyses suggested that having a more routine schedule made it easier each week for Consistent context participants to motivate themselves to walk ($\beta=.04$, 95% CI = .01 to .16).

MLM regressions for the 4-week follow-up period found that participants in all conditions lost steps. However, Consistent context participants benefited to some degree from the walking habits they had formed. Simple slope tests found no significant change during follow-up for participants with a higher level of habit automaticity (+1 SD: $\beta=-.02$, $p=.18$), while steps decreased over time for those with lower levels of habit automaticity (mean habit automaticity: $\beta=-.02$, $p=.02$; -1 SD: $\beta=-.03$, $p=.04$).

The effects of routine on habit automaticity and steps were robust to including other schedule-related variables correlated with routine, such as having a less busy schedule and having a preference for a routine schedule.

In conclusion, we find that a context common for many adults globally, a routine schedule, increased the success of a planning intervention in low-activity working midlife adults. Participants who planned their walking in consistent contexts and had more routine schedules increased their daily walking more with this intervention. In contrast, having a more routine schedule had little impact on the daily walking of participants in two control conditions.

Those who planned walking in consistent context also developed stronger, more automatic, walking habits than those who were asked to plan to walk in varied contexts or who made no plans. In addition, participants who made no plans, but had more routine schedules, seemed to naturally walk in more consistent contexts and so formed stronger, more automatic, walking habit than those with less routine schedules. Finally, the intervention participants who developed a stronger habit also showed some maintenance of steps during the four weeks of following the end of the intervention.

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Stockpiling Goods as Indicators of Anxiety and Loneliness: Hoarding Behavior in Times of Crisis

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EXTENDED ABSTRACT

The COVID-19 pandemic exacted multiple changes on consumer behavior. One of the most prominent, especially in the early stages, was stockpiling goods such as toilet paper and bottled water. Stockpiling causes logistics and supply chain issues and can divert critical supplies away from those who need them the most. From a consumer perspective, stockpiling can be more than just amassing goods; stockpiling can indicate problematic mental health patterns.

Research across animal and human populations indicates that stockpiling (viz. hoarding) is a response to stress and anxiety during uncertain times (Vickers & Preston, 2014a). Indeed, inducing anxiety and uncertainty in the laboratory increases people's hoarding immediately afterwards (Vickers & Preston, 2014b).

To test the dynamics of stress-induced negative emotions and stockpiling behavior during the pandemic, we took advantage of a unique longitudinal dataset. We tested how loneliness and its interpersonal correlate, anxiety, contributed to stockpiling behavior. Moreover, we tested whether stockpiling was psychologically mollifying, that is, whether it assuaged feelings of anxiety and loneliness over time.

We also tested a potential moderating factor—the degree to which people derive social belongingness from group activities (Gabriel et al., 2017). A new formulation of an old idea (Durkheim, 1912), this measure taps individual differences in collective effervescence. It measures feelings of solidarity and connectedness from large group events, such as festivals, concerts, and somber public events. We focused on collective effervescence for its distinct applicability to the COVID-19 crisis.

We collected an initial wave of data (n =1063) on March 16, 2020, a mere 3 days after the U.S. declared a national emergency due to COVID-19. Time 2 data were collected five weeks later (April 27). Participants who completed both assessments were included in the analyses (n=562, M_{age}=38.98; 45.02% female).

At both time points, participants completed measures of anxiety, loneliness, dispositions toward collective effervescent (Tendency for Effervescent Assembly Measure [TEAM]; Gabriel et al., 2017), and stockpiling of household goods (e.g., bottled water and toilet paper) in the past seven days. Bivariate latent change score models with a structural equation model (SEM) framework were used to fit our data (McArdle 2009).

First, we examined how anxiety at time 1 moderates loneliness at time 1 to influence the change in stockpiling level from time 1 to time 2. The analysis yielded only a significant interaction between time 1 loneliness and anxiety (b = .08, t = 2.36; p = .02). Whereas loneliness at time 1 did not have any influence on change in stocking level (b = -.04, NS) for participants experiencing low levels of anxiety (1 SD below the mean), loneliness predicted an increase in stocking (b = .10, t = 2.31; p = .02) for participants expressing high levels of anxiety (1 SD above the mean). The results suggest that lonely feelings lead to hoarding for people experiencing high anxiety.

Next, we investigated the moderating role of collective effervescence (assessed with TEAM) on the relationship between loneliness and stocking behavior. Specifically, we examined how TEAM at time 1 moderates loneliness at time 1 to influence the change in stockpiling level from time 1 to time 2. The analysis yielded a significant interaction between loneliness and TEAM (b = .03, t = 1.90; p = .06): whereas loneliness did not increase stocking for participants low on collective effervescence (b = .02, NS), loneliness led to higher level of stocking for those high on collective effervescence (b = .10, t = 3.12; p = .002). These results suggest that especially for people who derive utility from large-group experiences, lonely feelings resulted from not being able to do so increases their stocking behavior.

This model also enabled us to examine whether stocking served its intended purposes, that is, alleviating negative feelings such as loneliness and anxiety. To that end, we first examined how the change in loneliness level from time 1 to time 2 was influenced by time 1 stocking level, with TEAM at time 1 as a moderator. The model yielded a significant interaction between time 1 stockpiling and TEAM (b = .03, t = 2.30; p = .02). Stockpiling seems to have opposed effects on the change in loneliness for those who score very high versus low on TEAM. Whereas for participants who score low on TEAM (2 SD below the mean), their change in loneliness level was negatively predicted by their stockpiling at time 1 (b = -.17, t = -2.07; p = .04); for those who score high on TEAM (2 SD above the mean), their change in loneliness level was positively predicted by their time 1 stocking (b = .16, t= 1.92; p = .06). This suggest that for people who do not enjoy large group experiences, stocking up did assuage their loneliness feelings. However, for people who crave large group experiences, stocking up makes them feel even lonelier.

We next examined how the change in anxiety level from time 1 to time 2 was influenced by time 1 stockpiling level, with TEAM at time 1 as a moderator. The model yielded a positive (rather than negative) main effect of stocking (b = .06, t = 2.32; p = .02). Moreover, we observed a significant interaction between time 1 stockpiling and TEAM (b = .04, t = 2.02; p = .04). Whereas for participants who score low on TEAM, the change in their anxiety level from time 1 to time 2 was not predicted by their stockpiling at time 1 (b = .02, NS); for those who score high on TEAM, the change in their anxiety was positively predicted by their time 1 stockpiling (b = .11, t = 3.04; p < .01).

The results of our longitudinal study suggest that loneliness has a positive effect on stocking, especially for people who experience higher level of anxiety and those who enjoy large-group activities. Moreover, our results indicate that negative feelings during the pandemic were not assuaged by stockpiling supplies. To the contrary, for people who thrive in large-group experiences, higher initial stockpiling behavior predicted increased negative feelings across a five-week period.

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Don't Play the Scarcity Card: Perceived Scarcity in COVID-19 Vaccine Supplies Reduces Vaccination Priority and Acceptance

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EXTENDED ABSTRACT

Introduction

Non-medical interventions have been paramount to curb CO-VID-19 spread, while vaccines against the virus were developed (WHO, 2020). However, even though several successful vaccines were approved worldwide, available doses are insufficient to meet current demand (Torjesen, 2021). How this vaccine scarcity affects individuals' willingness to be vaccinated (hereafter: WTV)? This paper aims to address this important public policy question, as vaccine hesitancy can hinder controlling the pandemic.

While extant literature suggests that scarcity of resources increases demand (Roux et al., 2015; Shah et al., 2012), we argue that this relationship is contingent on two dimensions not fully addressed in the literature: (i) the *beneficiary* of the (scarce) resource and (ii) *access* to the (scarce) resource. The former refers to whether the resource benefits a private actor (e.g., an individual) vs. the general public; the latter refers to whether the resource can be accessed directly vs. one must rely on a 'gatekeeper' (e.g., governmental agencies).

Restricted access to vaccines due to shortages is compounded by the problem of vaccine hesitancy, making it critical to investigate factors that can reduce vaccine acceptance. Vaccine hesitancy is "an attitudinal continuum, capturing doubts regarding the safety, efficacy, necessity and general advisability of vaccination for oneself and one's family" (p. 2540, Browne, 2018). Vaccine hesitancy is fluid and may be affected by a variety of factors, such as trust in healthcare providers (Finkelstein et al., 2020) and high perception of risk related to contagion (Caserotti et al., 2021).

We propose that a key element of COVID-19 vaccine acceptance is the sense of priority of vaccination (i.e., perceived urgency or importance of getting the vaccine for oneself). In health policy research, this concept of priority is often viewed as a "sense of urgency" or reduced interest in selfcare (Barron, 1980; Lacy et al., 2004; Mitchell & Selmes, 2007).

Methods

In two pre-registered experimental studies, we manipulated whether vaccines were scarce or widely available, and tested the effect of scarcity frame on one's perceived priority and WTV (0-100 scales). Participants were told to imagine that they could book an appointment for the following week, regardless of scarcity condition. Based on the extensive scarcity literature, we originally predicted that scarcity would increase WTV. For experiment 2, we revised our theorizing and pre-registered new hypotheses, in an effort to replicate the unexpected findings of experiment 1.

We hypothesized that (i) framing the vaccine as scarce would reduce perceived priority to receive the vaccine, which would consequently reduce WTV; (ii) participants' trust in doctors would moderate the effect of perceived priority on WTV, so that high trust in doctors would "protect" individuals from the deleterious effect that low perceived priority has on WTV; and (iii) participants' objective risk (i.e. those with pre-existing medical conditions) would moderate the effect of scarcity on perceived priority to receive a vaccine, such that individuals in high risk would have higher perceived priority and WTV in the high (vs. low) scarcity condition, while low risk individuals would have lower perceived priority and WTV in the high (vs. low) scarcity condition.

Results

Study 1 ($N = 342$ U.S. undergraduate students, $M_{age} = 20.6$, $SD = 1.65$, 52% female, data collected in Oct/2020) employed a 2 (scarcity: high vs low scarcity) between-subjects design. The scarcity frame (contrast coded: -.5 = low, +.5 = high) reduced perceived priority to be vaccinated ($\beta = -13.72$, SE = 3.40, $t(339) = -4.04$, $p < .001$), while perceived priority increased WTV ($\beta = .75$, SE = .03, $t(335) = 23.59$, $p < .001$). Trust in doctors (alpha = .82) was a significant predictor of WTV ($\beta = 8.62$, SE = 1.72, $t(335) = 5.03$, $p < .001$), and a significant moderator of the effect of perceived priority on WTV. The moderated mediation was significant: coefficient = 1.40, 95% CI = .5517, 2.5201; 10,000 bootstrap samples. (WTV means by condition: scarcity = 60.12, $SD = 33.63$, control = 70.43, $SD = 32.43$, $t(340) = 2.89$, $p = .004$).

Study 2 ($N = 585$, 52.5% female, $M_{age} = 40.23$, $SD = 14.20$, data collected in Jan/Feb 2021 when two vaccines were already available), replicated Study 1 results within a broader U.S. population on Prolific (pre-screened for having objective risk vs. no objective risk to serious COVID-19). This study employed a 2 (scarcity: high vs. low) x 2 (objective risk: high vs. low) between-subjects design. We replicated the moderated mediation model tested in Study 1 (coefficient = .53, SE = .22, 95% CI = .1203, 1.0266, 10,000 bootstrap samples; other coefficients were of similar magnitude of those of Study 1). However, the interactions between objective risk and scarcity frame are not significant predictors of the WTV or priority (both ts < 1), contrary to our prediction. (WTV means by condition: scarcity = 71.72, $SD = 37.58$, control = 78.05, $SD = 33.55$, $t(583) = 2.15$, $p = .032$).

Discussion

Framing COVID-19 vaccines as scarce had unexpected effects on demand, reducing the WTV even for individuals at higher medical risk. This difference in vaccine acceptance could have a significant impact on our ability to reach population immunity for COVID-19. And if population immunity is out of reach, as many have suggested, incremental vaccine acceptance is even more important as each vaccinated person disrupts the chain of transmission. Importantly, behavioral researchers have recently suggested leveraging scarcity of vaccination doses to improve attitudes and intentions to receive a COVID-19 vaccine (Wood & Schulman, 2021). If scarcity has the opposite effect in this context, public health campaigns need to de-emphasize the scarcity aspect.

Addressing the effects of scarcity on demand is common in economic, marketing, or psychology literatures, with a majority of studies suggesting that scarcity increases demand. Building on the relatively meager research on boundary conditions for scarcity resulting in generous, not only selfish behavior, we proposed that scarcity can

have disparate impacts on demand depending on the beneficiary of a particular resource and the access to the resource. Our results illustrate under what conditions perceived scarcity can actually suppress demand for a good.

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Beyond a Self-Control Tool: The Effect of Limit Setting on Preference Sensitivity

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EXTENDED ABSTRACT

Consumers often experience goal conflict (e.g., leisure-work conflict) when faced with resource constraints (e.g., time constraints). To help consumers manage resources and cope with goal conflict, many apps allow users to set a limit to the resource spent on a conflicting goal (e.g., screen time limit). Will limit setting affect how people allocate resources? Prior research on goal conflict and budgeting mainly focused on resource allocation *between conflicting goals* (e.g., time allocated to leisure versus work; Fishbach and Dhar 2005; Heath and Soll 1996; Larson and Hamilton 2012), while little research has investigated resource allocation *between the options serving one conflicting goal* (e.g., time allocated to each leisure activity; Goldsmith, Friedman, and Dhar 2019).

We hypothesize that setting a limit to the resource spent on one conflicting goal (i.e., the limited goal) increases one's sensitivity to their preference among the options serving that goal. Specifically, limit setting should encourage consumers to *spend a larger proportion* of the resource for the limited goal on their favorite option, if the favorite option is *strongly preferred* over the others, but *not* when the favorite option is *only slightly preferred* over the others. For example, suppose a consumer wants to work more efficiently by reducing smartphone usage. They can set a specific limit on their daily screen time or not. We predict that setting this limit will increase the proportion of screen time spent on their favorite app. However, this effect will be attenuated if they don't have a strong preference for one app (i.e., the favorite app) over the others. We further propose that this occurs because limit setting shifts the opportunity cost people consider when facing goal conflict and resource constraints (Frederick et al. 2009; Spiller 2011). Specifically, when deciding whether to spend resources on an option associated with the limited goal (e.g., whether to open an app), limit setting leads consumers to consider *other options* serving the same goal *(e.g., other apps)*, as opposed to *the other goal (e.g., work),* as the opportunity cost.

Study 1 used 2 (no-limit vs. limit) between-subjects conditions and tested the effect of limit setting when consumers strongly prefer one option serving the limited goal over the others. Participants first ranked eight chocolate truffle flavors based on their preference. After a filler task, participants imagined that they could take four free snacks at their company's cafeteria everyday from Monday to Thursday from two options: carrot & celery sticks and chocolate truffles. The flavor of the chocolate truffles offered on Monday and Wednesday (Tuesday and Thursday) was the one ranked at #7 (#2) in the ranking task, customized for each participant to ensure a strong preference between the flavors. Next, to induce an indulgence-health goal conflict, participants imagined that they decided to limit their consumption of chocolate truffles to prevent weight gain. Then, those in the limit condition set a maximum number of chocolate truffles to eat per week, while participants in the no-limit condition skipped this step. Afterward, all participants indicated the number of chocolate truffles they would take each day from Monday to Thursday. As expected, limit setting increased the proportion of the favorite chocolate truffle each participant selected (i.e., the number of #2-flavor chocolate truffles/the total number of chocolate truffles selected; 62% vs. 73%, $p=.023$), and this effect was driven by increased consideration of the tradeoff between chocolate truffle flavors (3.80 vs. 5.48, $p<.001$; 95% CI=[.03, .16]). We did not find a significant effect

of limit setting on the total number of chocolate truffles taken, perceived goal conflict, or resource scarcity. Controlling for them does not change the conclusions.

Study 2 extended the findings of Study 1 by investigating the effect of limit setting across a larger span of preference strength for the favorite option. The study used 2 (limit vs. no limit) between-subjects conditions and measured preference strength as a continuous factor. Participants imagined experiencing a conflict between work and leisure activities and indicated how they would allocate their limited time among work and different leisure activities. We found a significant limit setting × preference strength interaction ($p=.005$): among participants who strongly preferred their favorite leisure activity over the others, setting a limit to the total leisure time increased the proportion of leisure time spent on the favorite activity; however, the effect was reversed among participants who slightly preferred their favorite leisure activity over the others.

Study 3 used a scenario involving a conflict between work and spending time on fun apps and tested our mechanism using a moderation approach: if our effect is driven by increased consideration of the tradeoff between options serving the limited goal, then the effect should attenuate if this tradeoff is made salient in both the limit and no-limit conditions. Thus, in addition to limit setting (limit vs. no-limit), we orthogonally manipulated tradeoff salience by adding a reminder (i.e., "Spending time on one app might come at the cost of spending time on the other app") or not. As expected, there was a limit setting × preference strength × reminder interaction ($p=.016$): when participants strongly preferred the favorite app, limit setting increased the proportion of screen time spent on that app in the no-reminder condition (64% vs. 72%; $p=.072$), but decreased the proportion in the reminder condition (75% vs. 64%; $p=.026$); however, when preference was weak, limit setting and reminder did not affect the proportion ($ps>.6$).

In sum, three studies showed that limit setting shifts the opportunity cost people consider when facing goal conflicts and thus promotes sensitivity to preferences among options serving the limited goal. Theoretically, this research contributes to the literature on goal conflict and budgeting, and further extends the literature on opportunity cost by investigating a novel antecedent that affects *what type of* opportunity cost people consider (Spiller 2011, 2019). Practically, our findings suggest that marketers can encourage consumers to set a limit to promote the purchase of premium products (when they are consumers' favorites). Moreover, limit setting may increase consumer welfare by encouraging choices that better fit consumers' inner preferences.

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Is Brand Activism the New Normal? Scale Development and Application

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EXTENDED ABSTRACT

In recent years, brands have begun "taking a stand" on social and political issues such as racism, social injustice, LGBTQ equality, or the refugee crisis to influence societal change. As such, brand activism is a newly evolved form of brand communication. Consumer expectations of brands have been evolving rapidly, as brands are expected to profess a more purposeful ethos to society now more than ever before. In the modern marketplace, it has become an increasingly popular trend to see brands promote social movements and fight for issues happening worldwide. For instance, numerous brands, including Nike, Netflix, TOMS, Reebok, started to protest social inequality and racial injustice during the 2020 Black Lives Matter protests (Loyalty Science Lab 2020; Mirzaei 2020). Another recent example is the pushback against the rise of anti-Asian hatred and bigotry following the spread of the COVID-19 pandemic from Asia (Chung 2021). Many brands have started using the hashtag #StopAsianHate on social media to raise awareness and combat racism (Chung 2021; Johannes 2021).

Although this emerging phenomenon has caught the attention of marketing literature in recent years (Bhagwat et al. 2020; Eilert and Cherup 2020; Hydock, Paharia, and Blair 2020; Korschun et al. 2019; Moorman 2020; Mukherjee and Althuizen 2020; Vredenburg et al. 2020), the effects of brand activism on consumer brand perceptions remain a largely unexplored research area. Understanding such effects is critically important because consumer responses to brand activism are diverse and polarized. Additionally, the literature lacks a reliable psychometric instrument to measure the construct of brand activism. Therefore, this research conceptualizes, defines, and develops a brand activism scale from a consumer's point-of-view. Utilizing a multi-method approach including interview and surveys, eight studies were conducted to create a two-dimensional 8-item brand activism scale and to test the scale's validity and reliability. This scale measures how brands can effectively engage in brand activism and be considered activist brands.

The second purpose of this research is to explore the scale's applicability in different brand-consumer relationship contexts throughout various issues such as social equality and racial injustice. Therefore, two additional studies were conducted to explore the scale within its nomological network. Specifically, Study 9a examines the effects of brand activism on consumers' brand evaluation. It also explores whether priming the consumers with a brand activism definition will change the proposed effect. Two hundred nineteen undergraduate students were recruited from a southern US university. Study 9a results support our prediction that consumers have a higher brand attitude when perceiving the brand as an activist than non-activist. Moreover, priming participants with the definition of brand activism did not change the pattern of the results. After controlling for the familiarity and purchase frequency, the results still hold, and patterns were the same.

Study 9b comprised a 2 (brand type: activist brand vs. non-activist brand) x 2 (gender: male vs. female) between-subjects design. A total of 250 participants were recruited from Prolific. Participants were asked to write either one activist or non-activist brand name and explained their reason. Next, participants completed the brand activism scale, manipulation check, willingness to pay a price premium (hereafter, WTP) that was the key-dependent measure in this study (Netemeyer et al. 2004), brand familiarity, and purchase frequency questions. As expected, consumers were WTP a price premium for an activist brand compared to a non-activist brand. A moderation analysis using a PROCESS model 1 (Hayes 2018) also showed that gender was a significant predictor of the relationship between brand type on WTP a price premium. Specifically, consumer's WTP a price premium was stronger for females than males for an activist brand. In contrast, both females and males were less WTP for a price premium in the non-activist condition. The results still held after controlling for the income, purchase frequency, and brand familiarity.

The present research contributes to the marketing and branding literature by presenting novel findings and discussing their associated managerial implications. First, this research makes a significant theoretical contribution by developing and validating a brand activism scale. Developing such a valuable tool to measure the perception of brand activism offers a significant contribution to branding literature. Moreover, brand managers may derive benefit from this research as it will help advance their understanding of brand activism and thus foster more satisfactory consumer-brand relationships. Additionally, from a public-policy perspective, this research may help people from a minority group, and those who suffer from racial inequality or social injustice can feel support from society, leading to increased life satisfaction and wellbeing.

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Sharing is Not Always Caring: Enforced Familial Sharing During the COVID-19 Lockdown

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EXTENDED ABSTRACT

Introduction

In Apple's heart-warming Christmas advert, The Surprise (Apple inc., 2019), an image of the family coming together around technology, namely an iPad device, which is promulgated as a force to draw families together; to entertain and appease bored children; and to forge positive and warm intergenerational familial relationships. However, during the enforced togetherness of the COVID-19 lockdown context, the reality for many families challenges the promulgation of these mythological ideals used widely to promote the purchase, consumption and sharing of technology in the household. This paper explores this enforced sharing of technology within families during the constrained home environment resulting from the COVID-19 lockdown context. This pandemic saw consumers increasingly reliant, even dependent upon technology for communications, information-seeking, education, and entertainment (Turkle, 2015a; Sheth, 2020). However, limitations in some households highlight that not all families and/or family members have free and/or equitable access or ownership to enabling devices, despite their heightened necessity, and apparent ubiquity during the COVID crisis. Consideration toward the complexities of family consumption regarding the different roles and identities in the household and the relationships members have with their devices are overlooked in this idealistic image of familial sharing. This work contextualises Belk's (2010) theoretical review of the consumer behaviour of sharing, interrelating considerations toward the pathological attachment family members form to their devices (Melumad & Pham, 2020), ultimately adding to the discussion of Sheth's (2020) paper exploring consumer behaviour and technology use during the pandemic.

Background

The dynamism of the sharing environment can be conceptualised from the literature, understanding that from the parental perspective, sharing devices during the lockdown period can be seen as the pooling of household resources, whereas guardians and children with higher attachment or ownership to devices, are likely to view this as a form of borrowing or lending (this is not dependent on the time period i.e., for a virtual lesson, or the whole lockdown period). From the child perspective, bartering and expectations of reciprocity may be in place and from their view, a sense of commodity exchange is present. In any case, the extension of the use of these devices takes the form of 'sharing in' within the household (expanding the sphere of extended-self by expanding the domain of common property) (Belk, 2010). Belk (2010) identifies this is complex in terms of the attachment we have to this possession, which we know can be quite high (Melumad & Pham, 2020). Thus, this study explores the area of resource allocation and the dynamics of the sharing environment during lockdown.

Method

In exploring the familial environment during the lockdown period, a two phase sequential design was utilised (Weinstein, 2018). Phase one represents the research undertaken to inform this paper, drawing on 48 survey responses completed during lockdown. The phase one survey predominantly consisted of open-ended questions, where some Likert style questions were included, a follow up required participants to reflect and explain why they chose a particular response. This allowed exploration in a more general sense toward the parent/guardians' own technology use, their views on technology use for young children and insight toward how devices were used, shared, and managed within the familial context during the lockdown period. Once ethical approval was given (19/LBS/022), the research took place during lockdown. Social media platform Facebook was used as a recruitment tool. The researcher created a profile specifically for the study. Various 'groups' were approached ranging from those sharing idea's for family/kid's activities during lockdown, more general parenting groups, 'buy and sell' pages for family items, as well as groups which facilitate the donation and receipt of family items to those in need. A thematic analysis was used for the survey.

Findings/Discussion

Our data showed sharing was dynamic within household's during lockdown. The negative parental view of technology use for young children impacted stricter mediation which constructed the demand sharing environment. Those with a more open view, introduced technology earlier reinforcing an open sharing environment during lockdown. Commonalities were found in that increased screen time was not desired. Activities enabled through sharing on highly personalised or economically valuable devices were usually specific, time bound and limited, moving beyond assumptions that possessions are joint within the family. High attachment to the device or the economic activities undertaken can cause conflict within the sharing economy. Similarly, there may be less conflict with less personalised devices, or if the activities undertaken are less likely to be for economic means. The abundance of resources plays a role here, however this is less prevalent than the parental view of technology. This has been summarised throughout a new conceptual framework for understanding the dynamic character of sharing within the familial environment during lockdown. The framework can offer additional insights to the consumption of technology in the family home towards the post-pandemic 'new normal'.

How Does Brand Warmth Influence Consumer Responses to Scarcity Appeals? The Role of Perceived Good Intentions

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EXTENDED ABSTRACT

Scarcity appeals, which advertise the limited availability of products (e.g., "only 10 available"), are one of the most commonly used advertising appeals for product promotions (Middleton 2017). Prior research on the effectiveness of scarcity appeals has primarily examined consumer responses toward the promoted *product*, finding that such appeals tend to increase the perceived value of the product and interest in purchasing the promoted product (Cialdini 2001; Inman, Peter, and Raghubir 1997). Despite the ubiquitous use of scarcity appeals, the effect of such appeals on consumer responses to *brands* has yet to be examined. To fill this gap, we examine the effect of scarcity appeals on brands by investigating the role of brand warmth.

Brand warmth refers to the brands' perceived friendliness, sincerity, trustworthiness, and their good intentions (Kervyn, Fiske, and Malone 2012). Prior research is limited in the role that brand warmth plays in consumer responses to specific brand actions, and the limited research in this domain has focused on prosocial behavior (Gershon and Cryder 2018). Extending this research, we examine the effect of brand warmth on consumer responses to brands using scarcity appeals. The effect of scarcity appeals on product desirability is found to be greater when consumers infer that the scarcity appeal is genuine rather than profit-driven (Lee et al. 2014), and when consumers expect products to be scarce (Mukherjee and Lee 2016). Indeed, persuasion tactics tend to be evaluated more favorably when they are not seen as sales-driven (Campbell 1995; Kirmani and Zhu 2007). Thus, we argue that because high-warmth (vs. low-warmth) brands are perceived to have a well-intentioned nature, consumers should infer that high-warmth (vs. low-warmth) brands have better intentions when using scarcity appeals, as a result, respond more favorably toward high-warmth (vs. low-warmth) brands.

Study 1 followed a single factor (brand warmth: high vs. low) between-subjects design. Participants (N=256) read about a hypothetical electronics store that was described as either warm, or not warm. Next, participants saw a promotion for a portable charger on sale that was scarce ("only 10 available"). Then, participants completed items assessing their behavioral intentions to visit the store, and brand attitudes. As predicted, behavioral intentions were greater and brand attitudes were more positive for the high-warmth (vs. low-warmth) brand following the scarcity appeal (behavioral intentions: $M_{high\text{-}warmth}$=3.40, $M_{low\text{-}warmth}$=2.95, p=.07; brand attitudes: $M_{high\text{-}warmth}$=4.79, $M_{low\text{-}warmth}$=4.08, p<.001).

Study 2 was designed to test the prediction that the effect uncovered in Study 1 is unique to when brands use a scarcity appeal, and does not emerge when brands use just any type of promotional advertisements. The study followed a 2 (brand warmth: high vs. low) x 2 (appeal: scarcity vs. no-scarcity) between-subjects design. Participants (N=614) read about a hypothetical coffee shop that was described as either warm, or not warm. Next, participants saw a promotional advertisement either with the scarcity appeal similar to that in Study 1, or not (lacked scarcity information). Then, participants completed the same behavioral intentions measure used in Study 1. Results revealed a marginally significant interaction (p=.05). Replicating Study 1, for the scarcity appeal, behavioral intentions toward the high-warmth (vs. low-warmth) brand were greater ($M_{high\text{-}warmth}$=3.51, $M_{low\text{-}warmth}$=2.85, p=.002); however, there was no such difference for the no-scarcity appeal (p=.68).

Study 3 was designed to test the proposed underlying mechanism that the observed positive effect is mediated by the perceived good intentions of the high-warmth brand. The study followed a procedure similar to that of Study 2 with the hypothetical footwear brand. Participants (N=388) responded to the same brand attitudes measure used in Study 1, followed by items measuring the perceived good intentions of the brand (e.g., well-intentioned, good-natured). Results revealed significant interactions on brand attitudes (p=.007) and perceived good intentions of the brand (p=.003). Replicating previous studies, for the scarcity appeal, participants had more positive brand attitudes toward the high-warmth (vs. low-warmth) brand ($M_{high\text{-}warmth}$=4.54, $M_{low\text{-}warmth}$=4.21, p=.08); however, the effect reversed for the no-scarcity appeal ($M_{high\text{-}warmth}$=4.36, $M_{low\text{-}warmth}$=4.75, p=.04). Although not predicted, this reversed effect provides even stronger evidence that high-warmth brands benefit over low-warmth brands only when a scarcity appeal is utilized. Moreover, for the scarcity appeal, the high-warmth (vs. low-warmth) brand was found to have better intentions ($M_{high\text{-}warmth}$=4.92, $M_{low\text{-}warmth}$=4.44, p=.004); however, there was no such difference for the no-scarcity appeal (p=.20). Further, moderated mediation analysis (PROCESS, Hayes 2018) demonstrated that the perceived good intentions of the brand mediated the observed positive effect in the scarcity condition (.12, CI [.04, .21]), but not in the no-scarcity condition (-.05, CI [-.15, .03]).

Study 4 was designed to test the proposed underlying mechanism via moderation. To do so, consumers' perceived good intentions of the brand were manipulated by making the profit motive behind using a scarcity appeal salient (vs. not). We predicted that when the profit motive is *not* salient, consumer responses would remain more favorable for a high-warmth (vs. low-warmth) brand. Conversely, when the profit motive is *salient*, this effect should be mitigated, because consumers should no longer infer that the high-warmth (vs. low-warmth) brand has better intentions. The study followed a 2 (brand warmth: high vs. low) x 2 (profit motive: salient, not salient) between-subjects design. Participants (N=444) were presented with a fictitious news article either about how companies use scarcity appeals to increase sales (profit motive salient), or about how companies establish corporate culture to reduce employee turnover (profit motive not salient). Next, participants were exposed to the same brand warmth and scarcity appeal manipulations, and completed the same behavioral intentions measure used in Study 2. Results revealed a significant interaction (p=.02). Replicating previous studies, when the profit motive was not salient, behavioral intentions were greater for the high-warmth (vs. low-warmth) brand using the scarcity appeal ($M_{high\text{-}warmth}$=3.16, $M_{low\text{-}warmth}$=2.71, p=.06). However, as predicted, when the profit motive was made salient, this effect was mitigated (p=.12).

In sum, we show that scarcity appeals influence consumer responses to advertising brands. Specifically, we demonstrate that higher brand warmth boosts consumers' evaluations toward the brand using a scarcity appeal. Moreover, we show that this positive effect is driven by the perceived good intentions of high-warmth brands.

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Practice Disengagement: Reconfiguring Systems of Practice in Transformational Consumption Journeys

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Grant me the serenity to accept the things I cannot change, the courage to change the things I can, and the wisdom to know the difference.

Serenity Prayer

EXTENDED ABSTRACT

Everyday millions of people wake up determined to change their lives. Some may struggle to abandon a negative behavior (e.g., overeating) while others endeavor to adopt a positive habit (e.g., fitness). In each case, enduring change involves rearranging an array of actions and often takes place throughout a progressive consumption journey (Akaka & Schau, 2019). We argue that these transformations involve reconfiguration of the elements of *social practices* (materials, meanings, and competences) and the *system of practices* that make up a person's life (Shove et al., 2012). Using a practice theoretic lens (Shove et al., 2012), we examine transformational consumption journeys to better understand implications of disengagement from a dispersed practice situated within systems of practices.

Ample research focuses on behavioral change based on individual choice. However, these approaches do not consider how consumption is embedded in practices and in systems of interdependent practices, resulting in limited gains for public policies aiming to promote an individual's singular behavior (Blue et al., 2016; Meier et al., 2017). We argue that changes in consumption are difficult because of the "stickiness" of a practice, which is often due to a practice being embedded within a web of everyday practices. Practices are predominantly studied as discrete entities, and little is known about how they relate to each other and other systems of practices. Furthermore, the enactment of a practice involves habit, routines, and mindless repetition; therefore, disengaging from practices can be rather difficult, and an important topic of investigation (Warde, 2005). To develop novel insight into the systemic, dynamic nature of practices and practice cessation, we pose two research questions: *How do consumers reconfigure practices to disengage from a dispersed practice? What are the outcomes of practice disengagement for the system of practices over a transformational consumption journey?*

The context of our study is compulsive consumers' disengagement from the dispersed practice (Schatzki 1996) of drinking alcohol which is found in an array of integrative practices (holiday celebrations, happy hours). We adopt the view that compulsive consumption can be part of dispersed practices, which themselves are embedded in integrative or complex practices (Schatzki 1996; Warde 2005).

To answer the research questions, we recruited 18 recovering alcoholics in AA groups in Brazil in many stages of the transformational journey (from days to 37 years). We collected data through observation of 13 AA meetings, 29 phenomenological interviews, and 10 diaries (15 days to two months). Data analysis followed a hermeneutic approach with iterations of within-case/across-case analyses to identify patterns in the reconfiguration of systems of practices (e.g., Arsel & Thompson, 2011).

Our findings show that compulsive consumers need to not only disengage from the dispersed practice of drinking alcohol but also enact new practices, change unsupportive practices, and/or disengage from practices where consumption of the substance is encouraged. *Enacting new practices* (e.g., AA and gardening practices) supports the transformational journeys because they can offer prescriptions for recovering alcoholics on how to enact everyday practices, help them overcome temptations, and fulfill idle time when replacing non-supportive practices. The enactment of new practices is supportive for transformation when their elements are aligned. Recovering alcoholics must also *disengage from practices in which the dispersed practice of drinking alcohol is embedded*, such as playing cards and going to bars. Consumers can completely disengage from these practices by physically staying away, giving excuses, or disclosing they are alcoholics. Alternatively, consumers can partially disengage from these practices by enacting them without drinking alcohol. Partial disengagement often entails practice misalignment (e.g., when someone calls them a fanatic in family lunches or when they do not find a football game fun without drinking). *Practice change* happens when practices are enacted without the dispersed practice of drinking alcohol. This can be described as a localized performance of a social practice (Thomas et al., 2020), in which everyone enacting this it accepts the rearranging and/or replacement of its elements. For instance, practitioners can replace alcoholic drinks with a substitute (e.g., grape juice in practices that involve wine). Practice misalignment is not an issue here because these localized performances are enacted by people who "go along" with the change in the practice.

Our data also reveal consumers' transformational journeys are recursive and require constant consideration of the relationship between a focal practice and the systems of practices within which it is embedded. Recovering alcoholics tend to gravitate between two poles: the recovery world and the relapse world. The first is filled with the regular enactment of supportive practices which are compatible among themselves. Conversely, the relapse world is filled with unsupportive practices (e.g., going to bars). When recovering alcoholics gradually disengage from practices in the recovery world, they gravitate toward the relapse world, which is dangerous because one can easily forget the meanings and competences learned in recovery (e.g., they start believing they can drink a beer without consequence). Almost all descriptions of relapse involve this pull towards the relapse world first.

Our study highlights that when consumers disengage from practices that they are used to, routines are disrupted, and they need to adopt other practices to reestablish ontological security (Phipps & Ozanne, 2017). We answer Meier et al. (2017) who call for understanding how disruption in a practice affects other practices and explore challenges consumers face when integrating new practices, which can lead to failure to habituate (Thomas & Epp, 2019). By showing how alcohol consumption is embedded in everyday routines, our study reveals how relationships between seemingly unrelated practices (Meier et al., 2017; Shove et al., 2012) are critical to understanding transformational journeys. Consumers who stop their alcohol consumption must continually consider the manner in which their practice disengagement impacts other practices in a perpetual dance of practice reconfiguration. Moving beyond individual decision-making toward systems of practice offers more meaningful impact to public health policies and interventions deigned to change practices and habits (e.g., Blue et al., 2016; Meier et al., 2017).

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How Should I Know? Codifying Brand Practices in Service Encounters

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EXTENDED ABSTRACT

In response to the pandemic, service providers, such as restaurants, retailers, grocery stores, beauty services, and gyms, radically changed their servicescapes, processes, protocols, and scripts (Benach 2020) altering practices abruptly. Even customers with longstanding relationships and complex customer journeys (Akaka and Schau 2019; Hamilton and Price 2019; Schau and Akaka 2020; Thomas, Epp and Price 2020) with firms were confused. To help consumers understand what services were available and how to interact in physical spaces, brand-related messages were sent out through digital communications and signs were posted on almost any surface possible (doors, walkways, chairs, tables, walls, and elevators). As the pandemic situation morphs and safety standards evolve, it is difficult for service providers to ensure consumers are aware of the most current protocols regarding decreased/increased capacity, mask wearing, vaccine mandates and social distancing protocols - all of which have direct impact on brand experiences (Brakus et al., 2009).

Although our context is a global disruption in service practices, our inquiry is not centered on the pandemic or even on the change of a practice per se. In our study, practice (re)codification takes center stage. Practice codification is the process that links competences and meanings and explains how customers should enact practices in a service context. In a moment when public health concerns demand sweeping practice reforms, practice (re)codification as a phenomenon is necessary. We are addressing how consumers learn to perform particular practices in a service encounter and how service providers encourage consumers to engage in specific, sometimes brand idiosyncratic, ways that support their brand image and enhance the service experience. Our research questions are: 1) how are brand practices codified for consumers in service encounters? And 2) what are the roles of service providers and beneficiaries in codifying brand practices?

We are interested in understanding interactions that involve specialized product knowledge, occur all or in part within physical servicescapes, and engage a variety of actors (e.g., customers, employees, consuming and non-consuming bystanders) in multi-sided interactions that contribute to the shaping of distinct brand experiences. Our empirical analysis focuses on a global coffeehouse, known for a complicated menu, with multiple ordering and fulfillment modalities (coffeehouses, drive-thrus, kiosks, and branded mobile app): Starbucks.

Service encounters are negotiated interactions between service providers and beneficiaries, which are socially constructed and sustained (e.g., Arnould and Price 1993; Bitner 1990; Bitner et al., 1990). Prior research suggests that consumers contribute to shaping service encounters (Arnould and Price 1993) and brands by enacting a variety of brand practices that range from community engagement to customizing and using brands (Schau Muniz and Arnould 2009). For people to comply with service protocols, they must first be codified (Shove, Pantzar and Watson, 2012: 51).

Our data are comprised of firm, third party media and consumer data. Our data collection focused on interviews and branded content that makes reference to service scripts and pandemic protocols, and thus we searched for keywords like "order", "script", "menu," "distancing," "masks," and derivatives. At the customer-level, we include online data from social media, blogs, and forums. We also include three focus groups centered on consumer responses to pandemic era service changes, e.g., masking, social distancing and plexiglass barriers. During our research, data analysis coincided with data collection. The process was iterative, following a hermeneutic approach (Thompson 1997). Initial insights guided the collection of additional data.

Our findings reveal that codification of service encounter practices in Starbucks is the process of encoding the service encounter script and associated props for clear role expectations within the servicescape. We find that at the corporate level, Starbucks fashioned policies, protocols, and signage needed to conduct service encounters in the pandemic. We find codification process involve the roles of encoder and decoder and associated practices, such as scripting, signaling and storytelling (encoder) and observing, trying and interpreting (decoder), respectively. We demonstrate that even brief or short-lived service encounters can be multi-dimensional, with active audience engagement and the potential for role negotiation and role switching within the encounter. Thus, we find that brand practice codification is a recursive and dynamic process that involves multiple actors who take on different roles and are able to switch back and forth within a given service encounter.

Services are central to economic growth. However, to account for service beneficiaries in the service process requires the consideration of how consumers contribute to a service encounter. To better understand consumers' roles in a service encounter we explored the specific practices needed to codify a practice so both service providers and beneficiaries can contribute to value creation in a particular context. Our findings contribute to the understanding of service encounters by identifying multiple avenues for communication of associated competences and meanings. We find that codification of a practice requires multiple actors who engage collections of both encoding and decoding practices. We contribute to our understanding of roles by providing empirical evidence for the dynamics of roles, embedded with sets of practices, and how roles change depending on the practices that are enacted in different contexts. We learn that as contexts evolve so too do the practices, and thereby roles, needed for interaction and, ultimately, value creation.

Practice disruptions have been shown to occur as social structures framing a practice change and evolve (Arsel and Thompson 2011; Goulding et al 2009; Sandikci and Ger 2010) and as threats to individual and societal wellbeing disrupt routines (Campbell et al., 2020; Gonzalez et al 2021; Phipps and Ozanne 2017). Practices that are disrupted must first be re-codified with new encoding of the protocols that foster clear decoding to facilitate timely practice protocol compliance. Further, consumer research has shed light on practice misalignment (Epp et al., 2014; Thomas and Epp 2019) to reveal why practices fail to be adopted within social structures. We offer that the misaligned practices need to be copiously codified in order to locate the misaligned materials, competences or meanings. Once the misalignment is mapped, protocols can be modified to realign the practices.

References available upon request.

Special Sessions

Language and Gender

Chair: Jonah Berger, The Wharton School, University of Pennsylvania, USA

Paper #1: Quantifying Misogyny in Consumer Culture

Reihane Boghrati, Arizona State University, USA
Jonah Berger, The Wharton School, University of Pennsylvania, USA

Paper #2: An Examination of the Existence and Cause of Gender Bias in Customer Reviews

Shelly Rathee, Villanova University, USA
Sachin Banker, University of Utah, USA
Arul Mishra, University of Utah, USA
Himanshu Mishra, University of Utah, USA

Paper #3: Aaron is Warmer than Darren: Names Beginning with Vowels Convey Gender and Warmth

Ruth Pogacar, University of Calgary, Canada
Thomas P. Carpenter, Seattle Pacific University, USA
Ryan Rahinel, University of Cincinnati, USA

Paper #4: COVID-19 is Feminine: Grammatical Gender Influences Danger Perceptions by Activating Gender Stereotypes

Alican Mecit, HEC, France
LJ Shrum, France
Tina Lowrey, France

SESSION OVERVIEW

Language is pervasive. It's how marketers communicate with consumers, consumers communicate with one another, and how people consume news, stories, and information.

But while a burgeoning stream of literature has begun to explore language in consumer behavior, there has been less attention to the role of gender in this process. How do gendered associations with letters or grammar impact how people, or other stimuli (e.g., COVID-19), are perceived? How might cultural items (e.g., music) and online platforms create and reinforce stereotypes and bias? And how by understanding the answer to these questions can we avoid and mitigate potential gender biases in the future?

This session answers these questions and more, as it deepens understanding around these important topics. It integrates various methods (e.g., lab experiments, field experiments, dictionaries, and machine learning), and data sources (e.g., 250,000+ song lyrics and 10 million online reviews) to shed light on gender, language, and their impact on consumer behavior.

First, **Boghrati and Berger** quantify misogyny in consumer culture. While cultural items like songs have an important impact in creating and reinforcing stereotypes and biases, less is known about whether such items are actually biased against women, and how any such biases have changed over time. Natural language processing of over 250,000 songs indicates that lyrics are misogynous, and while such biases have decreased over time, they persist.

Second, **Rathee, Banker, Mishra, and Mishra** examine gender bias in customer reviews. Using word embeddings to analyze over 11 million reviews on platforms like Amazon and Yelp, they find that positive psychographic attributes (e.g., rational and loyal) are more likely to be associated with men and negative attributes (e.g., fickle and lazy) are more likely to be associated with women.

Further, they demonstrate the consequences of such associations for the products women are recommended and ads they are shown.

Third, **Pogacar, Carpenter, and Rahinel** investigate how associations between letters and gender impact the way people are perceived. They find that names beginning with vowels are perceived as more feminine, even when those names belong to men. Further, because women are seen as warmer, people whose names begin with vowels are also seen as warmer. Analysis of U.S. congresspeople's names suggest this may even influence which candidates get elected.

Fourth, **Mecit, Shrum, and Lowrey** examine how grammatical gender might impact responses to things like COVID. In gendered languages like French and Spanish, things like viruses can be referred to in ways that mark them as masculine or feminine (e.g., le or la). They find that such subtle shifts in language can have an important impact. Using feminine marked terms made COVID-19 seem less dangerous, for example, which reduced intentions to be cautious in the future.

Taken together, these papers highlight how language provides insight into a range of important phenomena. The session should be relevant to anyone interested in gender, public policy, technology, judgment and decision making, and social cognition, as well as those who are interested in using natural language processing and language to answer relevant CB questions.

Quantifying Misogyny in Consumer Culture

EXTENDED ABSTRACT

Gender bias is pervasive. Across a range of disciplines (e.g., business, science, and medicine) and outcomes (e.g., hiring, evaluation, and recognition), women are often perceived less favorably and treated less fairly.

One reason bias may be so sticky is that they continually reinforced through culture. Songs, books, and other cultural tastes and practices not only reflect the setting in which they were produced, but also shape the attitudes and behaviors of the audiences that consume them. Song lyrics that are aggressive towards women, for example, or portray them negatively, increase anti-female attitudes and misogynous behavior (Fischer & Greitemeyer, 2006). Lyrics that espouse equality, however, can boost attitudes towards women and encourage pro-female behavior (Greitemeyer et al., 2015). Consequently, one reason stereotypes and biases, as well as attitudes more generally, may be so persistent is that they are continually reinforced by the cultural items (e.g., songs, books, and advertisements) that consumers experience on an everyday basis.

But while such cultural items clearly have impact, their actual nature is less transparent. Consider music. Are song lyrics biased against women? Have they changed over time?

Attempts to answer such questions have been hampered by issues of scale and measurement. While researchers in a range of disciplines have argued about whether music lyrics are misogynist, most perspectives are based on small samples or one genre over a short period of time (Adams & Fuller, 2006; Harding & Nett, 1984). Without more comprehensive data, however, it is difficult to draw strong conclusions. Further, even if one were able to compile such a dataset, quantification would be challenging. Manually coding tens

of thousands of songs would be prohibitive. Finally, because existing analyses rely completely on human judgment, they are susceptible to bias. The same lyrics, for example, may seem more or less misogynistic depending on the gender of the person reading them.

To address these challenges, we use automated textual analysis. We collect over a quarter of a million songs from six music genres over 50 years and use emerging computational linguistic approaches to examine (1) whether women and men are talked about differently in music and (2) whether any such biases may have shifted over time. Further, we examine (3) whether any such biases are driven by male or female artists and (4) whether lyrics seem to impact public opinions about gender.

Data. Our dataset includes 258,937 songs from 1965 to 2018. It includes pop, rock, country, R&B, dance, and rap genres.

Method. We use word embeddings (Mikolov et al., 2013) to examine a subtle form of misogyny; whether women are less likely to be linked with desirable traits (i.e., competence). Word embeddings map words to high-dimensional vectors such that the relationship between vectors captures the semantic relationship between the words. Words that are similar, or used in similar contexts appear closer (Bhatia, 2017).

Competence and warmth are two universal dimensions of social cognition (Fiske et al., 2007). But while women are often perceived as warm (e.g., kind and supportive), they are less often perceived as competent (e.g., smart and ambitious; Fiske et al., 2002). Consequently, we use cosine similarity and word lists known to tap competence (Nicolas et al., 2020), and gender (Garg et al., 2018) to measure the relative association between each gender and competence, and how it changes over time. If a gender word and a competence word occur in similar contexts, their vector representations are close in the word2vec space, which results in a larger cosine similarity score and indicates that the two words are highly associated.

We train a word embedding model for each time period, which allows for separate calculation and comparison of misogyny at multiple points. We take the word vector representation for each word and average the vectors for each gender to obtain a single 300-dimensional vector for men and women at each time point.

Results. Results suggest that while lyrics have become less misogynous over time, they remain biased (Fig. 1). Words related to competence have become more associated with women, from strongly biased towards men to less so ($\beta = -.0002$, $p < .001$). Results remain similar through a number of robustness checks and words related to intelligence (Garg et al., 2018) and warmth.

Drivers of Lyrical Shifts. Ancillary analyses examine the role of artist gender. For male artists, words related to competence ($\beta = -.0004$, $p < .001$) become more associated with women, but for female artists' language shows less evidence of change ($\beta = .0001$, $p = .35$). This is likely due to the fact that female artists' language was less misogynistic to begin with (Fig. 2). Female artists are more likely to associate women with competence overall ($\beta = -.0144$, $p < .001$), and the gender * time interaction ($\beta = .0002$, $p < .001$) indicates that the gender difference decreased over time.

Relationship with Societal Stereotypes. To examine how observed lyrical shifts in lyrics relate to changes in societal gender stereotypes we collect data on all public opinion polls from 1946 to 2018 measuring gender stereotypes related to competence. Results indicate that misogyny in lyrics is strongly correlated with societal stereotypes ($r = .62$). Importantly, lyrical changes are most strongly related to *subsequent* public opinion (i.e., opinion polls that directly follow the time period of lyrics).

Conclusion. These findings shed light on misogyny in music. Lyrics tend to be biased against women, and while these biases have decreased, they persist. Further, they are driven by shifts in the language of male artists (because female artists were less biased to begin with) and such shifts are precursors of subsequent shifts in public opinion.

This work also highlights the value of novel computational linguistic techniques for consumer research. While more and more researchers are starting to use dictionary-based methods, other approaches have received less attention. Hopefully these approaches can unlock a range of interesting questions.

An Examination of the Existence and Cause of Gender Bias in Customer Reviews

EXTENDED ABSTRACT

People increasingly rely upon algorithmically curated feeds that digitally filter information according to their preferences and determine what they see and do not see. This has created information bubbles, or silos where people are served with attitude-consistent news and rarely confront views that run counter to their beliefs, prompting much current debate about the hugely influential role that algorithms play in shaping people's perceptions of the world (Bakshy, Messing, and Adamic 2015; Min et al. 2019). While prior discussions have typically focused on informational bubbles (e.g., regarding news, viewpoints), our research highlights a uniquely consumer-focused problem in the domain of segmentation and targeting. We suggest that similar algorithmic processes involved in microtargeting are giving rise to "consumption bubbles" in which consumers are shown tailored product recommendations and advertisements to match their profiles and predicted preferences. Using 11 million reviews and other large text corpora, our research documents the development of consumption bubbles that are biased against women. Subsequently, in three field studies, we demonstrate gender-prejudiced targeting of female consumers by the major digital ad targeting platforms.

Specifically, we first propose that algorithms learn gender-bias from human-generated text corpora. We define gender-bias as the greater association of negative psychographic attributes (e.g., *impulsive, fickle, lazy*) with women and positive psychographic attributes (e.g., *rational, loyal, creative*) with men. These text corpora are a repository of voluntarily produced thoughts of millions of people, unfortunately capturing implicit societal beliefs including prejudices and biases. Second, we propose that algorithms relying on text corpora to learn consumer preferences then incorporate such bias into filters to offer customized services to users (Caselles-Dupré, Lesaint, and Royo-Letelier 2018; Liu, Joty, and Meng 2015). For instance, if algorithms learn implicit associations from large text corpora that consider men *planned* and women *impulsive*, they may subsequently serve men with financial services ads for *planned* investors while women get ads for *impulsive* investors. Women, therefore, miss out on offers targeting positive attributes as algorithms may not consider women to be *rational, planned* consumers, and the harms of such biased consumption bubbles are exacerbated when combined with firms engaging in predatory advertising (e.g., payday lending or for-profit colleges, that focus on people's vulnerabilities by targeting impatient, isolated consumers; O'Neil 2016). Therefore, we argue that this dark side of consumption bubbles can significantly harm women by limiting access to welfare-improving goods and services online.

In the current work, we build steps to characterize our two propositions. First, we use two word-embedding algorithms, GloVe and word2vec, to examine the existence of marketplace gender-bias. We use Common Crawl and 11 million product reviews from Amazon and Yelp, to ask whether algorithms learn to associate women with negative psychographic attributes that are then leveraged for

customer segmentation. Common Crawl is a snapshot of the contents of the World Wide Web, a text repository of 2.45 billion web pages archived monthly, and is more than 234 terabytes in size. Our analysis indicates that word embedding algorithms indeed learn gender-biased consumer representations from these large text corpora, associating women with more negative and less positive customer psychographic attributes.

Second, using multiple digital ad targeting platforms, we conduct a series of field studies to examine the presence of consumption bubbles in gender-biased product recommendations and ad targeting. In the first field study, we assessed whether algorithms favored delivery to women or men when ads for health services targeted positive versus negative psychographic attributes. We designed advertisements for customers seeking health advice. Our manipulation involved creating two versions of the same advertisement such that one included positive psychographic words (*reliable, rational*, and *resolute*), and the second version included negative psychographic words (*unreliable, fickle*, and *instinctive*). We deployed these advertisements as versions of the same campaign on a large online advertising platform. We used the number of impressions for male and female consumers for each advertisement to analyze the results.

In a second field study, we partnered with an existing company (an aura reader) to evaluate gender-bias in ad delivery. In this study, the ad copy was specific to the business. The advertisements were similar except for the psychographic attribute words, including five positive attributes (*strong, relaxed, jolly, dependable, tough*) and five negative attributes (*fragile, moody, irritable, irresponsible, sensitive*), which were selected by the business. Our results consistently showed that across domains of health services and mental well-being services, ads targeting negative psychographic attributes were delivered significantly more often to women while those targeting positive psychographic attributes were delivered significantly more often to men.

A third field study further examined product search recommendations on common shopping portals. The results demonstrated that shopping search queries provided women with gender-biased product recommendations, resulting in biased consideration sets and choice. Finally, examining Google Books corpus spanning the 20th century helped us understand the decade-by-decade changes in gender-bias over time and enabled us to examine the role of societal interventions such as enhancing educational attainment in creating greater gender equality.

Our findings highlight significant ethical, legal, and policy ramifications for firms. Firms routinely gather insights using algorithms and use these insights in their decisions. If algorithms are influencing so many aspects of decision-making, they should not come with the risk of caveat emptor. Because consumers are largely unaware of how ad-targeting algorithms can limit their access to goods and services, firms need to consider fairness objectives in conjunction with ad efficiency and optimization objectives. Our findings serve to illustrate that the decisions that companies make in designing digital ad campaigns can result in gender-prejudiced delivery of ads. As has been shown within the offline marketplace, the decisions that firms have made in providing limited access to banking, healthcare, and grocery services has resulted in the disenfranchisement of consumers residing in disadvantaged neighborhoods (Allcott, Gentzkow, and Yu 2019; Kirby and Kaneda 2005). As companies increasingly depend upon online platforms to conduct commerce, they must be mindful of how their digital advertising decisions may result in corresponding gender-biased limitations to goods and services, potentially reintroducing historical societal prejudices against women into the digital marketplace.

Aaron is Warmer than Darren: Names Beginning with Vowels Convey Feminine Gender and Warmth

EXTENDED ABSTRACT

Marketing research has examined many linguistic effects of brand names (see Pogacar, Shrum, & Lowrey, 2018). However, less attention has been paid to proper names. People's names carry incredible weigh, prompting first impressions (Rooth, 2010) of perceived intelligence (Young et al., 1993) and attractiveness (Garwood et al., 1980). If a person's name conveys positive characteristics, might this affect marketing outcomes related to the individual, such as political electability?

Perhaps the most important personal characteristic is warmth (Fiske et al., 2007)—trustworthiness, friendliness, likability, and sincerity (Fiske, 2018). Names may communicate warmth linguistically via feminine gender associations. The Stereotype Content Model suggests that warmth is associated with traditional femininity (Fiske, 2010) and linguistically feminine brand names convey warmth (Pogacar et al. 2021). Analysis of the 200 most popular baby names on the U.S. Social Security Administration 2010–2019 list suggests vowel-first names are indeed gendered: girls' names more frequently begin with a vowel than boys' names (30% vs. 21%; $c^2 = 4.26$, $p = .03$).

We test whether names beginning with vowels influence gender and warmth perceptions, and whether vowel-names are associated with the likelihood of a person winning elected office. Four IAT studies, and analysis of U.S. congresspeople's names, show that vowel-names convey femininity and warmth–even when the names belong to men–and male Democrats in congress more often have 'warm' vowel-names than Republican counterparts.

Stimuli names were taken from the U.S. Social Security Administration's list of popular names (except Study 3) and pretested to control for phonetic name gender, numbers of syllables, and familiarity.

Study 1: Vowel—Gender Associations

Four hundred mTurk participants (51% male; M_{age} = 30.07) evaluated either men's names (Andrew; Anthony; Edward; Isaac vs. Caleb; Henry; Marcus; Zachary) or women's names (Anna; Eva; Ella; Isabelle vs. Gabrielle; Leah; Ruby; Sara) in an Implicit Association Test (IAT; Greenwald et al., 1998) by pressing the "E" or "I" key on their computer as quickly as possible in response to stimuli pairings of names ("Vowel Names" vs. "Consonant Names") and gender descriptors ("Masculine" [*Gentleman, Male, Man, Masculine*] vs. "Feminine" [*Female, Feminine, Lady, Woman*]). This produces reaction time measures assessing relative strengths of associations between vowel/consonant names and masculinity/femininity (Greenwald et al. 1998, 2003; Figure 1).

Participants showed a stronger implicit association between vowel-first names and femininity relative to consonant-first names for both men's (M_{IAT} = 0.32, SD = 0.44, $t[196]$ = 10.17, $p < .001$) and women's names (M_{IAT} = 0.20, SD = 0.41, $t[198]$ = 6.78, $p < .001$).

Study 2: Vowel—Warmth Associations

We next test whether vowel-first names are also implicitly associated with warmth. Four hundred participants (52% male; M_{age} = 31.58) were randomly assigned to evaluate the same men's or women's names used previously. "Vowel Names" and "Consonant Names" were paired with "Positive" (*Friendly, Honest, Likable, Warm*) and "Negative" (*Cruel, Dishonest, Hostile, Nasty*) warmth descriptors and their antonyms based on Fiske's (2018) scale items.

The IAT was otherwise the same as Study 1. We collected explicit measures of perceived warmth.

Participants showed stronger implicit associations between vowel-first names and warmth relative to consonant-first for both men's (M_{IAT} = 0.43, SD = 0.50, $t(191)$ = 11.94, $p < .001$) and women's names (M_{IAT} = 0.37, SD = 0.46, $t(193)$ = 11.18, $p < .001$). Explicit measures followed the same pattern (Men's: $t[199]$ = 3.97, $p < .001$; Women's: $t[199]$ = 6.32, $p < .001$).

Study 3: Vowel—Warmth Associations among Unfamiliar Names

We generated a sample of unfamiliar names from a website for expectant parents (thebump.com). Four hundred Prolific Academic participants (46% male; M_{age} = 31.67) were randomly assigned to evaluate either men's (Olin; Oren; Ulmer; Upton vs. Quinlan; Quirino; Waylen; Wilkie) or women's names (Onida; Ursa; Una vs. Quilla; Willa; Wilfreda) as in Study 2.

Participants again displayed a stronger association between vowel-first names and warmth relative to consonant-first names for both men's (M_{IAT} = 0.35, SD = 0.51, $t[193]$ = 9.53, $p < .001$) and women's names (M_{IAT} = 0.27, SD = 0.53, $t[194]$ = 7.26, $p < .001$). Explicit measures of men's names followed the same pattern ($t[197]$ = 2.30, $p = .02$); evaluations of women's names did not differ ($t[201]$ = -1.40, $p = .16$).

Study 4: Vowel—Warmth Associations in Vowel-First versus Vowel-Last Names

The phonetic gender score for quantifying name gender emphasizes the femininity of vowel-*last* names (Barry & Harper, 1995). We therefore test whether vowel-first or vowel-last names have greater influence on perceived warmth by pitting them against each other. Two hundred Prolific Academic participants (51% male; M_{age} = 32.49) evaluated men's names (Alex; Edward; Emmett; Isaac vs. Brady; Henry; Levi; Jonah) because not enough popular women's names had masculine gender scores to generate stimuli. The procedure was the same as in Studies 2-3. Participants displayed a stronger association between warmth and vowel-first names relative to vowel-last names (M_{IAT} = 0.44, SD = 0.46, $t[194]$ = 13.21, $p < .001$). Explicit measures followed the same pattern ($t[199]$ = 3.49, $p = .001$).

Study 5: Vowel versus Consonant Names in U.S. Congress

If vowel-first names convey warmth, this should be relevant for individuals who capitalize on warmth professionally–for instance, elected officials. However, not all political candidates benefit equally from this characteristic–Democrats are associated more with warmth than Republicans (Rule & Ambady, 2010). Chi-square analysis of male U.S. Congresspeople (to control for the greater number of female Democrats) as of March 2021 found that elected Democrats were more likely to have vowel-names than Republicans ($\chi 2$ (2, 358) = 8.34, $p = .015$).

This research shows that names beginning with vowels are associated with both femininity and warmth. This holds for both men's names and women's names, regardless of whether the names are familiar or unfamiliar. The warmth associated with vowel-names may help people achieve professional goals–like winning elected office–when warmth is a valued characteristic. However, one should not judge the warmth of a book by its cover–Darren is likely just as trustworthy and likable as Aaron.

COVID-19 is Feminine: Grammatical Gender Influences Danger Perceptions by Activating Gender Stereotypes

EXTENDED ABSTRACT

Unlike English, which does not assign gender to nonhumans, French is a gendered language, and thus assigns either the masculine article (*le*) or the feminine article (*la*) to all nouns. Remembering whether any noun takes the masculine or feminine gender mark can be difficult, but the situation for COVID-19 is potentially even more confusing because the umbrella term for the virus that causes the disease, coronavirus, takes the masculine gender mark (*le coronavirus*). In this research, across six experiments with speakers of gendered languages (French and Spanish), we investigate whether and how the grammatical gender of COVID-19 influences danger perceptions.

The assignment of grammatical gender to nonhumans is typically semantically arbitrary (Maciuszek and Świątkowska 2019), and gender marks of non-human nouns have nothing to do with the qualities of the objects (e.g., in French, beard (*la barbe*) is feminine, whereas make-up (*le maquillage*) is masculine). However, numerous studies have shown that grammatical gender can act as a perceptual cue that connotes femininity and masculinity (Konishi 1993). The presence of gender markers for nonhuman nouns in gendered languages directs attention to gender distinctions and makes them more salient (Boroditsky, Schmidt, and Philips 2003), and these processes occur nonconsciously (Boutonnet, Athanasopoulos, and Thierry 2012). Thus, stereotypical gender perceptions may be activated by grammatical gender. In terms of gender stereotypes, compared to men, women are perceived as weaker and more passive (Abele 2003; Fiske et al. 2002), whereas compared to women, men are perceived as more violent, aggressive, and destructive (Eagly and Steffen 1986; Rudman, Greenwald, and McGhee 2001). These stereotypical gender perceptions not only apply to humans, but also to entities that have human-like gender cues (Jung et al. 2014).

In Study 1, we tested the hypothesis that activating thoughts about the virus using the feminine gender mark would lead to lower perceptions of danger and lower intentions of taking precautions to avoid contracting the virus in potential consumption episodes compared to activating thoughts with the masculine gender mark. We tested this hypothesis in four separate studies (1a-1d) that were designed to address issues of generalizability and rule out alternative explanations. For Study 1a (French, N=155) and Study 1b (Spanish, N=152), in the masculine grammatical gender condition, the instructions and the questions referred to *le* (Study 1a) or *el* (Study 1b) *coronavirus*, and in the feminine gender condition they referred to *la COVID-19*. Study 1c (N=150) used native English speakers to rule out potential confounds, again with a one-factor design (coronavirus vs. COVID-19). Finally, in Study 1d (French, N=153), we manipulated grammatical gender by whether the instructions and questions referred to *le COVID-19* or *la COVID-19*. Although the masculine form for COVID-19 (*le COVID-19*) is grammatically incorrect, French speakers more often than not mistakenly use it. Thus, the manipulation also has ecological validity.

Results supported our hypotheses (see table 1 for results for all studies): French (Study 1a and 1d) and Spanish (Study 1b) participants in the feminine (vs. masculine) condition thought the virus would be less dangerous in the future and intended to be less cautious in their future behaviors. English participants' perceptions of future danger of the coronavirus and COVID-19 were virtually identical, suggesting that the effects are not driven by differences in danger perceptions independent of grammatical gender.

In Study 2 (N=305), we tested whether stereotypical judgments about the virus would mediate the effect of grammatical gender on

danger perceptions along with a theoretically relevant boundary condition (moderating role of chronic gender stereotypes). The manipulation of grammatical gender was the same as Study 1d (*le* vs. *la COVID-19*).

Replicating the previous findings, results showed that participants in the feminine (vs. masculine) grammatical gender condition perceived COVID-19 to be less dangerous and associated COVID-19 with more stereotypical feminine characteristics. The moderating effect of chronic gender stereotypes on the relationship between grammatical gender and feminine stereotypes about the virus was significant. Probing further, at the mean level of the moderator (chronic gender stereotypes), the effect of grammatical gender on danger perceptions was mediated by stereotypical judgments about COVID-19, and as predicted, the effect was stronger for participants who hold stronger traditional gender stereotypes compared to those who hold weaker stereotypes, the latter of which is not significant.

In Study 3 (*N*=200), we wanted to test whether the results of the previous studies generalize to diseases other than COVID-19. We constructed a set of actual diseases, half of which take the masculine gender mark in French and half take the feminine gender mark, and had participants rate their severity and fatality. We included a comparison condition of native English speakers, whose language does not grammatically mark gender, providing a baseline of perceived dangerousness independent of grammatical gender. A repeated measures analyses showed that only the predicted interaction was significant. French speakers perceived the diseases and health conditions that take the feminine grammatical gender to be less dangerous than the diseases that take the masculine grammatical gender. In contrast, English speakers actually perceived the feminine set to be slightly more dangerous than the masculine set. Thus, French speakers judged the feminine set to be less dangerous than the masculine set more so than did English speakers. Given that English does not grammatically mark gender for non-human nouns, we interpret the difference between French and English speakers as the effect of grammatical gender.

In this research, we demonstrate how a simple linguistic cue–the grammatical gender–affects both perceptions of danger and intentions to engage in precautionary behaviors. Across a series of experiments, we show that COVID-19 is considered less likely to be dangerous when the disease is marked with the feminine (vs. masculine) grammatical gender, and that the grammatical gender effect also generalizes to other diseases as well. To the best of our knowledge, this research is the first to causally demonstrate such downstream effects of grammatical gender on judgment and decision-making.

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The Power of Narratives

Chair: Jonah Berger, The Wharton School, University of Pennsylvania, USA
Discussant: Tom van Laer, University of Sydney, Australia

Paper #1: Quantifying the Shape of Narratives
Olivier Toubia, Columbia University, USA
Jonah Berger, University of Pennsylvania, USA
Josh Eliashberg, University of Pennsylvania, USA

Paper #2: The Story of My Life: How Nostalgia Persuades Through Narrative Transportation
Matthew Farmer, University of Arizona, USA
Jesper H. Nielsen, University of Arizona, USA

Paper #3: Significant Objects: How Eudaimonic Narratives Enhance Symbolic Value
Anne Hamby, Boise State University, USA
Ali Tezer, HEC Montreal, Canada
Jennifer Edson Escalas, Vanderbilt University, USA

Paper #4: Fictional Villains and Escape from Self
Rebecca Krause-Galoni, University of Iowa, USA
Derek D. Rucker, Northwestern University, USA

SESSION OVERVIEW

Narratives are an integral part of everyday life. Consumer share narratives with others through word of mouth, and consume narratives through things like advertisements, books, and movies.

But while it's clear that the creation and consumption of narratives is both frequent, and important, less is known about how narratives work and why some are more impactful than others. Why are some narratives (e.g., movies, tv shows, or even academic papers) more successful? Why is nostalgia marketing so persuasive? What shapes the value of objects featured in narratives? And why are we so drawn to villains?

This session addresses these questions and more, as it sheds light on the nature and impact of narratives. The papers integrate various contexts (e.g., advertisements, movies, and academic papers), research methods (e.g., lab experiments, field studies, and natural language processing), and data sources (e.g., participants at gaming conventions and thousands of stories) to understand what makes narratives engaging and how they shape consumer behavior.

First, **Toubia, Berger, and Eliashberg** examine why some narratives are more impactful. They use natural language processing to represent tens of thousands of narratives (e.g., movies and academic papers) as sequences of points in a high-dimensional space. Then, they extract features of those narratives (i.e., speed, volume, and ground covered) that help explain their success (e.g., why some movies are evaluated more positively).

Second, **Farmer and Nielsen** examine why nostalgia persuades. While some work has suggested that nostalgia works through positive emotions, the authors find that narrative transportation plays an important role. In contrast to other positive appeals, nostalgia sells because it triggers narrative reflection that is immersive and transporting.

Third, **Hamby, Tezer, and Escalas** test a novel mechanism for narratives effectiveness. While prior work suggests that narratives can boost product evaluation through the transfer of positive affect, this explanation has trouble explaining why so many companies have started using meaningful narratives in their communications (i.e., thought provoking content, that may even evoke negative emotions). The authors demonstrate that such meaningful narratives can create value by symbolic transfer of meaning.

Fourth, **Krause-Galoni and Rucker** examine why consumers are drawn to narrative villains. While prior work might suggest interest in villains stems from a desire to experience real-world wishes and therefore may imply sadism or maleficence, the authors suggest an alternative motivation. Rather than allowing consumers to experience something they secretly want, embracing villains allows consumers to distance themselves from life's pressures and to escape from their real-world worries.

Tom van Laer will act as a discussant, integrating themes and work in the space.

Taken together, these papers deepen understanding around narratives and their impact on consumer behavior. While the general notion of narrative transportation has been quite impactful in marketing, this only scratches the surface of the interesting questions and directions in the space. The session should be relevant to anyone interested in narratives, persuasion, emotion, and consumer culture well as those who are interested in using natural language processing and large datasets to understand cultural success.

Quantifying the Shape of Narratives

EXTENDED ABSTRACT

Narratives are a powerful vehicle informing, entertaining, and making sense of the world. But why are some narratives more successful than others? And could a simple set of measures help explain variation in successful narratives across domains?

Narratives have long been described geometrically, as having "shapes", arcs, moving in circles, or covering a lot of ground. But while these suggestions are intriguing, little empirical work has actually measured such shapes or studied their impact. Might certain ways of unfurling a set of ideas increase their success? Might certain ways of structuring movies boost liking, for example, or certain ways of structuring academic papers increase citations?

We use natural language processing and machine learning to address these questions. Using state-of-the-art techniques, we measure the shapes of thousands of narratives from a variety of domains (i.e., movies, TV shows, and academic papers) and test how they relate to success (e.g., evaluations or citations).

We take narratives (e.g., academic papers), break them into approximately equal sized chunks or windows, plot each chunk in a high-dimensional space, and examine the path between chunks. To do so, we use word embeddings (Mikolov et al, 2017), a technique that transforms words into high-dimensional numerical vectors such that the relationship between vectors captures the semantic relationship between words. Each narrative is represented by a sequence of T points, $x_1, x_2, .. x_T$, in the 300-dimensional latent word embedding space.

From these sequences of points, we calculate new measures that characterize the shape of each narrative's path.

Speed. Speed, or pacing, is how quickly a narrative moves between consecutive points. Some narratives are faster, moving from one idea to the next relatively quickly, while others move more slowly. To capture this, we measure how far narratives travel between consecutive chunks. We compute the Euclidean distance between consecutive points: $distance(t) = \|x_{t+1} - x_t\|$. Word embeddings capture semantic similarity (Bhatia 2017), so consecutive narrative chunks that are further away are more likely to discuss different topics or

themes. Normalizing total distance by narrative length generates the narrative's *average speed*:

$$\text{speed} = \frac{\sum_{t=1}^{T-1} distance(t)}{T-1}$$

Rapid changes (i.e., high speed) should make narratives more engaging and exciting (Gergen and Gergen, 1986), but require additional cognitive effort to process and connect (Monahan, Murphy and Zajonc, 2000). Consequently, the excitement that speed generates likely comes at a (cognitive) cost. Consequently, speed may have a positive or negative relationship with success, depending on the context.

While speed is useful, it provides an incomplete picture. Two narratives could cover the same distance with quite different shapes (e.g., one goes out and back, while the other goes out and then out even further). Further, speed focuses only on consecutive points, but the meaning of narratives is often interpreted from the entire path (Bruner 1990).

Circuitousness. To begin to capture these nuances, we also measure *circuitousness*. We identify the shortest path a narrative could have taken, given the first point x_1, the last point x_T, and the other set of points $\{x_2, \dots x_{T-1}\}$ "visited" during the narrative. This optimization problem is a modified version of the well-known Traveling Salesman Problem. After solving this for a given set of points, we quantify the extent to which the actual sequence $\{x_1, x_2, \dots x_T\}$ deviates from optimal. *Circuitousness* is defined as the ratio of actual distance travelled to the shortest possible path. That is

$$\text{circuitousness} = \frac{\sum_{t=1}^{T-1} distance(t)}{length\ of\ shortest\ path}$$

While circuitousness might seem undesirable, given previously explored concepts are easier to process (Monahan, Murphy and Zajonc, 2000), circuitousness may provide the experience of movement or stimulation with reduced cognitive cost.

Volume. To further quantify a narrative's overall path, we also measure its *volume* (i.e., how much ground it covers). We approximate points $\{x_1, x_2 \dots x_T\}$ with an ellipsoid by solving an optimization problem that finds the minimum volume ellipsoid containing all these points (Moshtagh, 2005). Normalizing this by the dimensionality of the ellipsoid provides our measure of the volume of the narrative. Similar to speed, volume presents a tradeoff. Covering a lot of ground allows audiences to see and connect a wide range of topics but may increase the cognitive burden.

Next, we examine the relationship between these measures and narrative success. Examining over **4,000 movies** finds that those that move faster (i.e., travel further in consecutive periods on average) are evaluated more favorably (Table 1, column 1). Examining over **12,000 TV show episodes** finds a similar result (i.e., speed is good; Table 1, column 2). Given that distant points are less similar, they should be more surprising or unexpected, which may be beneficial.

TV show episodes that cover less volume are also evaluated more favorably. While one could interpret this as driven by TV show episodes being shorter than movies, note that volume is normalized by the number of chunks of text, indicating that even for text of the same length, TV show episodes that cover too much ground are evaluated less favorably. This may be driven by what audiences look for when they consume the different mediums. While high volume movies may fit audiences expectations of being transported through a narrative, TV shows may be consumed as a quick diversion, and thus volume may have a more negative effect

Examining citations of almost **30,000 academic papers published in 22 journals** reveals a distinctly different pattern (Table 1, column 3). First, speed has the opposite effect; papers that move faster are cited less. Rapid changes should increase the effort required to

follow an argument which may reduce citations. Second, volume has the opposite effect; papers that cover more ground are cited more. This is consistent with the finding that papers which link disconnected areas of knowledge receive more cites (Uzzi et al 2013). Finally, papers that are more circuitous receive more citations. Consistent with the fact that "spiral" curriculums which revisit similar topics helps students learn (Harden 1999), by repeatedly touching on similar themes, circuitousness may make it easier to integrate disparate information.

Overall, this work measures features of narrative structures and how they are linked to success.

The Story of My Life: How Nostalgia Persuades Through Narrative Transportation

EXTENDED ABSTRACT

To see that nostalgia marketing sells, one only needs to look to advertising's biggest stage, the Super Bowl, where nostalgia was a clear theme in each of the past three years (Maheshwari 2019; Meehan 2020; Smith 2021). In the 2020 Super Bowl, for example, Amazon took people on a time traveling journey from the dusty trails of the Old West to the golden era of R&B in the 2000s. Popular press and industry experts alike are also convinced of nostalgia's persuasive powers (Gross 2018; Miranda 2017; Olenski 2016). Forbes, for example, called nostalgia a "highly effective way for marketers to reach millennials" (Friedman 2016). Industry experts and researchers alike suggest that nostalgia persuades through positive emotions. In this research we propose, and show, that this current understanding of how nostalgia persuades is incomplete.

Building on findings that narrative transportation can result from mental simulation (Nielsen, Escalas, and Hoeffler 2018; Philips 2017), we propose that nostalgia marketing persuades consumers, at least in part, by encouraging them to generate vivid mental narratives of the past that are immersive and transporting. Specifically, we propose that nostalgia marketing persuades by encouraging consumers to reflect on vivid, immersive memories of a nostalgic past in the form of narratives. These nostalgic reflections become so immersive that they can lead consumers to experience a phenomenon known as narrative transportation, a feeling of cognitive and emotional engagement that makes people more receptive to persuasive messages.

This work contributes to theory in three ways. First, we show that people reflect on their nostalgic past in the form of vivid, immersive narratives. We thus expand on prior work highlighting the role of nostalgic reflection (Biskas et al. 2018; Huang, Huang, and Wyer 2016) and provide a fuller, more detailed explanation for why nostalgia has such a powerful effect on consumers. Second, we decouple the experience of nostalgic reflection from the emotion of nostalgia and thus demonstrate that the relationship between nostalgic stimuli and the emotional components of nostalgia is more complex than a simple stimulus response model might suggest (MacKenzie, Lutz, and Belch 1986). Finally, we demonstrate another way in which self-generated mental simulations can encourage narrative transportation (Nielsen et al. 2018), further expanding the scope of potential experiences that take on a narrative structure.

Across six studies (N = 1,148) we show that nostalgia marketing persuades in part by mentally transporting people to a nostalgic past. The first three studies provide evidence that nostalgic stimuli trigger higher levels of narrative transportation than non-nostalgic stimuli. In study 1a (N = 142, MTurk), we find that nostalgic memories ($M_{\text{NostalgicMemory}}$ = 6.12, SD = .88) are more transporting than immersive ($M_{\text{ImmersiveMemory}}$ = 4.63, SD = 1.97; $t(139)$ = 9.47, $p < .001$) or

ordinary memories ($M_{OrdinaryMemory}$ = 3.02, SD = 1.81; t(139) = 4.59, p < .001).

In study 1b (N = 201, MTurk), we directly manipulated two key aspects of memories that make them more nostalgic—warm feelings and a sense of loss—by asking participants who no longer live in their hometown to reflect on their favorite place (warm feelings) versus their least favorite place in either their hometown (a sense of loss) or their current town. Participants in study 1b were most transported when they wrote about their favorite place in their hometown (i.e., memories that are highly nostalgic; $M_{Favorite\_Hometown}$ = 6.91, SD = 1.14; $M_{LeastFavorite\_Hometown}$ = 5.97, SD = 5.97; $M_{Favorite\_Current}$ = 6.50, SD = 1.38; $M_{LeastFavorite\_Current}$ = 6.31, SD = 1.24; two-way ANOVA interaction: F(1, 197) = 4.46, p = .04).

In study 1c (N = 301, MTurk), we showed that advertisements with nostalgic (vs. modern) stimuli—but without a narrative format or instructions to simulate—still evoke more narrative transportation than do their modern equivalents ($M_{Nostalgic}$ = 5.59, M_{Modern} = 4.92; F(1,211) = 63.13, p < .001). We found this effect across multiple ad pairs that featured different products, designs, and nostalgic stimuli.

Studies 2 and 3 provide evidence that nostalgia marketing is persuasive in part because it leads to more narrative transportation, distinct from positive affect. In study 2 (N = 125, Prolific), we find that an ad with nostalgic (vs. modern) stimuli boosts brand attitudes ($M_{Nostalgic\_Ad}$ = 6.48, SD = 1.82; M_{Modern_Ad} = 5.63, SD = 2.56; F(1, 121) = 4.45, p = .037), even when the two ads are identical in design, branding, and messaging. Importantly, we also find that narrative transportation mediates this effect (Hayes 2017; 5,000 bootstrap samples, PROCESS Model 4; I.E. = .51, 95% CI [.02, 1.04]). Study 3 (N = 221, Prolific) replicates this mediation and shows that narrative transportation mediates above and beyond the positive affect elicited by the advertisements (PROCESS Model 4; I.E. = .12, 95% CI [.01, .26]).

In study 4 (N = 158, undergraduate lab) we further contrast the separate effects of narrative transportation and positive affect on persuasion by introducing a cognitive load manipulation to interfere with participants' ability to reflect on nostalgic memories. Consistent with a narrative route to persuasion, we found that under high cognitive load, the nostalgic ad became significantly less persuasive ($M_{NostalgicAd\_LowCogLoad}$ = 6.06, SD = 1.58; $M_{NostalgicAd\_HighCogLoad}$ = 4.86, SD = 1.89; t(154) = -3.05, p = .003) while the modern control ad was unchanged ($M_{ModernAd\_LowCogLoad}$ = 5.12, SD = 1.67; $M_{ModernAd\_HighCogLoad}$ = 5.44, SD = 1.70; two-way ANOVA interaction: F(1,154) = 7.59, p = .007).

Combined, these findings show that that nostalgia marketing does not just persuade through positive emotions, as is commonly described by both practitioners and academics. Rather, we show that nostalgia marketing also triggers vivid narrative reflection on the past that makes messages more transporting and thus more persuasive. These findings suggest that nostalgia can lead to deeper, longer-lasting persuasive effects than purely positive ads. Furthermore, these findings suggest that nostalgia appeals will be more effective than positive appeals in situations where elaboration and immersion are possible.

Significant Objects: How Eudaimonic Narratives Enhance Symbolic Value

EXTENDED ABSTRACT

The consumption of fictional narratives is a sought after, pleasurable experience, as evidenced by the multibillion-dollar narrative-based entertainment industry. However, consumers often seek out narratives that are not necessarily hedonically enjoyable (e.g., *Casablanca* and *Schindler's List*). These narratives contain eudaimonic themes, or those that explore broad life concerns such as significant human relationships, self-development, and societal betterment. Such eudaimonic content is also increasingly featured in advertisements. However, little is known about whether such ads are effective: do they enhance the value of products featured in the ads, and if so, how?

The current research addresses these questions. We build on the model of narrative transportation, or the extent to which the reader is immersed in a narrative. The narrative persuasion process is characterized by emotional engagement, mental imagery, and allocation of attention to the story, and is an inherently enjoyable process (Green and Brock 2000). The hedonically enjoyable aspect of transportation underpins past research on how narratives persuade: through positive affect transfer (van Laer et al. 2014, Escalas 2007).

Alternatively, research in communications posits that eudaimonic stories are consumed for the life lessons and personal insights they provide (Oliver and Raney 2011). Our research proposes that eudaimonic narrative content enhances the valuation of objects depicted in the story because the message transforms these objects into symbols of the meaning featured in the narrative. We assert that this process occurs separately from the hedonic affect transfer process shown in consumer research on narrative transportation (e.g. van Laer et al. 2014).

Our research also proposes that the positive effect of eudaimonic narratives on object value is stronger when an object is central to the narrative plot, where the meaning of a story resides, and after a worldview coherence threat, when consumers are motivated to reaffirm meaning in their lives (Heine, Proulx, & Vohs, 2006). Taken together, this research unravels how eudaimonic narratives create value and contributes to a more nuanced understanding of narrative persuasion.

Thus, the current work makes three main contributions to consumer research on narrative consumption: First, we identify and define eudaimonic thematic content as an influential dimension of narratives, building on prior consumer research (van Laer et al. 2014). Second, we demonstrate the influence of eudaimonic narrative themes on consumers' valuation of an object, adding nuance to the narrative transportation model of persuasion, which focused primarily on hedonic affect transfer (e.g., Escalas 2007). Third, we explicate the process through which eudaimonic narratives persuade. They serve as a symbol-creation mechanism, connecting narrative persuasion research to literature that describes how symbols obtain their meanings (i.e., McCracken 1989).

We accomplish this across five studies, three of which we plan to present at ACR. In the first study, we manipulate eudaimonic theme (present vs. absent), measure symbolic transfer as our proposed mediator, and include hedonic affect as a covariate. We find that participants in the eudaimonic narrative condition are willing to pay more for the focal notebook product (M = \$4.20) than those in the eudaimonic theme absent condition (M = \$3.16, F(1, 122) = 6.40, p = .013, η_p^2 = .050). A PROCESS analysis (model 4; Hayes, 2009) reveals a significant indirect effect of eudaimonic theme on product valuation through product symbolism ($\beta_{indirect}$ = .65, SE = .26, 95% CI = .188, 1.212), controlling for hedonic affect.

The additional two studies we plan to present explore boundary conditions. Study 2 shows that the positive effect of eudaimonic narrative content is conditioned on the centrality of the object to the narrative plot. A 2 (eudaimonic theme: absent, present) x 2 (product-plot centrality: peripheral, central) ANCOVA with raffle tickets purchased as the DV, controlling for hedonic affect, reveals a significant interaction (F(1, 187) = 4.60, p = .033, η_p^2 = .024). Planned contrasts

show that when the focal product is central to the plot, participants purchased more raffle tickets in the eudaimonic theme present condition ($M = 3.71$) compared to the absent condition ($M = 1.86$, $F(1, 187) = 6.70$, $p = .01$, $\eta_p^2 = .035$). However, when the product is peripheral to the plot, there is no effect of eudaimonic theme ($M_{present} = 1.84$ vs. $M_{absent} = 2.14$; $F(1, 187) < 1$, $p > .60$). Additionally, we examine the symbolic meaning transfer mediation process (PROCESS model 8) and find that the conditional indirect effect of eudaimonic theme on raffle tickets through product symbolism is significant in the plot-central condition, $\beta_{indirect} = .98$, $SE = .32$, 95% CI = .428, 1.683, but is not in the plot-peripheral condition, $\beta_{indirect} = .09$, $SE = .24$, 95% CI = -.397, .547. (Index of moderated mediation: $\beta = .88$, $SE = .39$, 95% CI = .214, 1.753.)

Study 3 demonstrates that the positive effect of eudaimonic narrative theme is enhanced for consumers who have experienced a worldview coherence threat. An ANCOVA with product valuation as the DV, eudaimonic theme (present vs. absent) and worldview coherence threat (present vs. absent) as IVs, controlling for hedonic affect, reveals a significant interaction, $F(1, 199) = 4.19$, $p = .042$, $\eta_p^2 = .021$. In the threat present condition, eudaimonic theme presence ($M = \$3.04$) enhances product valuation relative to its absence ($M = \$2.17$, $F(1, 199) = 15.77$, $p < .001$, $\eta_p^2 = .073$). However, without a worldview coherence threat, there is no effect of eudaimonic theme ($M_{present} = \$2.38$ versus $M_{absent} = \$2.62$, $F(1, 199) = 1.25$, $p = .266$, $\eta_p^2 = .006$). Additionally, we examine the symbolic meaning transfer mediation process (PROCESS model 14). The conditional indirect effect of eudaimonic theme on product valuation through symbolic transfer is significant in the threat absent condition, $\beta_{indirect} = .07$, $SE = .05$, 95% CI = .001, .188, but is stronger in the threat present condition, $\beta_{indirect} = .19$, $SE = .08$, 95% CI = .049, .373, as indicated by the index of moderated mediation, $\beta = .12$, $SE = .07$, 95% CI =.006, .284. The results of our studies underscore the richness in the ways that stories create value for consumers, and how this value comes to be captured in objects.

Fictional Villains and Escape from Self

EXTENDED ABSTRACT

The billion-dollar entertainment industry is fueled, in part, by opportunities for individuals to relate to, or even fantasize taking on the role, of individuals very different than themselves. For example, interactive narratives, such as role-playing games (RPGs), allow consumers to influence and become part of a story's events by role-playing as a fictional character (Oh, Lim, and Hwang 2020). Consumers can fantasize playing the part of a hero or a villain, a thief or a king. Creating and marketing these entertainment properties requires an understanding of what drives consumers' character preferences. In this work, we aim to understand when consumers' motivations result in a preference to play villainous characters.

Based on prior research, one possibility is that the only consumers drawn to villains are those with villainous real-world desires. Specifically, some research suggests that those who play villains in games are sadistic themselves (Greitemeyer and Sagioglou 2017). Indeed, the literature suggests a primary motivation for engaging in fantasy is a desire to vicariously experience one's real-world wishes – a motive we label *upward fantasy*. Yet, games and other interactive narratives such as "Grand Theft Auto" that allow consumers to portray the villain are extremely popular (Gilbert 2020; Verma 2020). If all consumers of these games are enacting upward fantasies, that would imply sadism is rampant. In contrast, we suggest a more benign explanation: we propose consumers are often drawn to interactive narratives to fulfill a need for *outward fantasy*. While upward fantasy focuses on approaching real-world goals, outward fantasy represents the desire to temporarily alter, ignore, or avoid one's real-world goals.

We propose that people seek to momentarily distance themselves from their real-world goals to avoid psychological stress. Pursuing important life goals routinely causes psychological strain, or feeling pressured or stressed, which can produce a desire for escape (Baumeister 1991; Carver and Scheier 1989; Connor-Smith and Flachsbart 2007). Forms of entertainment—such as interactive narratives—that allow for outward fantasy may offer a relief from stress by creating a momentary distance from one's real self. Moreover, given that most people want to see themselves as morally good (Blasi 1984; Greenwald 1980), villains—individuals who are "bad" by definition—would be particularly distinct from the real self and therefore should be particularly suited to serve the need for an outward fantasy.

In short, the current work suggests that the desire to portray a villain in an interactive narrative does not necessarily imply real-world sadistic goals. Instead, we propose the experience of psychological strain predicts interest in portraying a villain due to a desire to engage in outward fantasy, or a fantasy that provides full escape from one's real-world worries. This work makes several contributions to the literature on consumption of interactive narratives. First, we propose an alternative explanation besides mass sadism to reconcile assumptions about the use of interactive narratives for wish fulfillment with the massive popularity of villainous games. Second, we introduce novel predictions about the specific narrative content a consumer is likely to prefer, which can inform how and when such products should be marketed. Third, we offer one means of distinguishing when attraction to villains is problematic versus benign, which could help with public policy and interventions aimed at reducing the impact of violent games on real-world violence.

We test these ideas across three studies (N = 903). Study 1 examines whether consumers' feelings of psychological strain predict their interest in portraying a villain in an interactive narrative as well as their likelihood to choose the villain over another character (the hero). The first author programmed an interactive narrative in JavaScript called "Summer Weekend," and participants were offered two different versions of the game: one where they could play as "Heroic Hal," and the other as "Villainous Vic." The dependent measure was consequential in that participants knew their character selection would influence the choices they could make in the game. Participants' feelings of psychological strain significantly predicted increased interest in portraying Villainous Vic ($B = 0.45$, $SE = 0.16$, $t(46) = 2.78$, $p = .008$). This was specific to the villain; psychological strain actually decreased participants' interest in portraying Heroic Hal ($B = -0.32$, SE = 0.14, $t(45) = -2.18$, $p = .035$). Finally, a logistic regression revealed psychological strain significantly predicted the choice of the villain over the hero ($B = 0.61$, $SE = 0.24$, $z = 2.55$, $p = .011$).

Study 2 tests whether the effects in Study 1 replicate for interest in portraying villains from movies. Responses were collected from shoppers checking out at a costume store just before Halloween. Participants indicated their feelings of psychological strain and were also asked their interest in attending a costume party dressed as their favorite movie villain. Consistent with Study 1, psychological strain significantly predicted interest in dressing as a favorite movie villain ($B = 0.49$, $SE = 0.16$, $t(40) = 3.12$, $p = .003$). In contrast, the effect of strain on interest in the hero was not significant ($p > .1$).

In Study 3, we conducted a field study of participants at Gen Con, which is the largest tabletop gaming convention in North America. Participants who played an RPG at Gen Con answered questions

about themselves and the character they created for their game. Feelings of psychological strain significantly predicted how "evil" they made their character, from 1-Purely good to 7-Purely evil ($B = 0.08$, $SE = 0.04$, $t(809) = 2.16$, $p = .031$). The effect was mediated by their motivation to use interactive narratives as outward fantasies (indirect effect: $B = 0.01$, $SE = 0.01$, 95% CI: [0.002, 0.02]).

The results of these studies demonstrate how the concept of outward fantasy can help predict specific content different consumers may seek in interactive narratives. In doing so, it offers insight into when consumers might be particularly interested in entertainment forms that allow them to play a villain. Specifically, rather than villains being a means to fulfill consumers' sadistic fantasies, villains may simply facilitate a momentary reprieve from the psychological stress of trying to maintain one's desired self.

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How Modality Shapes Consumer Behavior

Chairs: Shiri Melumad, The Wharton School, University of Pennsylvania, USA
Jonah Berger, The Wharton School, University of Pennsylvania, USA
Discussant: Demi Oba, Duke University, USA

Paper #1: Vocalizing Search: How Voice-Assisted Search Alters Queries

Shiri Melumad, The Wharton School, University of Pennsylvania, USA

Paper #2: Expression Modalities: How Speaking and Writing Shape What Consumers Say, and Its Impact

Jonah Berger, University of Pennsylvania, USA
Matt Rocklage, University of Massachusetts, Boston, USA
Grant Packard, York University, Canada

Paper #3: Smartphones and the True Self: How Technology Influences Disposition Expression

Camilla Eunyoung Song, University of Florida, USA
Aner Sela, University of Florida, USA

Paper #4: How Do People Communicate Their Experiences Visually and Verbally? More Words and More Pictures

Gizem Ceylan, University of Southern California, USA
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SESSION OVERVIEW

Whether searching for information, sharing word of mouth, or making choices, consumer behavior occurs through different modalities. Consumers can type search queries or use voice assistants like Alexa, email a friend or call them on the phone, communicate through text and images, and make choices over the computer or through their smartphones.

But while modalities, and devices, have only become more ubiquitous, their nature, and how they might impact consumer behavior, is less clear. How might typed versus voice-assisted search, for example, shape the types of information consumers look for? Might speaking versus writing shape the content of word of mouth, and thus its impact on an audience? How might making choices on a smartphone versus PC impact whether consumers choose options more consistent with chronic dispositions? And how does the information people convey through text versus images differ?

This session examines these questions and more, as it works to deepen understanding around how modalities shape consumer behavior.

First, **Melumad** examines how modality impacts what people search for. While until recently search mainly involved typing, today many consumers are increasingly relying on voice-assisted technology (e.g., Siri, Alexa) to engage in goal-directed search processes. Four experiments demonstrate that vocalizing search encourages greater deliberation and self-presentational concerns, which in turn, impact both how consumers phrase queries, and the types of information they search for.

Second, **Berger, Rocklage, and Packard** investigate how modality impacts the content, and consequences, of word of mouth (e.g., sharing opinions of products and services). While word of mouth suggests interpersonal communication through voice, consumers also often communicate through writing. Five studies demonstrate that because the spontaneous (vs. goal-directed) process of speaking involves less deliberation, it increases the emotionality of communication. This difference in language produced, in turn, can increase persuasion.

Third, **Song and Sela** examine how the modality used to make choices can shape what consumers choose. While people vary in their risk tolerance, preferences for vices over virtues, and degree to which they maximize vs. satisfice, such chronic dispositions don't always shape choice. Four studies, however, demonstrate that because smartphones activate private self-awareness to a greater extent than PCs, choosing on a smartphone leads people to make decisions that are more consistent with their chronic dispositions.

Fourth, **Ceylan and Diehl** study how people communicate experiences visually and verbally. While one might imagine that communicators use these two modes as complements, conveying different information through images and words, they find the opposite. People seem to convey the same information in both channels, to make sure important information is clearly communicated.

Taken together, these papers shed light on how modalities shape consumer behavior. Demi Oba will close the session by providing an overarching model that integrates different aspects of modality. The session should be relevant to anyone interested in judgment and decision making, word of mouth, emotion, and choice, as those who are interested in understanding how emerging technologies may shape consumer behavior.

Vocalizing Search: How Voice-Assisted Search Alters Queries

EXTENDED ABSTRACT

Over the past decade, voice-assisted search—such as Amazon's Alexa smart speaker or Google search's dictation feature—has increasingly supplanted traditional online search as a major channel through which consumers seek and gather information. As consumers rely more on voice-assisted technology for search, how might this alter the way they seek information?

In this paper I investigate this question. Drawing upon a variety of literatures including human-computer interaction (e.g., Cowan et al. 2017), psycholinguistics (e.g., Rubin 1987), self-presentation theory (e.g., Goffman 1959), and word-of-mouth (e.g., Berger and Iyengar 2013), I propose a theory of how vocalizing queries systematically affects the process of consumer search, as well as its downstream consequences. In particular, I posit that vocalizing (vs. typing) queries evokes two distinct psychological mechanisms that alter the content of queries. The first is that speaking a query out loud naturally increases consumers' self-presentational concerns (e.g., Chafe and Tannen 1987; Shen and Sengupta 2018), which leads them to seek information in a manner that puts them in a more flattering light, such as trying to appear more knowledgeable or avoiding searching for embarrassing information. Second, because of the "cost" of misphrasing a vocalized query (due to the relative difficulty of editing oneself) when seeking out desired information, consumers deliberate more on their query before indicating it, leading them to provide more specific descriptions of what they are looking for—for example, by naming a specific model/brand of a product. I show that both of these effects manifest in terms of how consumers construct queries for the *same* type of information, as well as the types of information they naturally elect to search for.

I tested these predictions across four experiments. In the first experiment, 700 participants from the Turk Prime panel were given a

specific search goal—here, searching for a product that would allow them to be more productive at home—and were randomly assigned to indicate their queries either by typing into a simulated search engine (e.g., Google) or vocalizing their queries to a simulated voice assistant (e.g., Alexa). After indicating their query, participants responded to a series of questions that measured (1) the degree to which they experienced self-presentational concerns during the task (1-5 scale), and (2) the degree to which they deliberated about their query before indicating it (1-7 scale). After transcribing the audio data (using AWS' "Transcribe" API), all queries were subject to a set of text analyses, including ratings from 1,500 judges from Prolific Academic (blind to condition) who rated six randomly selected queries along two dimensions (1-7 scale): (1) *self-enhancement* – the extent to which the product searched for revealed the consumer's unique personal tastes/preferences; and (2) *description specificity* – how narrowly/specifically the consumer described the product s/he was searching for.

The results supported the Hypothesis. Relative to those in the text condition, participants in the voice condition reported that, when indicating their query, they felt more conscious of how it would come across to others (M_{voice} = 2.24 vs. M_{text} = 1.70; $F(1, 684)$ = 32.91, $p <$ .001), and deliberated more on their queries before indicating them (M_{voice} = 4.37 vs. M_{text} =3.53; $F(1, 684)$ = 28.84, $p < .001$). Next, as hypothesized, vocalized queries were perceived as more self-enhancing than typed queries, with judges rating the products in spoken queries as appearing to reveal more about the participant's particular preferences/tastes (M_{voice} = 3.99 vs. M_{text} = 2.88; $F(1, 2963)$ = 267.75, $p < .001$, η^2 = .08). Likewise, spoken queries were also rated as more narrowly defining what the participant was searching for than typed queries (M_{voice} = 4.42 vs. M_{text} = 4.13; $F(1, 3028)$ = 18.09, $p < .001$, η^2 = .01). Finally, as shown below, a structural-equation model supported the proposed theoretical model.

Three subsequent experiments established the robustness of these effects across a range of domains. Experiment 2 (N=771) conceptually replicated the above findings in a more constrained task where all participants were asked to search for a set of wireless headphones (such that the searched product was held constant across conditions). The results again provide evidence for greater self-enhancement and greater specificity in vocalized search, here reflected in the language that was used to search for the same product (rather than in the types of products themselves): Participants in the voice condition generated queries that made them seem more self-enhancing (M_{voice} = 2.59 vs. M_{text} = 2.34; $F(1, 3134)$ = 24.92, $p < .001$) and contained more specific descriptions (M_{voice} = 4.39 vs. M_{text} = 3.87; $F(1, 4164)$ = 95.13, $p < .001$) as rated by outside judges. Experiment 3 (N=761) then examined whether the tendency for consumers to be more self-enhancing in vocalized search would also manifest in a greater *avoidance* of information that might be embarrassing. To test this, participants were again randomly assigned to vocalize or type their queries, but this time were asked to pose a query about a personal health question. The results provide convergent evidence for differences in self-enhancement, with judges rating vocalized queries as less embarrassing/more shareable than typed queries (LSM: M_{voice} = 5.58 vs. M_{text} = 5.25; $F(1, 3324)$ = 23.62, $p < .001$). In Experiment 4 all participants were asked to search for a product using the same search engine (Google), but were now randomly assigned to type their query (as in the prior studies) or vocalize it as if they were dictating it into the search engine (simulating Google's dictation feature); the results confirmed that the effects were robust to this context, thereby mitigating concerns that the findings were merely an artifact of differences in the norms associated with voice assistants (e.g., Alexa) versus standard Google search.

Expression Modalities: How Speaking Versus Writing Shapes What Consumers Say, and Its Impact

EXTENDED ABSTRACT

Word of mouth is both frequent and important. But might the way consumers communicate (i.e., speaking versus writing) shape the language they use? And, thus, the impact of what they share?

While a great deal of research has begun to examine the behavioral drivers of word of mouth, there has been less attention to how communication modality might shape what consumers share. Sometimes consumers speak to others (e.g., talking face to face or over the phone) and other times they write (e.g., over email or text). Might speaking rather than writing about a restaurant, for example, shape the way consumers talk about it, and, thus, their audience's interest in eating there?

While communication mode may seem inconsequential, we suggest it can have an important impact on word of mouth. Because speaking in the context of conversations is often a more spontaneous process that involves less deliberation than writing, we suggest that it can encourage more emotional language. Indeed, deliberation has been shown to decrease emotion in other contexts (Shiv and Fedorikhin 1999). As a result, communication modality can spillover to impact the persuasiveness of communication. Five experiments test these possibilities.

Experiment 1 provided a test of the basic effect. Participants shared their opinion about a restaurant either orally (i.e., into a microphone) or in writing (i.e., through a computer). To examine generalizability, we also manipulated whether they talked about a restaurant they loved or hated. We transcribed the oral opinions and measured the emotionality of the language produced in each condition using the Evaluative Lexicon (Rocklage, Rucker, and Nordgren 2018). As predicted, regardless of opinion valence, speaking increased the emotionality of the language used.

Ancillary analyses across experiments cast doubt on alternative explanations based on social presence, audience size, ephemerality, synchronicity, arousal, and production time.

Experiment 2 begins to test the hypothesized process through mediation. We measured how much participants deliberated about what to say and whether it mediates the effect of expression mode on emotionality. Speaking again increased emotional language. Further, evidence indicated the effects were mediated by deliberation.

Experiment 3 uses moderation to test the underlying process. If speaking increases emotionality because it decreases deliberation, as hypothesized, then the effects should be moderated by individual differences in spontaneous emotion expression (i.e., emotional expressivity; Kring, Smith, and Neale 1994). Speaking, which involves less deliberation and thus more spontaneity, should be particularly likely to boost emotionality among individuals high in emotional expressivity.

We also use an alternate method of collecting spoken opinions. While speaking into a microphone controls for some possibilities, one could argue that it may seem artificial. To examine generalizability, Experiment 3 has participants leave a voicemail in spoken condition and write an email in the written condition, just as people often do in everyday life.

Analyses revealed the predicted Modality x Emotional Expressivity interaction. Consistent with our theorizing, compared to writing, speaking led emotionally expressive participants (+1 SD) to use more emotion. This difference was significantly mitigated, however, among participants low in emotional expressivity (-1 SD).

Experiment 4 further tests the underlying role of deliberation through moderation. If communication mode influences emotion-

ality via deliberation, as suggested, then encouraging deliberation should mitigate the effect. Encouraging speakers to take time to think about what to say should make them look more like writers and decrease the emotionality of what they share. Consequently, in addition to either speaking or writing, half of them were asked to "take a few moments to organize your thoughts" before sharing them.

Consistent with our theorizing, deliberation moderated the effects. In the control condition, results replicated those found in the first three studies. Compared to writing, speaking increased emotionality. Increasing deliberation, however, mitigated this effect. Taking a moment to think before sharing reduced the difference between speaking and writing.

Experiment 5 tests whether expression mode's impact on emotional language spills over to shape the attitudes of word of mouth recipients. Imagine a friend told you about a movie. Could the fact that they spoke to you, rather than wrote to you, change the emotionality of the language they use to talk about the film, and thus your interest in going to see it?

Participants were randomly assigned the language (i.e., the text) from one of the opinions expressed by a participant from Experiment 2, and based on it, reported how interested they would be in trying the restaurant. In addition, to capture the underlying process, they rated how emotional the description of the restaurant was.

Consistent with our theorizing, expression mode influenced observer attitudes through emotional language. Spoken communication led to more emotional language, which led participants to perceive the review as more emotional, which increased interest in trying the restaurant.

Conclusion Taken together, these results (1) demonstrate that modality impacts emotionality, (2) document the underlying process by which this occurs, and (3) illustrate the downstream effect on the communication audience.

This research makes three main contributions. First, it contributes to the burgeoning literature on psychological drivers of word of mouth. While research has begun to examine why consumers talk about some things rather than others, there has been less attention to how communication mode might impact what consumers share.

Second, this work deepens understanding of the role of language in consumer behavior. We contribute to the growing literature on consumer language (Moore and McFerran 2017), showing that how consumers communicate impacts the emotionality of the language they use.

Finally, research finds large differences between the content of online and offline word of mouth (Fay and Larkin 2017) and suggests that offline word of mouth is more impactful (Keller and Fay 2009). While these effects are likely multiply determined, modality may be a contributing factor. Most online word of mouth is written, but a much larger chunk of offline word of mouth is spoken. Our results suggest this may not only change the content of conversations, but also their impact.

Smartphones and the True Self: How Technology Influences Disposition Expression

EXTENDED ABSTRACT

People differ in their chronic dispositions, and conventional wisdom holds that these often shape behavior (Bargh et al. 1986; Tyler 1947). However, the extent to which dispositional traits manifest in behavior in specific instances varies considerably (Kassarjian 1971; Lewin 1951; Ross and Nisbett 2011; Sirgy 1982), and may depend on accessibility (Higgins 1996), power (Hirsh, Galinsky, and Zhong 2011), social demands (Bargh, McKenna, and Fitzsimons 2002), and culture (Kim and Sherman 2007).

We propose that technology can be an important determinant of behavioral disposition expression. Specifically, compared with personal computers (PCs), we show that smartphone use amplifies the expression of chronic dispositions, such as risk-seeking, self-control, maximizing/satisficing, and political ideology, in choice. We argue that, because smartphones are extremely private and personal, more than any other personal device (Clayton, Leshner, and Almond 2015; Hatuka and Toch 2016; Park and Kaye 2019), using them activates private self-awareness, a state of elevated accessibility of intimate self-knowledge and attention to internal states (Carver and Scheier 1981; Gibbons 1990; Song and Sela 2021). This state of elevated private self-awareness, caused by smartphone use, increases the accessibility and, consequently, the behavioral expression of chronic traits and dispositions. Thus, we predict and find greater correspondence between chronic dispositions and choice when people use their personal smartphone, compared with their PC.

Five studies support this perspective. In Study 1A ($N = 411$), participants used the behavioral lab's desktop computers to complete a personality questionnaire, which included a maximizing-satisficing scale, our focal trait (Nenkov et al. 2008; no device effect on maximizing, $p = .41$). Then, they were randomly assigned to complete the remainder of the session on either their personal smartphone or personal laptop, which they had been asked to bring with them. Participants completed a hotel search task, where they could browse as many or as few options as they wanted before making a final decision. Based on prior research (Ma and Roese 2014; Nardini and Sela 2019), the extent of search is an important manifestation of maximizing vs. satisficing tendencies. Consistent with our theorizing, a device × maximizing trait interaction effect ($b = 1.20$, $p < .01$) reveals pronounced correspondence between dispositional maximizing and search behavior among participants using their smartphone ($b = .95$, $p < .01$), which was attenuated among PC users ($b = -.25$, $p = .45$).

Study 1B ($N = 187$; preregistered) focuses on self-control as the focal dispositional trait. After being randomly assigned to use their own smartphone or PC, participants made a choice between "vice" and "virtue" in one of several domains (e.g., choosing between a delicious pasta and a healthy salad; from Sela, Berger, and Kim 2017). Finally, they completed a personality questionnaire which included a measure of dispositional self-control (Tangney, Baumeister, and Boone 2004; no device effect, $p = .31$). Consistent with our prediction, a marginally-significant device × dispositional self-control interaction effect on choice ($b = .41$, $p = .09$) reveals greater correspondence between dispositional self-control and choice among smartphone users ($b = .72$, $p < .01$) than among PC users ($b = .31$, $p = .016$).

Study 1C focuses on political orientation expression. Participants ($N = 302$) indicated their political orientation (45.5% republicans and 54.4% democrats, no device effect; $p = .20$). After completing filler questions, they indicated their attitudes toward several politically polarizing COVID-19 policies (e.g., fining individuals for violating social distancing rules; Druckman et al. 2021). Supporting our prediction, a significant device × political orientation interaction effect on aggregate policy endorsement ($b = .89$, $p = .02$) reveals greater correspondence between political orientation and endorsement of partisan policies among smartphone users ($b = 3.02$, $p < .01$) than among PC users ($b = 2.12$, $p < .01$).

Study 1D ($N = 141$) used a similar procedure as Study 1A to measure dispositional risk tolerance (scale adapted from Mandrik and Bao 2005; no device effect, $p = .91$). After completing the trait measure, participants indicated the amount of money they would in-

vest in a risky opportunity (Kupor, Liu, and Amir 2017). Consistent with our prediction, a device × dispositional risk-tolerance interaction effect (b = -16.03, p = .02) reveals pronounced correspondence between risk-tolerance and risky/riskless choice among participants using their smartphone (b = -9.11, p = .046), but not among PC users (b = 6.93, p = .19).

One may wonder whether smartphones influence choice by activating chronic self-goals, namely, notions of the "ideal self" (e.g., wanting to be healthy), or – as we hypothesize – knowledge of the "actual self" (e.g., "I am healthy"; Higgins 1987). Study 2 (N = 129) examines this question by measuring both "ideal" (or "ought") and "actual" self-perceptions. We used a procedure from prior research (Higgins 1987; Sela and Shiv 2009) to capture the chronic "ideal" and "actual" self-view related to physical health. Following filler questions, participants were then asked to make a choice in a healthy eating dilemma similar to Study 1B. A marginally-significant device × actual-self interaction (b = .46, p = .08) reveals greater correspondence between "actual" self-view and choice among smartphone users (b = .60, p < .01) than among PC users (b = .14, p = .35). Ratings of "ideal" (i.e., motivated) self-view did not interact with device in predicting choice (b = -.20, p = .57).

Firms and researchers alike routinely measure consumers' personality traits (Graves and Matz 2018; Sunstein 2018) and use them to predict online behavior. The current findings suggest that such "profiling" may prove more predictive of choice when consumers use their smartphones, rather than PC. More broadly, smartphones have had a dramatic effect on consumers' lives, reshaping relationships, habits, and consumption behaviors. We hope that this research advances understanding of some of these effects.

How Do People Communicate Their Experiences Visually and Verbally? More Words and More Pictures

EXTENDED ABSTRACT

With the advent of camera phones, communicating our experiences using pictures has become part of everyday life. For example, 4.5 billion pictures are shared in WhatsApp messages daily (Business Today 2017). In our research, we ask how people use pictures and words to communicate their experiences. Specifically, we ask whether in visual-verbal messages, pictures substitute words for efficiency or whether words are used to emphasize what is communicated in the picture, resulting in redundancy. Lay belief may suggest that "a picture is worth 1000 words" and hence that pictures may substitute text. This would be in line with Grice's Maxim of Quantity that prescribes that communicators need to be brief and efficient (Grice 1975).

Alternatively, people may convey similar information in visual and verbal modalities in a redundant way, to increase the potential relevance of the information to the receiver, and to facilitate processing (Wilson 1993), in line with Grice's Maxim of Relation. Given the dearth of attention and the excess of noise in today's world (Davenport and Beck 2001; Partan and Marler 1999) as well as the relatively low cost of using words and pictures jointly, we expect that, in visual-verbal communications, people will prioritize redundancy (in line with the Maxim of Relation) over efficiency (contrary to the Maxim of Quantity).

Study 1 examined the relationship between pictures and visual words (i.e., words that convey information that pictures could convey also) in the context of reviews, using two large real-world datasets (Yelp and TripAdvisor). We used the *see* words category from the Linguistic Inquiry and Word Count dictionary (LIWC) to determine the extent to which a review included visual words. We found that when writers used more visual words, they were also more likely to add a picture in both the Yelp (β=0.11, t=44.5, p<.001) and TripAdvisor (β=0.05, t=15.9, p<.001) datasets. This held controlling for review, reviewer, and restaurant characteristics. We also found the same relationship for the total number of photos included. These analyses provided initial evidence that pictures and words are positively related.

In **study 2**, we manipulated the number of see words in a product review and tested whether more visual words heighten picture use. This study followed a three-group design. We recruited 598 participants (41.2% female; M_{age}=35.8) on MTurk (preregistration: osf.io/jd23r/). Participants imagined they had written a review of a computer mouse and read "their" 140 words review. Participants in the no-see-words condition read a review that included no words from LIWC's *see* category. In the high-frequency [low-frequency] condition "see" words constituted 30% [10%] of the review. Participants indicated whether they would add a picture when posting this review (Yes=1, No=0). A larger percentage of participants in the high-frequency (86%) indicated that they would include a picture compared to the no-see-words condition (75%), z=3.1, p=.002. Participants in the low-frequency were directionally but not statistically significantly more likely to include a picture with their review (82%) compared with the no-see-words condition (z=1.4, p=.1). This study provided causal evidence that people choose to emphasize redundant information in visual-verbal communications.

In **study 3,** we tested whether people intend to align visual words and pictures at the semantic level (e.g., describing and depicting food), which results in redundancy. We recruited 190 students (52.6% female; M_{age}=19.9; preregistered: AsPredicted #58409). Participants read one of two review replicates that focused on visual aspects of the coffee shop (foam-art, or wall-art). After reading the review, participants chose the picture they would like to post with the review text. In each condition, two out of 10 pictures precisely matched the review text and the remaining eight were from other categories related to the coffee shop experience but not mentioned in the review. Our dependent measure was whether or not people chose one of the two matching pictures. We also measured whether participants believed they selected a picture that conveyed the same information as the text. An overwhelming 92% of participants chose a picture that matched the review text. We did not find any difference between the two review replicates (M=94% in foam-art, M=89% in wall-art). We also found that participants who matched text and picture (M=5.93) reported greater intentions to provide the same information than those who did not (M=3.30), β=1.58, $t(190)$=3.66, p<.001.

While study 3 measured people's intention, **study 4** further examined whether people strive for redundancy by comparing people's internal goal to holding an explicit redundancy or an explicit efficiency goal. We recruited 322 on MTurk (53.7% female; M_{age}=41.3; preregistered: AsPredicted #59195) and randomly assigned them to one of 3 between-subjects conditions (goals: no external vs. redundancy goal vs. efficiency goal). In the redundancy [efficiency] goal condition, participants were told to convey their experience with the goal to communicate thoroughly [efficiently], possibly [without] repeating some of the information that was already conveyed by the picture. In the no external goal condition, participants were not provided a goal. As the key dependent variable, we assessed the extent to which their text referred to the picture. We also measured whether participants believed their text conveyed the same information as the picture. As manipulated, participants in the redundancy-goal condition (M=9.1% of total words) used more picture-related words than participants in the efficiency-goal condition (M=6.4%), β = -2.66, $t(322)$ = -3.68, p < .001. Importantly, and supporting our prediction,

participants in the no external goal condition also used more picture-related words compare to the efficiency condition (*M*=7.9 %), *β* =-1.50, *t*(322) = -2.11, *p* = .03. Further, the no-goal and redundancy-goal conditions used picture-related words similarly frequently, *β* = 1.15, *t*(322) = 1.61, *p* = .11. Participants' stated intention to provide redundant information mirrored these findings.

Taken together, we find that pictures and words go hand-in-hand. We consistently find that people use words describing visual aspects and pictures jointly, in line with Grice's Maxim of Relation, emphasizing relevant information for the receiver. Our research sheds light onto the communicators' side of word of mouth and examines how people use pictures and words in visual-verbal communication.

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Numeric Judgments and Decisions

Chair: Joowon Klusowski, Yale University, USA
Discussant: Joshua Lewis, New York University, USA

Paper #1: How Should Time Estimates Be Structured to Increase Consumers' Satisfaction?

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Paper #2: Premature Predictions: Forecasters Get Less Credit For Predictions Made Too Early

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Paper #3: Predicting The Effects of Prosocial Nudges

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Paper #4: Even Number Prevalence In Quantity Decisions

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SESSION OVERVIEW

Consumers nowadays have greater access to important, self-relevant numeric information than ever before. Within the past year alone, they have observed changes in stock prices, health statistics, and election polls expressed in numbers. This increasing abundance of numeric information makes it important to understand how consumers interact with such information. Therefore, this special session presents four papers that are related to numeric judgments and decisions, addressing both how consumers evaluate and generate them.

The first paper by Hu, Gaertig, and Dietvorst examines consumers' perceptions and preferences toward different formats of uncertain time estimates (e.g., the most likely point estimates vs. conservative point estimates vs. range estimates). They find that consumers prefer range estimates to point estimates, unless the ranges are excessively wide. In contexts where early arrivals are preferred, consumers prefer conservative estimates, but when accuracy is better, consumers prefer the most likely estimates. These findings provide practical implications for companies communicating uncertainty in time estimates.

The second paper by Mislavsky and Gaertig studies consumers' responses to predictions made at different time points (e.g., one year vs. one day in advance). They find that—contrary to lay beliefs that early estimates will receive greater credit—consumers give less credit to estimates made too early. This effect seems to arise because consumers acknowledge the role of luck in early predictions, and it does not manifest for incorrect predictions. These results shed light on how consumers evaluate predictions based on the temporal information presented alongside them.

The third paper by Gao, Jung, and Nelson investigates consumers' numeric predictions regarding the effects of various marketing-relevant interventions (e.g., defaults for charitable donations in an online shopping environment) and the accuracy of their predictions. They find that consumers underestimate the effects of defaults on purchasing decisions by large percentage points. They also find that consumers tend to overpredict the effects of interventions in joint evaluations compared to separate evaluations. This research highlights different challenges in accurately predicting prosocial behavior in the marketplace.

The fourth paper by Klusowski, Small, and Goldenberg demonstrates consumers' general, arbitrary tendency to choose even numbers more frequently than odd numbers in quantity decisions (e.g., how many apples to buy for oneself at a grocery store). They find this tendency in both archival shopping data and online survey data. While this tendency largely holds even without round numbers that are multiples of ten, they identify important boundary conditions that attenuate this effect, extending previous research on quantity decisions and numerical cognition.

Together, this session addresses how consumers evaluate or generate numeric judgments and decisions. Specifically, the first two papers examine consumers' responses to information that has been provided to them, and the last two papers investigate their tendencies when arriving at judgments or decisions themselves. Ultimately, this session aims to provide insights into understanding and improving consumers' numeric judgments and decisions—which will become increasingly more important for optimizing their well-being as the amount of numeric information available to them continues to grow every day.

How Should Time Estimates Be Structured to Increase Consumers' Satisfaction?

EXTENDED ABSTRACT

Consumers often encounter algorithmic estimates in inherently uncertain contexts, such as estimated delivery times provided by food delivery apps or estimated arrival times for Uber, Lyft, or Google Maps. When providing time estimates to consumers, companies must decide how to present these estimates and, importantly, whether to communicate the inherent uncertainty of the future. For example, a food delivery app can give customers the most likely delivery time (e.g., "45 minutes"), a conservative estimate (e.g., "55 minutes"), or a range (e.g., "35-55 minutes"). But which format do consumers prefer? In this research, we examine how time estimates should be structured to increase consumers' satisfaction.

In 8 pre-registered studies ($N = 5,816$), participants indicated their satisfaction with time estimates provided by a hypothetical food delivery or GPS app. We presented participants with the estimated and actual arrival times of 20 past orders/trips on the app and then asked them to evaluate the app. This design allowed us to mimic real-world scenarios in which consumers experience a sequence of individual orders/trips and form an overall impression of the app's performance. We generated the apps' actual outcomes from either a normal or log-normal distribution. Across our studies, we manipulated the format of the time estimate (a point or a range) and/or the location of the time estimate in the distribution (accurate estimate or conservative estimate). Each participant always saw the same estimate for all 20 orders/trips. In all studies, participants then reported their subjective liking of the app using a composite scale (liking, informativeness, usefulness, accuracy, trust).

In Study 1 ($N = 698$), participants evaluated a food delivery app. We manipulated whether the delivery estimate was presented as an accurate point estimate ("45 minutes" – the mean of the distribution), a normal range estimate ("35-55 minutes" – the 80% confidence interval (CI)), or a narrow range estimate ("40-50 minutes" - the 50% CI). Participants liked the two ranges significantly more than the point estimate ($ps < .001$) and the liking of the two ranges did not dif-

fer from each other ($p = .571$). We replicated the finding that ranges are preferred to point estimates in 4 additional studies with similar procedures and show that the finding is robust to different domains (food delivery or GPS), different durations (short or long), and different outcome distributions (normal or log-normal). In Study 2 ($N = 599$), we tested a boundary condition: An extremely wide range (99% CI) is liked less than both a point estimate ($p = .026$) and a normal range ($p < .001$), suggesting that consumers like range estimates as long as they are not excessively wide.

Our findings suggest that the choice between a point estimate and a range estimate may involve a tradeoff between accuracy and informativeness (Yaniv & Foster, 1995). While point estimates are informative and easy to understand, they may convey a false sense of certainty regarding the prediction and are more likely to be wrong. In contrast, ranges are more likely to contain the actual outcome, but they are also less informative because they specify a less specific outcome. Our results suggest that as long as ranges are not excessively wide, and hence uninformative, consumers seem to prefer the increased accuracy that ranges provide to point estimates.

One alternative explanation is that ranges are less likely to be perceived as being "late" because, relative to point estimates, fewer outcomes take longer than the upper bound of the range. To address this possibility, we examined consumers' liking of conservative point estimates, which can be just as unlikely to be late as ranges. We additionally manipulated whether the estimates were centered at the mean of the distribution (e.g., a point estimate of "45 minutes" or a range estimate of "35-55 minutes") or the 90th percentile (e.g., a point estimate of "55 minutes" or a range estimate of "45-65 minutes"). In Studies 3-5 (Ns = 801, 998, and 888, respectively), a conservative point estimate was liked less than any range (ps < .001). In addition, when evaluating a food delivery app (Studies 3-4), participants did not penalize conservative estimates for being less accurate on average. In fact, they liked the conservative point estimate directionally more than the accurate point estimate (ps = .164, .024). However, when evaluating a GPS (Study 5), participants were significantly more satisfied with the accurate point estimate than the conservative point estimate ($p < .001$).

We found that this discrepancy between perceptions of time estimates across domains is driven by different perceptions of early arrivals. In Study 7 ($N = 371$), we found first evidence that how satisfied participants would be with an early arrival mediates the domain difference in liking for conservative estimates. In Study 8 ($N = 1,088$), conducted within the food delivery domain, we directly manipulated whether early or accurate arrivals of the food would be better for the consumer, and this moderated the preference for accurate or conservative estimates: When asked to imagine that they order food while still at work and try to get home in time for the delivery (accurate is better condition), participants preferred the app giving an accurate estimate rather than a conservative estimate ($p = .011$). However, those who imagined ordering dessert for delivery while finishing dinner (early is better condition) preferred the app giving a conservative estimate ($p = .004$). The interaction was significant ($p < .001$).

Taken together, our results suggest that in inherently uncertain consumer contexts, range estimates are more appealing to consumers than point estimates, as long as the range is not excessively wide. In addition, in contexts where accuracy is preferred, accurate estimates are more satisfactory than conservative estimates, but when early arrivals are preferred, those conservative errors are no longer punished by consumers. Our results have important practical implications for companies designing apps as apps that provide time estimates to consumers are becoming ubiquitous.

Premature Predictions: Forecasters Get Less Credit For Predictions Made Too Early

EXTENDED ABSTRACT

Many forecasters believe that they will get more credit if they are the first to make a prediction and may feel compelled to make predictions far in advance of an event. However, in six preregistered studies (N=5,444), we find that this intuition is incorrect. Forecasters are given less credit (e.g., are rated as less competent) the farther in advance of an event they make predictions. This is because consumers acknowledge that luck plays a role for very early predictions that turn out to be correct. We also show that this effect does not hold for events that are knowable far in advance. Finally, the effect also exists for future predictions for which the outcome is not yet known.

In Study 1a (N=205), we tested participants' lay theories about prediction timing. Participants were told to imagine making a prediction about a future event and given examples of possible predictions they could make. We then asked how much credit they thought they would get (1=none; 7=a lot) if they made a correct prediction 10 years in advance, 5 years in advance, 1 year in advance, and 1 month in advance (within-subjects). Using a regression analysis with the expected credit as the DV and the number of months in advance (e.g., 5 years=60) as a continuous IV, there was a positive relationship between expected credit and how far in advance the prediction was made, p=.003. That is, they expected more credit for a prediction made 5 years in advance than one made 1 year in advance, and so on. In Study 1b (N=917), we replicate this finding using specific predictions and manipulating prediction timing between subjects.

Despite lay intuitions, in Study 2 (N=992), participants gave others less credit for predictions made farther in advance. We randomly assigned participants to one of four between-subjects conditions. All participants read that they saw an article where an expert made a prediction. We told participants that these predictions were indeed correct and the date that the events occurred. Given the date of the event, the article participants saw was dated 1 month before the event occurred, 1 year before, 5 years before, or 10 years before. To stimulus sample, we showed predictions in 1 of 5 domains. For example, in the "sports" domain, the expert predicted that the Tampa Bay Buccaneers would win the Super Bowl in February 2021. Participants then answered six questions to evaluate the expert's credibility (e.g., "How knowledgeable is this person?") on a 7-point scale. We analyzed the average of these six measures (alpha=.92) using a regression analysis as in Study 1. Collapsing across domains, there was a significantly negative relationship between how far in advance (in months) a prediction was made and the amount of credit that participants gave forecasters, p<.001. That is, forecasters received less credit the farther in advance the predictions were made. This result held directionally for 4 of the 5 domains tested and significantly for 3 of the 5.

In Study 2, we also set out to test a possible mechanism of our effect. Specifically, we examined whether people acknowledge that luck plays a role for very early predictions that turn out to be correct and hence whether participants' perceived epistemicness of the event mediates the relationship between forecaster evaluation and the time frame of the prediction. To do this, we included a set of new questions (α=.77) aimed at measuring participants' perceived epistemicness of the events that we adapted from the short version of the Epistemic-Aleatory Rating Scale (EARS; Tannenbaum, Fox, and Ülkümen 2017). For example, one of the items from the EARS read, "At the time this prediction was made, this outcome was knowable in advance, given enough information." Participants perceived the events as less epistemic (i.e., more determined by chance), the far-

ther in advance the prediction was made, p<.001. When we include participants' responses to the EARS in the regression, EARS entirely mediates the main effect of months in advance on forecasters' evaluations (i.e., the 95% CI did not include zero, 95% CI [-.003, -.001], and the effect directionally, but not significantly, reverses).

The results from Study 2 suggest that we should see an attenuation or reversal of our main effect if the forecasters predicted an event that is reasonably knowable far in advance. We test this in Study 3. We randomly assigned participants (N=1,740) to one of four between-subjects conditions. As in Study 2, participants read about an expert who made a prediction about an event. However, in two pretests, we identified three "short-term" predictions, which participants felt were only knowable one week to one month in advance, and three "long-term" predictions, which participants felt were knowable one year to five years in advance. Participants either read that the prediction was made either one week or one year before the event occurred and answered the same four dependent variable questions as in Study 2. We find a significant interaction between event type (short-term vs. long term) and prediction timing (one week before vs. one year before), p=.019, providing further evidence that the event's perceived epistemicness at the time of the prediction is a primary driver of the amount of credit a forecaster receives for a correct prediction.

Finally, in two additional studies, we find that participants also rate forecasters less positively if they make predictions about events far in the future where the outcome is not yet determined (Study 4). This does not seem to be driven by negative inferences about the forecaster's personality (e.g., that they are arrogant; Study 5).

Our research has substantial implications for the incentives that forecasters face when making predictions. If they have the lay theory that they will get more credit from being the first to "get it right," then they may rush to make a prediction without complete information. With our results in mind, they may now have the incentive to rethink these assumptions and wait to make more informed predictions.

Predicting The Effects of Prosocial Nudges

EXTENDED ABSTRACT

Behavioral science is enchanted by the promise of "nudges". Although nudges have been shown to be effective in a wide range of decision-making, they may also produce null outcomes or even backfire (Hagmann et al., 2019), underscoring the importance of accurately understanding and predicting their effects (DellaVigna et al., 2019).

There is a growing interest in assessing people's predictions of different policy interventions, but the existing investigations yield inconclusive results. Some studies show that people are not good at intuiting and applying nudges (Zlatev et al., 2017) or prediction in general (Dawes et al., 1989), whereas others show that both lay people and experts are quite accurate in their predictions (DellaVigna & Linos, 2020; Jung et al., 2018). The question remains when and how people accurately intuit nudging effects.

Through two pairs of large-scale studies ($N = 23,798$), we examine when and why predictors forecast the presence of intervention effects and whether these predictions align with reality. Furthermore, to probe whether predictions are sensitive to different forms of interventions, we manipulated two types of interventions that involve categorical (e.g., defaulted-in vs. not) vs. incremental (e.g., small vs. large) differences.

We conducted Study 1 ($N = 2,086$) on Amazon Mechanical Turk (MTurk) to examine decisions in a real-effort task where par-ticipants earned bonus by typing "ab"s consecutively (DellaVigna & Pope, 2018). We varied the bonus to be either 2 or 20 cents for every 1,000 pairs of "ab"s typed. Moreover, we defaulted half of the participants to donate the bonus to charity (opt-out) and the other half to receive the bonus themselves (opt-in). Predictors ($N = 503$) predicted the proportion that opted to donate their bonus in each condition.

Defaults were quite consequential. 39.76% of the participants in the opt-out condition donated their bonus to charity, whereas only 14.57% did in the opt-in condition. Predictors intuited this effect but vastly underestimated its size, estimating only a 8.07% difference. Curiously, although the bonus was ten times larger for some participants, participants were equally likely to donate when the stakes were high (26.64%) and low (26.43%). Predictors, however, forecasted a significant effect of stakes size: they predicted a 31.73% donation rate when the stakes were high, and 41.17% when the stakes were low. Predictors seem to be better at intuiting the impact of the categorical (vs. incremental) manipulation.

Participants in Study 1 could compare all experimental conditions when making predictions. It is possible that this joint evaluation mode influenced their predictions (Hsee, 1996). Study 2 tested this possibility by including separate predictors who each evaluated and made predictions for a single experimental condition. If the evaluation mode moderated participants' lay beliefs about intervention effects, we should see differences in predictions between joint and separate predictors.

Study 2 tested consumers' decisions in response to two different forms of prosocial nudges. We conducted a field study in collaboration with a retailer that allows customers to pay any price they wanted for eBooks. Customers ($N = 20,691$) who visited the company's website were randomly assigned to a 2 (default: opt-in vs. opt-out) x 2 (donation proportion: 5% vs. 25%) between-subjects design. Some were defaulted to donate part of their payment to charity (opt-out), whereas others were not (opt-in). Moreover, the donation was either 5% or 25% of the payment.

We recruited a separate sample of predictors ($N = 1,021$) who forecasted the behaviors of customers in the field. Predictors made predictions for all four conditions (joint) or just one (separate). Predictors predicted (1) the proportion of customers who bought a bundle, and among these buyers (2) the average payment, and (3) the proportion who donated.

As in Study 1, predictors correctly forecasted that opt-out choice architecture would increase donations, but they vastly underestimated the magnitude. On average, the change in default created a 43-percentage point difference in donation likelihood (81% vs. 38%), but joint predictors anticipated a 10-percentage point effect, and separate predictors only a 7-percentage point effect. Moreover, there was substantial difference in predictions by joint vs. separate predictors. Donation rate was also influenced by the proportion going to charity, as people were 5 percentage points less likely to donate when a higher percentage went to charity. In this case, joint predictors were correct in both sign and magnitude (a 7 percentage point forecast), but separate predictors didn't forecast this effect at all. Since the incremental difference (25% vs. 5%) is difficult to assess in separate evaluations, it is expected that separate predictors did not predict an effect of donation proportion.

Perhaps most notably, even when the nudge was inert, that did not mean that forecasters anticipated this null effect. On purchase rate, there was no effect of either default or donation proportion. While separate predictors predicted neither effect, joint predictors predicted small negative effects of both. Similarly, on payment amount, there was no effect of either default or donation proportion, and separate predictors again predicted neither. In contrast, joint pre-

dictors predicted small positive effects of both. Therefore, subtler effects (especially those involving incremental vs. categorical differences) tend to elude separate predictions, whereas joint predictors would always predict an effect, for better or worse.

Our studies demonstrate that separate predictors make widely varying guesses about one condition, whereas joint predictors adjust their forecasts based on their lay intuition about the direction and size of the treatment effects, given their initial guesses. But the actual nudging phenomenon is unlikely guided by similar guesses and beliefs. What appears to be accuracy in predictions could be a coincidence between reality and (misguided) beliefs. Therefore, while it may be tempting to conclude that a certain prediction mode produces more accurate predictions, we caution against such interpretation, as accuracy necessarily hinges on the ground truth, which varies from one experimental setting to another (Vivalt, 2015). A more useful and realistic approach, therefore, is to study the systematic, often contextual, influences on predictions (DellaVigna, Otis, & Vivalt, 2020), regardless of their accuracy.

Even Number Prevalence in Quantity Decisions

EXTENDED ABSTRACT

When consumers are deciding the quantity of a particular product to acquire or consume, multiple factors may influence their decisions. Yet, aside from any idiosyncratic, deliberate reasons for choosing specific quantities, consumer may also have a general, arbitrary tendency to choose a certain class of numbers. In this research, we show that consumers choose even numbers more frequently than odd numbers when selecting quantities.

Previous research has shed light on some focal numbers that consumers frequently select. For example, it suggests that consumers often choose one (Geier, Rozin, & Doros, 2006), "round numbers" that are multiples of ten (Baird, Lewis & Romer, 1970; Pope & Simonsohn, 2011), or "prominent numbers" that are powers of ten as well as their doubles and halves (Converse & Dennis, 2018). While this line of work has primarily focused on the prevalence of multiples of five and ten, we propose a much more granular class of focal numbers. Specifically, we show that people choose even numbers more frequently than odd numbers in quantity decisions because the former are more fluent—both in terms of retrieval and processing—across four pre-registered studies.

In Study 1, we used the Kilts-Nielsen consumer panel data to examine whether people are more likely to choose even numbers when shopping for multiple units of an item. To identify contexts in which considering multiple units is the norm, we pre-registered several criteria (e.g., include all products but exclude products for which the mode of the purchase quantities was one). In such contexts, we found that consumers were indeed more likely to buy even quantities than odd quantities. For example, of 51,176 products for which the mode of the purchase quantities was not one, 80% were more frequently purchased in even quantities than odd quantities, which was significantly higher than 50% ($p < .001$).

In Study 2, we used an online survey to test this hypothesis. Specifically, we asked 399 MTurk participants to make 11 quantity decisions across a variety of contexts (e.g., "When you buy apples at a grocery store, how many do you usually buy for yourself at a time?"). These questions specifically preempted potential alternative explanations, such as the evenness of the household size. We found that participants were significantly more likely to choose even quantities than odd quantities in all 11 decisions (Ms = 65-89%; ps < .001). Even when we excluded all round numbers that were multiples of ten—to conduct the most conservative robustness check

against our hypothesis—the proportion of even numbers was significantly higher than 50% in 7 decisions (Ms = 58-88%; ps < .010) and directionally higher in 4 decisions (Ms = 54-57%; ps > .05).

In Study 3, we used an online experiment to demonstrate that this effect would diminish when consumers can fluently retrieve another focal number that happens to be odd. In this experiment, we randomly assigned 397 MTurk participants to either the Control or the Odd condition. In the Control condition, participants indicated how many pieces of sushi they would take at a restaurant offering all-you-can-eat sushi. In the Odd condition, they indicated how many pieces they would take at a restaurant offering free samples of sushi. We expected that in the Odd condition, many participants would fluently retrieve and choose one, following the implicit social norm to take only one free sample per person, and that the prevalence of even numbers would diminish. Indeed, in the Control condition, 59% participants chose even quantities of sushi, whereas in the Odd condition, only 38% did ($X^2(1) = 17.29$, $p < .001$)—driven by the 18% vs. 44% of the participants choosing one in the respective conditions.

In Study 4, we used an online experiment to show that this effect would also attenuate when consumers can fluently process an odd quantity. In this experiment, we asked 398 MTurk participants to imagine deciding whether to buy eight or nine chocolates. We randomly assigned them to either the Control or the Odd condition. In the Control condition, participants saw images of single chocolates. In the Odd condition, they saw images of eight and nine chocolates, each organized within a three-by-three array. We expected that this organization would increase the processing fluency of the odd quantity and hence diminish participants' choice for the even quantity. As expected, we found that in the Control condition, 68% of the participants chose eight chocolates over nine chocolates, whereas in the Odd-set condition, only 49% did ($X^2(1)=14.15$ and $p < .001$).

Overall, this research shows that consumers choose even quantities more frequently than odd quantities and that marketers can harness this tendency by influencing the relative fluency of even vs. odd quantities. This research contributes to consumer research in important ways. First, it shows that consumers' choice for focal numbers (e.g., round numbers, prominent numbers) occurs at a much more granular and concrete level than previously known. Second, it extends the literature on even vs. odd numbers, which has previously focused on a limited set of even vs. odd digits in the context of pricing (Schindler & Wiman, 1989). Third, it broadens the scope of consumer research on numbers from externally generated numeric stimuli (e.g., brand names, King & Janiszewski, 2011; prices, Schindler & Kirby 1997) to internally generated quantities (Converse & Dennis, 2018). These findings should be of importance to both consumers and marketers as they suggest ways to understand and influence consumers' quantity decisions—which has important implications sales forecast, customer satisfaction, inventory management, and many other aspects of marketing (Wansink, Kent, & Hoch, 1998).

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False Information and How it Shapes Consumers' Lives

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Paper #1: Seeing Meaning Even When None Might Exist: Collectivism Increases Belief in Empty Claims

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Paper #2: Neural Mechanisms Promoting Selflessness in Potential Conflicts of Interest

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Paper #3: The Market for Fake News

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Brett Hollenbeck, University of California Los Angeles, USA
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Paper #4: The Impact of Mistakes on Perceived Quality

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SESSION OVERVIEW

Recent years have seen increased worldwide concern over false information and its potential influence political, economic, and social well-being (Vosoughi, Roy, and Aral 2018). False information seems to have infiltrated not only news people read every day but also reviews consumers consult from in their decision processes.

While prior research has started investigating how fake news spreads (Lazer et al. 2018) multiple open questions remain about what causes people to share fake news or reviews and the consequences of doing so for individuals and for the society at large. What personality factors influence peoples' likelihood of spreading fake news or posting fake product reviews? What are the costs and benefits of fake product reviews on customers? How do consumers judge institutions that report inaccurate information? This session addresses these questions and offers insights into how and why false information disrupts the society.

First, **Lin, Zhang and Oyserman** document in 7 studies that collectivism is factor that increases people's beliefs in and likelihood of sharing false news. This is because collectivism motivates people to seek common ground in communication and increases their sense that they are responsible for inferring what a communicator is trying to say. By asking "*How* might this claim make sense?", people who score higher in collectivism are more likely to believe and share fabricated news.

Next, **Reeck and Mazar** explore whether (lack of) dispositional self-control can influence people's morally suboptimal behavior, such as leaving stellar reviews of products they have not used. By using a combination of behavioral and functional magnetic resonance imaging, authors find that self-control tracks individual differences in righteousness when confronting potential conflicts of interest (benefiting the self while harming others), and that this relationship is specific to circumstances in which the proper course of action is ambiguous.

He, Hollenbeck and Proserpio study the market for fake product reviews on Amazon.com. They find that soliciting fake reviews leads to a significant increase in average rating and sales rank, but the

effect disappears after roughly one month. After firms stop buying fake reviews their average ratings fall significantly and the share of one-star reviews increases significantly, indicating fake reviews are mostly used by low quality products and are deceiving and harming consumers.

Ceylan and Weingarten examine how people judge quality of institutions (such as news outlets) that take a corrective action by fact-checking potentially false information and how they further adjust this evaluation in the presence of deviations from true information. They find that consumers use a non-linear adjustment and adjust ratings downward most for the first mistake, then only slightly more downwards for each subsequent mistake after the first.

The papers employ both laboratory and field data to document novel and timely insights into antecedents and important consequences of spread of false information. All papers are at an advanced stage of development with multiple studies completed. We expect this session to generate strong interest among practitioners, researchers studying false information, fake product reviews, and corrections as well as social media and word-of-mouth more broadly.

Seeing Meaning Even When None Might Exist: Collectivism Increases Belief in Empty Claims

EXTENDED ABSTRACT

Four in ten Americans (42%) find astrology scientific (General Social Survey 2018). During the COVID-19 outbreak, 39% of Americans surveyed by the CDC took action based on misinformation, doing things like gargling with cleaning products (Gharpure et al. 2020). The worrisome implication is that people often find meaning and take action based on "empty" claims -- claims that have no regard for either truth or empirical evidence. In an era of social media spreading fake news, understanding why people consistently see meaning in empty claims is critical for developing policies to combat consumption of misinformation. The current research proposes that collectivism, an aspect of human culture that sensitizes people to the importance of connection and fitting in, increases people's vulnerability to empty claims.

We propose that by emphasizing relating with others, collectivism motivates people to seek common ground in communication and increases their sense that they are responsible for inferring what a communicator is trying to say. To do so, people process claims as if they were asking implicitly, "*How* might this claim make sense?" This focus on making sense motivates people to interpret, fill in the blanks, and construct meaning for empty claims, and eventually come to experience empty claims as truthful, meaningful, even profound.

We tested our proposal across seven studies ($N > 16,000$) using a variety of ways to operationalize collectivism and empty claims. In Studies 1 and 2, we examined the association between collectivism and belief in pseudoscience using nationally representative surveys from the U.S. (Study 1) and China (Study 2). We found converging evidence in both countries that the more people endorsed collectivistic values, the more susceptible they were to pseudoscience such as astrology and palm reading (Study 1: $OR = 1.27$, 95% CI [1.21, 1.33], $\chi^2(1) = 86.60$, $p < .001$; Study 2: $= .30$, $F(1, 9636) = 951.27$, $p < .001$, $R^2 = .09$). These positive associations were robust to controlling for gender, race, social class, and religiosity.

In Study 3 we tested the relationship between collectivism and belief in fake news during the COVID-19 pandemic. We showed participants in China (Study 3a) and participants in the U.S. (Study 3b) a mixture of fake and real news about the coronavirus and had them complete a collectivism scale (Oyserman 1993). In both studies, people who scored higher in collectivism believed in COVID-19 fake news more (Study 3a: = .18, $F(1, 276) = 8.93$, $p =.003$; Study 3b: = .20, $F(1, 198) =8.21$, $p =.005$). Belief in fake news mattered. By affecting belief, collectivism increased the likelihood of forming false memories about fabricated news (Study 3a: $ab = .01$, $SE = .005$, 95% CI = [.003, .024]) and people's willingness to share fake news (Study 3b: $ab = .24$, $SE = .07$, 95% CI = [.11, .40]).

In Study 4, we operationalized collectivism as country-of-residence, comparing people in the U.S. and China. Relative to American participants, Chinese participants found more meaning in randomly formed metaphors ($F(1, 438) = 10.70$, $p = .001$, $d = 0.35$) and greater profundity in randomly generated vague statements ($F(1, 438) = 51.98$, $p < .001$, $d = 0.75$. In this same sample, endorsing collectivist values positively predicted meaningfulness (= .25, $F(1, 437) = 26.99$, $p <.001$) and profundity (= .26, $F(1, 437) = 34.84$, p <.001, $R^2 = .07$).

Study 5 documents causality. We used a force-agreement paradigm to manipulate participant's momentary self-perception of being collectivistic. Participants were randomly assigned to either rate their agreement (from 1 = *Slightly agree* to 7 = *Completely agree*) or disagreement (from 1 = *Slightly disagree* to 7 = *Completely disagree*) with six collectivistic self-descriptions. Participants randomly assigned to agree with collectivistic self-descriptions found randomly generated vague statements more profound (Study 5a: $F(1, 286) = 3.47$, $p = .06$, $d = .22$) and believe randomly generated pseudo-scientific news story more (Study 5b: $F(1, 357) = 5.68$, $p = .02$, $d = .26$) than those randomly assigned to disagree with collectivistic self-descriptions.

Finally, Studies 6 and 7 tested the proposed underlying processes: collectivism increases seeing meaning in empty claims because it motivates people to actively fill in the blanks in seeking common ground with the communicator. Study 6 showed that people higher in collectivism were more likely to actively construct explanations of how a novel metaphor might be meaningful ($OR = 1.47$, $t(249) = 2.56$, $p = .01$). This meaning-making process mediated the higher meaningfulness ratings they assigned to the metaphor (indirect effect = 0.22, $SE = 0.09$, $p = 0.01$, 95% CI = [0.06, 0.39]), suggesting that meaning-making underlies the collectivism effect.

Study 7 tested the underlying driver of seeking common ground by manipulating whether a communicator was implied. Participants were led to believe the statements were either human generated or randomly generated (non-human generated). Collectivism was positively related to seeing meaning if a human communicator was assumed ($r(56)= .42$, $p = .001$) and was unrelated to seeing meaning if a human communicator was explicitly excluded ($r(63)= -.08$, $p = .54$). This suggests that people higher in collectivism are more likely to find meaning in empty claims only if they are seeking common ground with an implied communicator.

Taken together, our studies suggest that to satisfy a human need to relate and fit in, people attempt to see what others see by asking themselves "how might this claim make sense?" In doing so, people self-convince. Collectivism increases seeing meaning where none may exist.

The seemingly benign cultural motive to relate is likely a reason why conspiracy theories, fake news, and pseudoscience thrive. A core implication is that to reduce consumption of misinformation, people's tendency to seek common ground needs to be disrupted.

Considering the cultural roots of the tendency to see meaning where none may exist may be one important step to counter the spread of false information in the public sphere.

Neural Mechanisms Promoting Righteousness in Conflicts of Interest

EXTENDED ABSTRACT

Self-interest is fundamental to economic models of human reasoning, which assume that individuals are utility maximizers. Yet people occasionally act against their own self-interest. Sometimes they do so because of external reinforcement, including social scorn and reputational concerns, which promotes seemingly selfless, virtuous behaviors. Sometimes, however, they behave selflessly even when external reinforcements are minimal, as when they leave generous gratuities at restaurants they only visit once (Kahneman, Knetsch and Thaler 1986) or donate organs to strangers (Jacobs et al. 2004). Moreover, people occasionally act against their own interest even when the "proper" response is ambiguous. In circumstances where the proper course of action is difficult to determine and the external consequences of selfish behavior are minimal, what distinguishes people who continue to choose the principled course of action from those who act selfishly?

Conflicts of interest (Cain, Loewenstein and Moore 2004) present a particularly important context for examining righteousness, as they have been shown to undermine a broad range of judgments that consumer rely upon, such as doctors' espousal of self-interested medical guidance (Dana and Loewenstein 2003), and investment recommendations from financial professionals Mullainathan, Noeth and Schoar 2012) at the expense of patient or client welfare. In particular, as the proper course of action becomes more ambiguous, higher-order commitments no longer prescribe a particular action clearly and people's tendency to pursue self-interest becomes more pronounced (Babcock and Loewenstein 2004). Therefore, understanding what predicts who is most likely to act on their self-interest as the appropriate response becomes more unclear is important to avoiding negative outcomes for those who rely on their advice. We examined this question across three primary experiments.

Participants in Study 1 were asked to imagine a purchase that arrived at their home while they were away on vacation. The seller offered a substantial discount if they left a 5-star review of the product within 24 hours, creating a potential conflict between their desire to provide an accurate review and the desire to receive a personal discount. They were given either ambiguous or unambiguous information about the item purchased and asked if they would leave a 5-star review. Participants were more likely to leave a five-star review in the Ambiguous Conflict of Interest condition than the Unambiguous Conflict of Interest Condition, $^2(1) = 6.18$, $p = .013$. Importantly, we observed that several participants were willing to forego their self-interest and decline to leave a 5-star rating despite the tempting refund offer, even when they only had ambiguous evidence that doing so would be inappropriate.

In Study 2, participants were asked to imagine they were purchasing gift cards to a local café for their friends. One friend had ambiguous preferences while the other had clear preferences for which café they preferred. One of the cafés offered a benefit to the participant for buying a gift card, creating a potential conflict of interest where they might choose to buy a gift card to that café in order to receive the benefit, even if it were their friend's less preferred option. Participants were more likely to choose the self-interested option when the recipient's preferences were ambiguous compared to when they were unambiguous (McNemar's Test $p = .011$). However,

even in ambiguous conflict of interest situations, a substantial share of participants eschews private gains, thereby displaying righteous behavior.

To investigate the psychological processes that explain individual differences in righteousness behavior, we next employed a conflict of interest task in conjunction with functional neuroimaging (Mazar, Amir and Ariely 2008). On each of 150 trials, participants (N = 27) viewed an image that contained 100 dots and a vertical line dividing the image into left and right halves. Although participants were instructed to indicate which side contained more dots accurately, they were paid more ($0.10 per response) when they indicated there were more dots on the right than when they responded there were more dots on the left ($0.02 per response). Thus, trials that consisted of more dots on the left, lower paying side represented a potential conflict of interest between giving the correct response or giving an incorrect response in exchange for higher pay (incentivized error trials). As previous research has demonstrated that selfish behaviors are more common in response to ambiguity (Argo and Shiv 2012; Mazar, Amir and Ariely 2008), ambiguity was manipulated such that on half the trials the discrimination was difficult and uncertainty about the correct response was relatively high. Not surprisingly, we find that incentivized responses occurred more frequently than disincentivized responses, $F(1, 26)=21.93$, $p<.001$. Importantly, there was a significant interaction between response incentive and ambiguity, $F(1, 26)=13.016$, $p=.001$. Pairwise comparisons revealed that incentivized responses were provided more frequently than disincentivized responses when the correct response was more ambiguous, $t(26)=5.544$, $p<.001$. This same pattern of results was also observed in error rates, with participants making more selfish, incentivized errors on more ambiguous than less ambiguous discriminations, $t(26)=4.882$, $p<.001$. Overall, participants did allow motives for personal gain to color their judgment, and this self-serving bias was more common when the appropriate response was more ambiguous.

A network of neural regions putatively involved in cognitive control exhibited greater activation in individuals who did not increase their self-interested responding when the proper response was more obscure, including lateral prefrontal cortex, dorsal parietal cortex, and temporoparietal junction. Importantly, these regions discriminated those who responded in a self-serving fashion from those who did not, specifically on trials in which the correct response was more ambiguous, and self-interest was most likely to influence judgments. The parietal regions and temporoparietal junction have been previously implicated in directing attention and other controlled processing (Corbetta, Patel and Shulman 2008). The correlation between lateral prefrontal cortex and righteousness may reflect the role of this region in resolving competition between competing responses, rules, or representations (Botvinick et al. 2001; Kerns et al. 2004; ,acDonald et al. 2000) and resisting temptation by implementing self-control (Hare, Camerer and Rangel 2009; McClure et al. 2004).

Taken as a whole, these findings advocate a central role for self-control in determining who will continue to subvert their own self-interest when the "proper" action becomes more difficult to determine. In light of the present findings, interventions seeking to limit the negative consequences of conflicts of interest should focus on enhancing self-control among those whose judgments they seek to insulate from self-interest.

The Market for Fake News

EXTENDED ABSTRACT

Online markets have from their first days struggled to deal with malicious actors. These include consumer scams, piracy, counterfeit products, malware, viruses, and spam. And yet online platforms have become some of the world's largest companies in part by effectively limiting these malicious actors and retaining consumer trust. The economics of these platforms suggest a difficult tradeoff between opening the platform to outside actors such as third-party developers and sellers and retaining strict control over access to and use of the platform. Preventing deceptive or fraudulent actions is key to this tradeoff. Third-party participants may have strong incentives to manipulate platforms, such as increasing their visibility in search rankings via fake downloads (Li et al., 2016), increasing revenue via bot-driven advertising impressions (Gordon et al., 2021), manipulating social network influence with fake followers, manipulating auction outcomes, defrauding consumers with false advertising claims (Rao and Wang 2017; Chiou and Tucker 2018; Rao 2018), or manipulating their seller reputation with fake reviews (Mayzlin et al. 2014; Luca and Zervas 2016). We study this last form of deception or fraudulent activity: the widespread purchasing of fake product reviews. Fake reviews may be particularly harmful because they not only deceive consumers into purchasing products that may be of low quality, they also erode the long-term trust in the review platforms that is crucial for online markets to flourish (Cabral and Hortacsu 2010; Einav et al. 2016; Tadelis 2016). Therefore, if user feedback and product reviews are not trustworthy, in addition to consumers being harmed platform values may suffer as well.

We study the effect of fake reviews on seller outcomes, consumer welfare, and platform value. Despite this practice being unlawful, we document the existence of a large and fast-moving online market for fake reviews. This market features sellers posting in private online groups to promote their products and solicit willing customers to purchase them and leave positive reviews in exchange for compensation. These groups exist for many online retailers including Walmart and Wayfair but we focus on Amazon because it is the largest and most developed market. We collect data from this market by sending research assistants into these groups to document what products are buying fake reviews and the duration of these promotions. We then carefully track these products' outcomes on Amazon.com including posted reviews, average ratings, prices, and sales rank. This is the first data of this kind in that it provides direct evidence on both the fake reviews themselves and on detailed firm outcomes from buying fake reviews.

Our research objective is to answer a set of currently unsettled questions about online rating manipulation. How does this market work, in particular, what are the costs and benefits to sellers from buying fake reviews? What types of products buy fake reviews and how effective are they? Are consumers ultimately harmed by fake reviews or are they mainly used by high-quality products, that is, should they be seen more like advertising or outright fraud? Do fake reviews lead to a self-sustaining increase in sales and organic ratings? These questions can be directly tested using the unique panel nature of our data.

We first employ research assistants to construct a random sample of approximately 1, 500 products observed soliciting fake reviews over a 9-month period. We find a wide assortment of product types in many categories, including many products with a very large number of reviews at the time we first observe them buying fake reviews. These products also tend not to have especially low ratings, with an average rating slightly higher than comparable prod-

ucts. Almost none of the sellers purchasing reviews in these markets are well-known brands, consistent with research showing that online reviews are more effective and more important for small independent firms compared to brand name firms (Hollenbeck 2018). We then track the outcomes of these products before and after the buying of fake reviews using data collected from Amazon. In the weeks after they purchase fake reviews, the number of reviews posted increases substantially. Their average rating and share of five-star reviews also increase substantially: Ratings increase by .08 stars on average, and the average number of reviews posted per week increases by 7, roughly doubling the number of reviews they receive compared to before soliciting fake reviews. We also observe a substantial increase in search position and sales rank at this time. The increase in average ratings is short-lived, with ratings falling back to the previous level within 2 to 4 weeks, but the increase in the weekly number of reviews, sales rank, and position in search listings remain substantially higher more than four weeks later. We also track the long-term outcomes associated with the buying of fake reviews. We find that the evidence primarily supports the consumer harm view. We track outcomes after the last observed post soliciting fake reviews and find that ratings tend to fall as soon as the seller stops buying reviews. Finally, we document some facts regarding how the platform regulates fake reviews. We see that a very large share of reviews is deleted by Amazon. The bulk of deleted reviews are those that are posted within one to two months of the fake review solicitation that we observe, but they are deleted with an average lag of over 100 days, thus allowing the short-term boost in average ratings and number of reviews that we document. Altogether our results suggest that while Amazon's review deletion policy should reduce the long-term harm to consumers from fake reviews, it is inadequate because there is enough of a short-term boost in sales and ratings that firms find it advantageous to participate in this market, and there is a clear consumer harm as shown in the subsequent increase in one-star reviews.

The Impact of Mistakes on Perceived Quality

EXTENDED ABSTRACT

Recent years have seen an uptick in the spread of fake news (Vosoughi, Roy, and Aral 2018). Alongside this rise, researchers and practitioners are developing best practices for how to correct peoples' beliefs or mitigate the extent to which consumers believe untrustworthy headlines (e.g., Clayton et al. 2020; Lewandowsky et al. 2012; Pennycook, Cannon, and Rand 2018).

One such method to address inaccurate headlines is fact-checking (e.g., Snopes; Jun, Meng, and Johar 2017), in which sites or users identify mistakes and how truthful headlines or articles are. However, in the presence of mistakes, how do consumers update their beliefs about the quality and trustworthiness of news outlets and journalists? That is, how do consumers judge the quality of news outlets with no mistakes, one mistake, or multiple mistakes?

We examine how consumers adjust their evaluations in the presence of deviations from news verification. One possibility is that consumers apply a consistent decrease in quality for each mistake they learn about (which we call the *linear punishment* model). Another possibility is that consumers use a non-linear adjustment and adjust ratings downward most for the first mistake, then only slightly more downwards for each subsequent mistake after the first (which we call the *purity* model). This outcome, reminiscent of past judgment and decision-making models (Einhorn 1970; Einhorn et al. 1972) is observed in a series of four studies and is consistent with punishing violations of purity (see Graham, Haidt, and Nosek 2009).

In study1, we examined how people adjust their ratings of quality of the news outlets in the presence of mistakes. Participants (N = 298) read a series of five nonpolitical headlines (e.g., SpaceX launch, CO_2 emissions) meant to avoid people trying to adapt the message to prior beliefs (Lord, Ross, and Lepper 1979). After each headline, participants learned nothing about the headline (no-info), that all the information was verified (control), that there was a numeric mistake (one numeric), that there was a non-numeric mistake (one non-numeric), or that two details (the numeric and non-numeric mistake) were incorrect (two-mistakes). These conditions were counterbalanced across the five headlines; each participant saw one headline from each condition in a random order. After seeing each headline and the corresponding information for that condition, participants rated the accuracy of the headline (1 = Not at all accurate, 7 = Completely accurate), and were randomly assigned to rate either the journalist or news outlet (between-subjects) on five dimensions: competence, effort into researching the news, quality source of news, trust, and willingness to read more (-50 = Completely disagree, 0 = Neither agree nor disagree, +50 = Completely agree). These statements held together and were averaged into one quality index.

The pattern of results was consistent with the purity model. First, the manipulations were successful: the perceived accuracy of the numeric and non-numeric mistake conditions were not significantly different from each other but were lower than that of the control and no-info conditions but were both higher than in the two-mistakes condition. Second, the drop in the quality index was greater when going from control to either of the mistake (numeric, non-numeric) conditions than from either mistake condition to the two-mistakes condition (ts > 3, ps < .01) for both the journalist and the news outlet conditions. Thus, study1 provided initial evidence that the difference in quality between no mistakes and one mistake is greater than that of one mistake to two mistakes.

In the second study, we replicated the findings from study one but with slightly different conditions. That is, participants (N = 194) read five headlines that had no information (no-info), were verified (control), or were disputed and had one mistake (one-mistake), two mistakes (two-mistakes), or three mistakes (three-mistakes). Participants were also randomly assigned into one of two conditions: they rated either an unspecified journalist or a journalist from their preferred news outlet (which participants reported at the beginning and was piped into the questions) on the same measures from the first study. This manipulation did not interact with the results and will not be discussed further. Consistent with the first study, the drop in the quality index from the control to the one-mistake condition was greater than that of the drop from the one-mistake to the two-mistakes condition (ts > 3, ps < .01). The same difference between the one and two-mistakes conditions and the two and three-mistakes conditions was lesser in magnitude (ts < 1, ps > .3).

In the third study (N = 195), we tested whether the results were contingent on severity of the mistake. That is, do any mistakes lead to the aforementioned results, or will people temper their judgments when the mistakes are trivial (e.g., identifying small typos that do not change the meaning of the headline)? When mistakes were meaningful as in other studies, we replicated the aforementioned results (p < .001), but not when the mistakes were perceived to be trivial (p > .5; interaction p < .001).

In the final study (N = 266), we tested whether the attribution for why the mistake was made influenced reactions to mistakes. Participants were randomly assigned to one of the three mission conditions: the news outlet wanted to get it right and had a responsibility to correct errors (ethics), they wanted to get it first and had a responsibility to deliver news fast (speed), or no-mission. The design of headlines

and fact-checking information was similar to earlier studies. Indeed, people judged the news outlet in line with the purity model in the speed and no-mission conditions. However, in the ethics condition, they adjusted their quality judgments linearly and the drop in quality from control to one-mistake reduced significantly compared with other two conditions (interaction $p < .001$).

Collectively, our findings suggest that while fact-checking is important, consumers adjust their quality judgments downwards as a function of number of mistakes using a purity model.

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Understanding Our Divisions: Politics' Effect on Marketplace Dynamics

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Paper #1: How Political Identity Shapes Customer Satisfaction

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Paper #2: Political Ideology, Desire to Signal Bravery, and Vigilance against Health Threats

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Paper #3: When Brands Become Activists: Who Reacts and How?

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Paper #4: Consumers' Responses to Firms that Engage in Government Lobbying

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SESSION OVERVIEW

Each passing day seems to bring about a new political conflict. From provocative online posts to controversial commercials, we often need look no further than the marketplace to see the influence of our political divisions (Horst 2018). Yet, despite its growing ubiquity in consumer behavior, there is still much we do not know about the influence of politics in the marketplace (Keller 2020).

This session takes a comprehensive look at the role of politics in marketing by examining its influence at three levels – consumers' political ideology, brands' political activism, and companies' political influence through lobbying. Each perspective brings its own questions and insights. Specifically, does political ideology shape consumers' satisfaction with the products and services they consume? Why has consumers' political ideology influenced perceptions of threat during the COVID-19 pandemic? When brands take controversial political stances, who expresses outrage and who stays silent?

And, how do consumers view companies' political lobbying behavior? This session answers these and other questions as it deepens our understanding of how and why politics influence marketplace dynamics.

To begin, **Ordabayeva and colleagues** investigate how and why political identity influences customer satisfaction with the very same product. Across 9 studies, they find that conservatives tend to express greater satisfaction with the products and services they consume. This is due to conservatives' (vs. liberals') greater belief in free will, which leads them to trust more in their consumption decisions.

Lisjak and colleagues examine a seeming paradox: conservatives are often more vigilant to threats, and yet resistant to interventions during the COVID-19 pandemic. The authors find that conservatives' desire to signal bravery helps explain this discrepancy. Conservatives are more likely to believe that visiting public places during the pandemic signals bravery, which predicts them taking fewer precautions.

Rocklage and Rucker analyze 300 million tweets from 110,000 Twitter users to forecast who, when, and how consumers react to brands' controversial political stances. They find a bleak outlook for brands: consumers who tend to form and express negative attitudes readily express outrage. However, opposite of what brands would hope, those on the positive end are surprisingly silent. Moreover, consumers who are predisposed to base their attitudes on emotion are quickest to react during a controversy.

Paharia and colleagues find that not only do consumers have a sense of which companies lobby the government or not, but also that this knowledge can lead to lowered satisfaction and likelihood of purchasing from those companies. Indeed, the authors find that consumers view political lobbying as unfair and potentially indicative of lower product quality.

By examining politics' effect at all three levels – consumer, brand, and company – the session answers the call for examining and bridging political divisions. It also identifies useful insights for consumers, brands, companies, and policy makers. This session will be of interest to researchers seeking to understand how politics influence consumer behavior from multiple perspectives. In addition to attracting the growing number of scholars interested in political ideology, the session will also draw those studying customer satisfaction, attitudes, language, word of mouth, emotion, and branding.

How Political Identity Shapes Customer Satisfaction

EXTENDED ABSTRACT

A growing literature examines how political identity shapes consumers' preferences for products and marketing campaigns. Yet, it is unclear how political identity shapes individuals' satisfaction with the products and services they consume, despite the significant implications of customer satisfaction for post-purchase behavior (consumption quantity, usage, re-purchase, recommendation, loyalty), wellbeing, and sales.

We propose that, compared to liberals, conservatives may be more satisfied with the products and services they consume. We propose this may happen because conservatives (vs. liberals) hold a

stronger belief in free will – that individuals exercise free will and autonomy over their actions – which, in turn, may boost conservatives' (vs. liberals') trust in their decisions (including decisions to consume certain products and services). Our predictions build on several literatures. First, although belief in free will is widely prevalent, individual factors may shape the strength of these beliefs (Carey and Paulhus 2013; Zheng et al. 2016). We posit that political identity is one such factor. Specifically, conservatives tend to emphasize the role of personal responsibility, whereas liberals focus on external sociocultural factors, to explain individual outcomes (Jost et al. 2008; Skitka et al. 2002) – this may contribute to conservatives' (vs. liberals') stronger belief in free will. Second, perceiving personal causality behind actions increases individuals' feelings of efficacy and confidence about the outcomes of these actions (Bandura 1980; Botti and McGill 2010) – hence, belief in free will may boost individuals' trust in their decisions and actions. Third, higher confidence in one's actions or decisions may motivate individuals to process and perceive decision outcomes and experiences in a way that confirms prior beliefs – i.e., that one's decision was sound in the first place (Simon and Spiller 2016; Snyder and Swann 1978).

We therefore predict that conservatives' (vs. liberals') higher trust in their decisions, stemming from their stronger free-will belief, may result in higher customer satisfaction. This prediction goes beyond recent findings on conservatives' (vs. liberals') lower tendency to engage in customer complaints (Jung et al. 2017). Specifically, dissatisfying consumption experiences do not result in complaints most of the time, and complaints do not necessarily reflect customer (dis)satisfaction (Day and Landon 1977; McGraw et al. 2015). Furthermore, we document the wide-ranging downstream consequences (repurchase, recommendation, sales) and boundary conditions (low choice availability, overwhelmingly positive consumption experience) of the novel political identity-satisfaction link.

Nine studies test our predictions using primary and secondary data, real and hypothetical behavior. Studies 1-4 use controlled experiments and Studies 5A-D use field data.

Study 1 (N = 412) examined the phenomenon and its mechanism. After indicating their political identity (1 = extremely liberal, 9 = extremely conservative; Jost 2006), participants recalled a product that they had purchased within the past two years, reported their satisfaction with the product (1 = very dissatisfied, 11 = very satisfied; 1 = extremely dissatisfied, 7 = extremely satisfied), product price, and how long ago they had made the purchase. Afterwards, participants indicated their belief in free will (7 items; e.g., "People have complete control over the decisions they make"; Paulhus and Carey 2011), trust in decisions (3 items; e.g., "I can trust my ability to make good decisions"), and additional constructs (heuristic processing, need for closure, market efficiency, cognitive dissonance, dissonance reduction, fluency, expectations of and commitment to decisions). Political conservatism (vs. liberalism) led to higher customer satisfaction ($p < .001$), due to free-will beliefs and trust rather than alternative process specifications or constructs. In this and subsequent studies, controlling for purchase price and purchase age (reported by participants), as well as purchase hedonism (vs. utilitarianism) and positivity (vs negativity) (coded by research assistants) did not impact the results.

Studies 2A-B examined the process behind the political identity-satisfaction link while controlling for actual consumption experience. Study 2A (N = 291) manipulated ideology by prompting participants to recall a prior interaction with someone who was much more liberal or conservative than them (Ordabayeva and Fernandes 2018). We measured free-will beliefs and decision trust (in random order using abbreviated scales) as well as satisfaction with a "how-

to" video that participants watched in the context of the study. Satisfaction was higher in the conservative than in the liberal condition ($p = .017$). This effect was serially mediated by free-will beliefs and decision trust. Study 2B (N = 202) further corroborated the role of free-will beliefs and decision trust (vs. alternatives) in mediating the effect of measured political identity on satisfaction with the controlled video from Study 2A.

Study 3 (N = 442) measured political identity and then weakened (vs. not) free-will beliefs through an article that argued against (vs. for) the existence of free will (Alquist et al. 2013). Weakening free-will beliefs attenuated the effect of political identity on customer satisfaction (same task as in Study 1; interaction: $p = .022$; ideology effect in the high free-will condition: $p = .052$ and in the low free-will condition: $p = .162$).

Study 4 (N = 412) tested the moderating role of valence of the consumption experience. After indicating their political identity, participants recalled a product purchase that turned out very well or very poorly, and they indicated their product satisfaction. The political identity-satisfaction link was attenuated for a very positive prior experience (interaction: $p < .001$; ideology in the negative experience condition: $p < .001$; positive experience condition: $p = .660$).

Studies 5A-D examined real-world settings to boost managerial relevance. Study 5A documented a positive link between online customer reviews of local restaurants and localities' political ideology, particularly (vs. less so) when many (vs. few) restaurant options were available. Study 5B revealed a positive link between political conservatism and travelers' satisfaction with the services of an actual airport. Study 5C showed that conservatives' (vs. liberals') higher satisfaction with healthcare insurance led to their higher repurchase (re-subscription) and recommendation intentions. Study 5D documented higher actual sales reported by B2B companies with more conservative (vs. liberal) customers.

Political Ideology, Desire to Signal Bravery, and Vigilance against Health Threats

EXTENDED ABSTRACT

American citizens' responses to COVID-19 have differed by political ideology, whereby conservatives have been less likely to wear masks and wash hands than liberals (Reuters/Ipsos Poll 2020). This resistance is surprising, given the large body of evidence that conservatives tend to engage in more health-related behavior than liberals, especially against infectious disease (Terrizzi et al. 2013).

We propose that conservatives' propensity to engage in health-related behavior depends not only on their vigilant motivation, but also on their psychological desire to signal bravery. When a tradeoff exists between following one's vigilant tendencies and the desire to project bravery (e.g., in the context of COVID-19), conservatives' likelihood to engage in health related behavior may depend on how proximal the health threat is. We define threat proximity as the perceived closeness of the danger to the self (Cole et al. 2013). We propose that when threat proximity is low, conservatives may be less likely to engage in health-related behavior than liberals in an effort to signal bravery. Consistent with this possibility, people living in Southern conservative (vs. other) U.S. states were sometimes willing to incur personal health costs, such as experiencing minor electric shocks, to project bravery (Cohen et al. 1996). However, when threat proximity is high, we suggest that conservatives will revert to their natural vigilant state, and be as likely to engage in health-related behavior as liberals.

Study 1 used secondary data to examine the effect of political ideology and threat proximity on state-level Google searches of vigi-

lance against COVID-19 (coronavirus symptoms, COVID-19 prevention, medical face mask, N95 mask, hand sanitizer, gloves, social distancing, and food supplies; from 0=no search volume to 100=max search volume in a state; α = .69). We scored each state on conservatism, following Ordabayeva and Fernandes (2018). The measure of threat proximity was the cumulative number of coronavirus deaths per 100K population in each state. The results revealed the predicted ideology × threat proximity interaction on vigilance-related searches (p = .025). Floodlight analysis showed that under low threat proximity, conservative states were less likely to search for vigilant terms than liberal states (111 deaths per 100K population and lower, $p \leq$ .05), but not under high threat proximity.

Study 2 tested the causal effect of threat proximity and political ideology on vigilance. Student participants (n = 173) read a news article about the death of an actual COVID-19 victim. Following Mandel, Petrova and Cialdini (2006), we manipulated perceived threat proximity by describing a victim who was a dissimilar other (73-year-old man with medical conditions; low proximity) or a similar other (college student with no medical conditions; high proximity). Next, participants indicated whether they intended to (1) purchase virus protection products (e.g., medical masks); (2); stock up on food; and (3) purchase crime-protective products (α=.72). Participants reported their political ideology using a single-item scale (1 = "extremely liberal" to 9 = "extremely conservative"; Jost et al. 2007). The ideology × threat proximity interaction was significant (p = .022). While in the low threat proximity condition, conservatives reported lower intentions to engage in vigilant behavior than liberals (p = .002), they did not differ in the high threat proximity condition (p = .904).

Study 3 (n = 412) tested the mediating role of the desire to signal bravery. We measured retrospective actual vigilant behavior by asking participants to indicate the extent to which thus far they (1) had purchased virus protection products, (2) had purchased enough food and household supplies, (3) had been wearing masks in public, and (4) had been practicing social distancing (α = .88). As a measure of threat proximity, participants indicated (1) how many people have tested positive, and (2) how many people have died from COVID-19 in their county. We measured political ideology as in study 2. We measured desire to signal bravery by asking participants to indicate their agreement that visiting public places during the COVID-19 pandemic is a sign of (1) personal strength and (2) bravery and courage. Lastly, to show that the effects of bravery persisted above and beyond the role of partisan media consumption, we measured how frequently participants watched (1) CNN and (2) Fox News. We observed the critical political ideology × threat proximity interaction (p < .001). Floodlight analysis revealed that under low threat proximity, conservatives were less likely to engage in vigilant behavior than liberals (5.88 and lower on the 1-to-7 threat proximity scale, $p \leq$ .05), but not under high threat proximity. A moderated mediation analysis (Hayes 2013; Model 15) revealed that desire to signal bravery mediated the effect of ideology on vigilance under low threat proximity (CI = -.179, -.044), but not under high threat proximity (CI = -.008, .061). These effects remained significant after controlling for the role of partisan media consumption.

So far, we tested our framework in the context of COVID-19. As a first step to examine the generalizability of these findings in different contexts, we conducted a survey (n = 550), in which participants indicated their agreement with statements measuring preference for signaling bravery in the face of a health threat: (1) If I ever injured my foot, I would never walk in public with a walking stick. I would just deal with it. (2) If I get a concussion in a game with friends, I try to shake it off and continue the game. (3) It looks really weak when people who are on bikes or motorcycles wear a helmet even on quiet residential streets. Finally, we measured political ideology as in study 2. Conservatives (vs. liberals) reporter grater preference for bravery in the face of health threat across all three contexts (b's: .10 - .12, p's: .013 - .045). The results remained significant after controlling for gender.

These findings suggest that public health leaders could increase conservatives' precautionary behavior by (1) using bravery appeals and (2) highlighting threat proximity.

When Brands Become Activists: Who Reacts and How?

EXTENDED ABSTRACT

Brands serve numerous roles – from providing products to bolstering consumers' identity (MacInnis and Folkes 2017). Despite this, an unswerving principle for most brands is to remain publicly neutral on political issues (Swaminathan et al. 2020). Taking a side risks alienating large segments of consumers. And yet, prominent brands have recently broken this rule (Horst 2018). In three consecutive years, Budweiser, Nike, and Gillette all spent millions of dollars on advertising that took positions on polarizing political issues.

Despite these recent events, most marketers struggle with even a basic understanding of who reacts to these stances, when they react, and the opinions they express (Swaminathan et al. 2020). We use a novel approach that combines attitude theory with computational linguistics and real-world big data to provide insight into these dynamics.

Specifically, prior research treats each attitude as its own entity, disconnected from that person's other attitudes. For example, people's attitude toward their toaster is treated as unique from their attitude toward racial injustice. Yet, we propose there may be individual differences in people's predisposition toward forming and expressing both positive attitudes (vs. negative) and emotional attitudes (vs. cognitive). Put simply, understanding consumers' propensities toward certain types of attitudes may serve as a means to understand who responds when brands take polarizing stances in advertising.

Hypothesis. Regarding valence, consumers who are predisposed toward negative attitudes may be most likely to express outrage (e.g., Bizer et al. 2011). In contrast, consumers predisposed toward positive attitudes may express support for the brand (e.g., Abelson et al. 1982). Thus, consumers' valence tendencies may predict who will respond to a controversial stance by brands. We also explored the possibility of a negativity bias, whereby negative attitudes may be stronger predictors than positive (e.g., Rocklage, Pietri, and Fazio 2017).

In addition, research suggests that attitude emotionality may predict how *quickly* consumers will react to these controversies. On the one hand, research indicates that attitudes that are formed via a more thoughtful, reason-based approach are particularly strong (Petty, Haugtvedt, and Smith 1995). This may lead consumers to react quickly when they perceive a political stance either in line or against their attitudes. On the other hand, those who base their attitudes more on their emotional reactions may be quicker to react given the ability of emotion to spur behavior (e.g., Rocklage, Rucker, and Nordgren 2021). We test these competing Hypothesis.

Given the brands' stances were political, we also examined how the political ideology of each consumer moderated these results. Finally, we assessed the additional consequences of these tweets by examining whose tweets were retweeted and therefore spread further.

Field studies. We first identified three advertisements where brands took a political stance that evoked widespread controversy:

advertisements on immigration (Budweiser), racial injustice (Nike), and the Me Too movement (Gillette).

For each brand separately, we then identified all consumers who tweeted about that brand in the year *prior* to each advertisement. Identifying a set of consumers prior to the controversy decreases bias in the sample as it allows for the unique ability to assess not only who reacts to the controversy, but also who stays silent and *does not* attack or defend the brand.

We scraped all of each consumer's tweets in the year prior to each event. Across the studies there were approximately 110,000 consumers and 300 million tweets. To measure individual differences in attitudes, we first removed any tweets that mentioned the brand. We then quantified the average valence and emotion (vs. cognition) of each consumer's attitudes via their tweets using the Evaluative Lexicon, a validated computational linguistic tool for measuring attitudes (Rocklage, Rucker, and Nordgren 2018). This provided us with the average valence and emotionality of each consumer's attitudes in the year prior to the controversy. We used these individual differences to predict how consumers reacted on Twitter during the controversies. We measured consumers' political ideology using a validated latent space model (Barbera et al. 2015).

Results. For each controversy, we used logistic mixed modeling to predict whether a consumer tweeted about the company during the week of the controversy. We also controlled for consumers' general propensity to tweet by including the total number of tweets that consumer made in the year prior to the controversy.

Across controversies, the more consumers were predisposed to form and express negative attitudes, the more likely they were to react to each controversy as it broke in real time for Budweiser, Nike, and Gillette. This was moderated by ideology: negative conservatives were particularly likely to tweet given the companies tended to take liberal stances. These same results indicated those predisposed to form and express positive attitudes as well as liberals were noticeably silent and did *not* come to the support of brands.

How did these consumers react when they tweeted? The more negative and conservative consumers were, the more negative they were toward the brand. This same effect indicates that positive and liberal consumers tended to tweet positively toward the brand, though, as overviewed previously, they were less likely to tweet in general.

Regarding emotionality, we found that the more that consumers tended to form and express their attitudes based on emotion (vs. cognition) as an individual difference, the quicker they were to tweet when the controversy broke. More emotional consumers tweeted closer to when the advertisement was released from each brand. Emotional liberals and conservatives were equally quick to react.

Finally, conservatives' tweets were retweeted more, thereby having the consequence of spreading negativity further.

Summary. These real-world field data indicate that brands should expect consumers who are predisposed to form and express negative, emotion-based attitudes to be overrepresented on social media, quicker to react, and to react negatively. Tweets from negative consumers were also more likely to spread. Finally, brands should not necessarily expect to have consumers come to their support.

Consumers' Responses to Firms that Engage in Government Lobbying

EXTENDED ABSTRACT

Lobbying, defined as "expending resources in an attempt to sway government officials to make decisions beneficial to the lobbying firm," is a tactic firms use to manage their regulatory environ-ment. Firm-lobbying has been shown to provide strong returns estimated by some at 22,000% (Alexander, Mazza, and Scholz 2009). Recent findings reveal that $325 million in lobbying investments by *Fortune* 100 firms accounted for $338 billion in federal contracts in return (Andrzejewski 2019). Accordingly, the high returns to lobbying make it unlikely that firms will halt this practice.

In this research we consider how consumers respond to lobbying. News about company lobbying is often present in the news (e.g. the Associated Press has a unique web page dedicated to news about lobbying). Therefore, we propose that consumers' exposure to information about corporate activities such as lobbying can incidentally impact purchase intentions. In this research, we find that consumers disapprove of firms that lobby compared to firms that do not lobby (or when no lobbying information is provided). We find this effect is driven by a cognitive mechanism and an emotional mechanism. From the cognitive side, consumers perceive that lobbying firms offer inferior products. Such inferences may be based on an intuitive understanding of regulatory capture theory, where firms are incentivized to focus more on securing favorable treatment from government, than they are focused on satisfying customers. As regulatory capture theory explains, firms use lobbying to derive competitive advantages from benefits such as subsidies, monopolistic or favorable competitive conditions (barriers to entry, access to new markets), protective tariffs, and fixed prices (Stigler 1971). From the emotional side, consumers feel that lobbying is an unfair act, where companies may be seen as bending the rules in order to secure unfair advantages. Past research has shown that consumers are highly sensitive to fairness (Bolton, Warlop, and Alba 2003). Accordingly, we propose that consumers will disfavor lobbying firms because they believe these firms are acting in an unfair manner. We further predict this effect of fairness will be stronger for liberals who care more about fairness compared to conservativse (Graham, Haidt, and Nosek 2009).

In a pretest with a sample of 505 U.S. participants our goal was to first determine how accurate participants would be about company lobbying activities. The study quizzed respondents on the extent to which ten well-known firms lobbied (five-point Likert scales). We compared respondent scoring with actual company lobbying spending disclosed. Within the companies featured, we posed paired-comparisons of close competitor firms and asked whether one lobbied more, less, or about the same. On this task respondents were 71% accurate.

In Experiment 1, with a sample of 225 participants recruited from a U.S. executive MBA program, our purpose was to demonstrate the effect of customer lobbying for a currently owned product. To increase realism, and control for product experience participants were asked about the mobile phone they currently owned (Apple, Samsung, HTC, Google, and LG). Participants were then randomly assigned to a no lobbying condition or a lobbying condition where they read news of lobbying disclosures for their phone brand. Participants report lower satisfaction when they were told the brand lobbied than when they were told the brand did not lobby (M=5.75 vs. M=5.34, t(223)=3.34, *p* = .001). Results for purchase intentions follow a similar pattern (M=5.5, vs. M=5.13, F(1, 223)=2.22, *p* < .03). These results did not change when including brand as a covariate in the analysis.

In Experiment 2, we considered quality and fairness as mediators, and attempted to attenuate the negative effects of lobbying. In addition to being told whether a company lobbied or not (through a news article headline), participants in Experiment 2 were given information about whether the company was alone in their lobbying activities (self-interested), or whether they were lobbying alongside a customer group (customer-interested). Three-hundred and ninety

nine U.S. participants were randomly assigned to condition in a 2 × 2 between subjects design with lobbying (lobbying vs. no lobbying mention) and intention (self-interest vs. customer-interest) as between-subjects factors (industry replicates: pharmaceutical and electricity). We found a significant interaction ($F(1, 395)=8.79$, $p < .005$). In the company-interest conditions, participants indicated lower purchase intention when the company lobbied compared to when there was no mention of lobbying ($M_{lobby}=2.96$ vs. $M_{no\ lobby}=3.84$; $F(1, 395)= 29.49$, $p < .001$). However in the customer-interest conditions, there was no significant impact of lobbying behavior on purchase intention ($M_{lobby}=3.86$ vs. $M_{no\ lobby}=4.03$; $F(1, 395) = 1.02$, n.s). Fairness and quality evaluations were significant mediators in the company-interest conditions (fairness evaluations: -.45, CI: -.66, -.27; quality evaluations: -.12, CI: -.23, -.05). Neither were significant mediators of lobbying in customer-interest conditions (fairness: -.02, CI: -.21, .15; quality: .02, CI: -.06, .1).

In experiment 3, our goal was to determine whether the negative effect of lobbying on purchase intention would vary based on consumer groups with varying concerns for fairness. We predicted that liberals, who carry greater fairness concerns, would exhibit a stronger disfavor of lobbying firms compared to conservatives who care about fairness less. 268 U.S. liberals and conservative participants (prescreened) were randomly assigned to a lobbying condition or a no lobbying condition for an automobile brand. We found a significant interaction between lobbying and political orientation ($F(1, 264)=11.97$, $p < .001$). Examining the interaction very liberal participants indicated lower purchase intentions when the brand lobbied compared to when there was no lobbying ($M_{lobby}=2.76$ vs. $M_{no\ lobby}=4.86$; $F(1, 264)= 106.59$, $p < .001$). However, for very conservative participants this negative effect of lobbying was weakened ($M_{lobby}=3.43$ vs. $M_{no\ lobby}=4.52$; $F(1, 264) = 24.64$, p<.001). The negative mediating effects of fairness were significantly stronger for liberals (liberals fairness evaluations: -1.52, CI: -1.92, -1.17; conservatives fairness evaluations: -.9, CI: -1.19, -.64; index of moderated mediation: .62, CI: .28, 1.02). There was no difference in the negative mediating effects of quality between conservatives and liberals (liberals quality evaluations: -.15, CI: -.3, -.05; conservatives quality evaluations: -.11, CI: -.24, -.02; index of moderated mediation: .03, CI: -.08, .19).

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Risk in the Time of COVID

Chair: Abigail Bergman, University of Chicago, USA
Discussant: Suzanne Shu, Cornell University, USA

Paper #1: The Masked Majority: Underprediction of Widespread Support for Covid-19 Safety Policies

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Paper #2: Grocery Spending and Stockpiling During the COVID-19 Pandemic

Yeşim Orhun, University of Michigan, Ross School of Business, USA

Oleg Urminsky, University of Chicago, Booth School of Business, USA

Paper #3: Jobloss and Risky Decision Making

Daniel O'Leary, University of Chicago, Booth School of Business, USA

Abigail B. Sussman, University of Chicago, Booth School of Business, USA

Jennifer S. Trueblood, Vanderbilt University, Department of Psychology, USA

Paper #4: Risky but Alluring: The Unexpected Increase in Risk Taking During the COVID-19 Pandemic

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Ying Zeng, University of Toronto, Rotman School of Business, Canada

SESSION OVERVIEW

The COVID-19 pandemic presents a unique opportunity to examine how consumers deal with novel and emerging risks related to safety, finances, and health. Not only are consumers faced with the uncertain health risks of a new virus, but also with incorporating new restrictions and safety measures into their daily routines (Habersaat et al., 2020; Sheth, 2020). In addition, financial insecurity has amplified the risks associated with making these choices.

From whether to go to the grocery store to whether to visit elderly relatives to whether to go into an in-person job, previously mundane decisions have become constant risk assessments (Hakim et al., 2021). Consumers must make daily decisions about what risks they are willing to take, how they will respond to risks in the environment, and how they expect those around them to react to risks (Budd et al., 2020). While the extremity of the situation is unique to the pandemic, the insights into consumer behavior gleaned from studying the pandemic have applications to improving understanding of risk-related behavior under pressure, in general. The papers in this session examine how consumers' experiences during the COVID-19 pandemic impacted their risk tolerance and how the impact varied across types of consumers.

From the beginning of the pandemic, consumers' attempts to reduce COVID risk have had a major impact on their choices about when to shop, what to buy, and how to behave. Consistent with the desire to minimize COVID risk, **Urminsky and Bergman** find widespread support for retailers having strict COVID-19 safety requirements among consumers despite consistent underprediction of this support by both managers and consumers. Most people desire to avoid risk themselves but fail to recognize that others share this desire. Using survey and Nielsen Homescan data, **Orhun and Ur-**

minsky document behavior consistent with avoiding shopping risk, particularly stockpiling durable goods and decreasing trips to the store. However, poorer people, who were often more impacted by the pandemic, were less likely to stockpile and did not reduce shopping frequency as much.

The last two papers explore differences in how attitudes toward non-COVID risks were impacted by the pandemic. **Tsai and Zeng** find increased (non-COVID) risk-taking behaviors in populations that were more directly affected by the pandemic compared to those who were less affected and argue that this increase is due to heightened boredom among these populations. Furthermore, **O'Leary, Sussman, and Trueblood** demonstrate that pandemic-induced financial hardship was associated with a higher willingness to engage in risk-taking behaviors.

Taken as a whole, these papers collectively demonstrate the varied risk responses to the pandemic as well as the heterogeneity observed in risk preferences. Beyond the COVID-19 pandemic, these findings can help further our understanding of the way that danger and deprivation more generally impact how people think about risky choices for themselves and others.

The Masked Majority: Underprediction Of Widespread Support for Covid-19 Safety Policies

EXTENDED ABSTRACT

Mask wearing is a key intervention to reduce COVID-19 transmission risk, especially indoors (Brooks et al., 2020; Eikenberry et al., 2020; Khanh et al., 2020). However, lack of a centralized pandemic strategy in the US resulted in uneven mask policies, requiring firms to decide how strictly to require and enforce mask-wearing, and leaving consumers to assess risk based on limited policy information. Norm-formation regarding mask-wearing hinged on potentially inaccurate beliefs about others' preferences. Individuals often under-predict how risk averse others will be (Faro & Rottenstreich, 2006; Hsee & Weber, 1997). Perceptions about mask policy adherence could also be obscured by vocal minority opinions that skew policy decisions when businesses believe that more people oppose masks than actually do (Halbeslehen et al., 2004; Oliver, 2014).

In four pre-registered studies, we investigate whether support for strict COVID-19 prevention policies is underestimated, across business types, information sources (stated policies and viral videos), and types of policies (required mask-wearing and vaccination). We consistently find that people strongly favor organizations with strict COVID-19 prevention policies, such that the risks of losing customers and of negative consumer perceptions are higher for lax policies (e.g., recommended mask-wearing) than for strict policies (requiring and enforcing mask-wearing). Nevertheless, customers and managers underestimate support for strict policies.

In study 1, (N=546), made repeated choices between two airlines, one that required masks and one that recommended masks, with differences in ticket prices varied across the choices. Participants then predicted how many participants out of 100 chose each airline when tickets were equally prices. Across all price pairs, participants chose the stricter option 69% of the time (SD=35.11). When choosing between equally-priced options, the majority of people selected the stricter airline option (69.78%). However, the same respondents under-predicted how many people would choose the stricter option

(M$_{prediction}$=59.83%, error=9.95%, bootstrapped 95%CI of difference: [-13.55,-6.22], p<0.001). Thus, consumers preferred a stricter policy but were not aware that others did as well.

In study 2, we examine the accuracy of a sample of retail managers (N=93, study 2b) because they are often the employees responsible enforcing store policies (Corkery, 2020; Repko, 2020; Segarra, 2020) in predicting the preferences of a nationally-representative sample of consumers (N=498). We tested consumers' preferences (and their beliefs about other consumers' preferences) in five between-subjects scenario conditions (bakery, pharmacy, movie theater, hair salon, and gym). In each condition, participants chose between visiting one of two equally convenient businesses that required vs. recommended mask-wearing or choosing not to patronize either business. Consumer participants then estimated how many other consumers out of 100 would choose each option. The manager participants likewise estimated how many participants out of 100 made each choice in all five scenarios. Consumers also rated each business on perceived warmth and competence (Kervyn et al., 2013). Consumers mostly selected the stricter mask-required option (73%, Z=106.44, p<.001; vs. 15% lax option or 12% abstaining). Both consumers and managers significantly underpredicted how many consumers chose the stricter option overall (M$_{consumer\ prediction}$=55%, error=-18.65, p<.001; M$_{manager\ prediction}$=49%, error=-23.74p<.001). Overall, managers were not better than laypeople at predicting the preferences of consumers.

In study 3 (N=200), participants watched two videos filmed at actual Walmart stores, one depicting strict enforcement and the other depicting non-enforcement. Participants chose between shopping at the strict-enforcement or non-enforcement store, or choose not to go to either store. Participants then estimated how many participants out of 100 would choose each option. Participants also assessed the warmth, competence, trustworthiness and caring of each store.

Respondents preferred the stricter store over the lax non-enforcing store (70.1% vs. 29.9%, χ²(1,N=134)=21.8, p<.001), and rated the strict store significantly higher on warmth, competence, caring, and trust (all ps<.02). Instead of harming a store's reputation, videos depicting strict enforcement resulted in more choices of that store and beneficial brand perceptions of the business, compared to a video showing nonenforcement. Nevertheless, respondents underpredicted the degree to which other consumers would share an overall preference for the stricter store (M$_{prediction}$: 39.9% vs. 54.3% actual, error=-14.43, p<.001). Overall, these results suggest that the negative impact of non-enforcement on consumer preferences is systematically underestimated.

In study 4 (N=197), participants chose between having a surgical procedure at a hospital that required employees to be vaccinated against COVID-19, or at a hospital that that recommended employees be vaccinated or not having the procedure at either hospital but enduring pain, holding constant convenience and insurance coverage. Participants then estimated how many other participants out of 100 would choose each option. To examine the potential consequences of beliefs about descriptive norms regarding staff vaccination policies on word of mouth (Anderson, 1998; Buttle, 1998), participants were then told that their friend is going to have a procedure at the opposite hospital than the one the participant selected, and asked whether they would warn the friend about each hospital's vaccine policy.

The majority of respondents selected the stricter vaccine-requiring hospital over the lax non-requiring hospital (77.04% vs. 19.89%, χ²(2,N=196)=176.8, p<.001; 3.06% delayed). Respondents rated the hospital with the required-vaccine policy significantly higher on warmth and competence (ps<.001). Respondents again underpredicted the preference for the stricter hospital (M$_{prediction}$=63.76% vs.

77.04% actual, error=-12.28%, p<.001). Controlling for own choice, weaker perceived descriptive norms (i.e., a lower estimated percentage of people the respondent expected to agree with them) predicted a lower likelihood of warning a friend about the hospitals' policies (b=0.004, SE=0.001, p<.001). Overall, these results demonstrate not only underestimation of the majority-preference to get treatment at a hospital that requires employees to be vaccinated, but that underestimating the descriptive norm predicts less willingness to engage in word-of-mouth behavior.

These four studies demonstrate that consumers and managers consistently underestimate support for COVID-19 prevention measures, reinforcing a climate in which individuals and businesses hesitate to advocate for strict policies, and impeding the establishment of crucial social norms, with consequences for public health.

Grocery Spending and Stockpiling During the COVID-19 Pandemic

EXTENDED ABSTRACT

Consumer inertia has been widely documented, with consumers purchasing tending to be relatively stable over time. However, the 2020 COVID pandemic in the United States was an unprecedented shock to consumer behavior. In this paper, we investigate the nature of changes in consumer grocery shopping behavior during the pandemic and how consumers differed in their response.

During the initial weeks of the 2020 COVID pandemic in the United States, consumers faced an uncertain and stressful future. In March, a patchwork of school closure and stay-at-home orders went into effect over a three-week period in the majority of U.S. states. Grocery shopping, typically a routine activity, became a challenge of providing for one's self and one's family in the face of uncertainty about the availability of supplies and about future needs, as well as unprecedented economic insecurity. In this paper, we investigate how consumers changed their food purchasing behaviors during the early weeks of the pandemic and the lock-down period that followed. Differences in consumers' responses could impact their preparedness to face the pandemic, including their access to beneficial nutrition and their potential for food insecurity while isolating. Therefore, we investigate how populations already at-risk for food insecurity, particularly low-income households, differ in the extent to which their shopping behavior changed.

Using both original survey data (N=722) and Nielsen Homescan panelist purchase data, we find dramatic changes in U.S. households' grocery shopping behavior during the pandemic and substantial discrepancies in those changes across households of different demographics. During the "initial-response" period in early March we see substantial increases in both shopping trips (increasing by 7% - 8%) and spending on food and beverages (by 25% - 32%) compared to the same periods in 2019, consistent with stockpiling. During the subsequent "lock-down period" through the end of April, consumers sustained an increased level of spending on food and beverages (an average 13% increase compared to the same period in 2019), while making fewer shopping trips than usual (an average of 10% reduction). As a result, during the lock-down period, consumers' spending per shopping trip ballooned to levels 30% higher than usual.

Both survey data and shopping data suggest that these spending changes varied by type of food. Specifically, survey respondents reported initially increasing purchases for foods that they perceived as more storable and more of a necessity. Subsequent spending increases focused on foods perceived as healthy, tasty and necessities. Purchase data confirms that the spending changes prioritized rela-

tively nutritious foods that store well. These results held when controlling for demographics.

Food insecurity has been on the rise since the pandemic began. For example, Feeding America, a national organization serving 200 local food banks, reports that 98% of their client food banks had reported higher demand since the beginning of the pandemic, and two-thirds reported reduced inventory (Gundersen et al., 2021). Even prior to the pandemic, lack of liquidity constrained grocery shopping flexibility for lower-income households (Orhun & Palazzolo, 2019). Consistent with the view that lower-income households lacked the liquidity to effectively stockpile, spending data reveals that lower income shoppers did not increase food spending to the same degree as higher-income households during the pandemic, and what they did spend did not shift towards the storable, high-nutrition ingredients that high-income households were stocking up on. Survey data further finds that households that reported experiencing greater food insecurity in 2019 increased their spending less at the start of the pandemic.

These findings suggest that low-income consumers have in fact not adapted their grocery shopping to meet changing needs during the pandemic as much as the wealthier families were able to. Overall, our results raise the possibility that for millions of low-income American families, the coronavirus pandemic may also have created or exacerbated food-insecurity issues. Our results regarding the differences in the composition of food purchased by low-income households during the pandemic also suggest that in addition to potentially insufficient food, lower income households that do have enough food may still be at greater risk of lower nutritional quality in the foods they are able to buy.

Risky But Alluring: Severe COVID-19 Pandemic Influence Increases Risk Taking

EXTENDED ABSTRACT

Decision under risk has been one of the most lively and interdisciplinary topics in judgment and decision-making (Fox et al., 2015; Loewenstein et al., 2001). Despite the rich literature on this topic, it does not provide a clear theoretical prediction about how an extreme exogenous shock such as the COVID-19 pandemic might influence consumers' general risk attitude in their daily lives. The present research addressed this issue.

A series of four studies (two preregistered) showed that compared with consumers who were less severely affected by the pandemic, those who were severely affected indicated *greater* risk taking toward a set of risky activities across social, health/safety, financial, ethical, and recreational domains (30-item DOSPERT scale, Blais & Weber, 2006; Weber et al., 2002) or on a single-item risk-taking scale (study 4:"please indicate your willingness to take risks in general;" Dohmen et al., 2011).

The difference in risk taking cannot be attributed to individuals' risk perception because across studies, the perceived risk of the same activities among the severely affected group was either *lower* or *similar* to that of the less severely affected group, showing a counterintuitive risky-but-alluring effect. Data showed that this paradox could be explained by elevated boredom levels and perceived benefits of risky activities among those who were severely affected.

Pandemic influence was measured using a factual scale such that a participant would be categorized as *severely affected* if they or any of their household members encountered at least one of the following situations due to the epidemic: (1) substantially reduced income; (2) confirmed as infected or being hospitalized; (3) experienced mandatory quarantine; and (4) other applicable situations.

Although these situations are different in nature, they share one thing in common: cause individuals to be even less likely or able to engage in common, lower-risk activities such as dining out, not to mention higher-risk activities such as skydiving (Meta-analysis confirmed that the effect of pandemic influence did not vary by these situations.)

Study 1 (MTurk) established the risky-but-alluring effect and showed that severely affected participants ($N = 122$) were more likely to engage in risky activities ($M = 3.75$) than those who were less severely affected ($N = 94$, $M = 2.94$, $t(214) = 6.43$, $p < .001$). However, the mean risk-perception level did not vary significantly between those who severely affected ($M = 3.51$) and those who were less severely affected ($M = 3.58$, $t(214) = .79$, $p = .43$). Linear regression showed that pandemic influence remained a significant predictor of risk taking ($p < .001$) when risk perception was controlled for, ruling out risk perception. To verify which group was driving the effect, we used a pre-pandemic group (i.e., the unaffected group, $N = 120$) who completed a similar survey in Summer 2019 as a comparison benchmark. Results showed that the pre-pandemic participants (the unaffected group) were less risk taking ($M = 2.51$) than both the severely affected group (Tukey's $t(333) = 11.01$, $p < .001$) and the less severely affected group (Tukey's $t(333) = 3.55$, $p = .001$). However, compared to the unaffected participants ($M = 3.28$), risk perception was *higher* among both the severely affected ($M = 3.58$, $t(333) = 3.75$, $p < .001$) and the less severely affected participants ($M = 3.51$, $t(333) = 2.69$, $p = .021$), further suggesting the effect of pandemic influence on risk taking cannot be attributed to risk perception.

Study 2 (234 university students in Canada) replicated study 1 and showed that severely affected participants were more likely to engage in risky activities ($M = 2.65$) than the less severely affected ones ($M = 2.51$, $t(232) = 2.16$, $p = .032$), and the effect remained significant after controlling for risk perception ($p < .001$). Mediation analysis showed a significant indirect effect of pandemic influence on risk taking through state boredom, but not through positive or negative affect.

Study 3 (206 MTurkers) replicated the risky-but-alluring effect and showed that the effect remained robust after controlling for risk perception, demographics and subjectively perceived pandemic influence, suggesting that our categorization of pandemic influence would still predict risk taking independently from people's perceptions. In addition, data showed that perceived benefits from taking risks mediated the effect of pandemic influence and ruled out factors related to risk perception including perceived severity and perceived chance of negative outcomes.

Study 4 (206 MTurkers once again replicated the key finding using the DOSPERT scale and the singles-item measure of willingness to take risks). A serial mediation showed that the indirect effect of pandemic influence on risk taking through boredom and perceived benefits was significant. One might argue the severe pandemic influence was driven by participants' chronic individual difference in risk taking because more risk taking leads to careless behaviors toward COVID-19 and thus severe pandemic influence. We ruled out this reversed inference by showing that people perceived themselves to be similarly careful toward COVID-19 ($M_{severe} = 5.66$, $M_{less\ severe} = 5.41$, $t(204) = 1.19$, $p = .24$) and reported taking similar actual safety measures ($M_{severe} = 8.22$, $M_{less\ severe} = 7.80$, $t(204) = .91$, $p = .36$). Together, these results suggested that the severely affected participants experienced a higher boredom level, expected more benefits from taking risks, and thus reported greater risk taking.

This research adds to the literature on decision under risk, especially the role of perceived benefits, as well as literature on public reactions toward long-lasting emergency states. It also has policy

implications on targeted interventions and aid plans, as well as methodological implications regarding data collection during the COVID-19 pandemic.

Jobloss and Risky Decision Making

EXTENDED ABSTRACT

Few events are as detrimental to consumer well-being as a job loss (Lucas et al., 2004; Wanberg, 2012). One of the many destructive impacts of the COVID-19 pandemic has been the associated job losses. In April 2020, the unemployment rate in the United States reached 14.7%, equivalent to 23.1 million people, higher than at any time since the Great Depression. The magnitude of these layoffs underscores the importance of understanding job loss and related consequences.

One pervasive feature of consumer behavior is the trade-off between risks and rewards (Kahneman & Tversky, 1979; Taylor, 1974). From deciding whether to invest in the stock market to deciding whether to purchase a new brand of blender, nearly every decision that a consumer makes involves some amount of risk. Given the centrality of risk to a wide range of consumer decisions, understanding the circumstances, such as job loss, that influence risky decision-making is critical.

The relationship between job loss and risk preferences has not been widely studied, but prior research has examined this relationship in the context of other components of a person's financial well-being (Griskevicius et al., 2013; Guiso et al., 2018; Haisley et al., 2008; Haushofer & Fehr, 2014; Tanaka et al., 2010). While some researchers find that financial well-being is positively associated with risky decision-making (Dohmen et al., 2011a; Guiso & Paiella, 2008; Haushofer & Fehr, 2014; Tanaka et al., 2010), others find that financial well-being is inversely associated with risky decision-making (Gabrielyan & Just, 2020; Griskevicius et al., 2013; Haisley et al., 2008). These two sets of findings suggest competing Hypothesis for the relationship between job loss and risky decision-making. The former would predict that people who have recently lost their job should become more risk averse while the latter would predict they should become more risk-seeking. In the present research, we undertook a systematic investigation of this relationship.

In Study 1, we developed a novel laboratory manipulation of job loss. We examined whether participants assigned to a job loss condition were more likely to make risky decisions than participants assigned to a control condition. At the start of the experiment, participants were told that they would complete 80 trials of a decision-making task where they would earn wages based on their decisions. Participants were also told that while completing the task, they might lose their ability to earn additional money. For participants in the job loss condition, they lost the ability to earn money after trial 40. Our first measure of risky decision-making was an incentive-compatible risky decision where participants could choose either keep the bonus payment that they had earned during the task or they could choose to invest their winnings in an investment with a 50% chance of doubling their bonus and a 50% chance of losing their bonus. Our second measure of risky decision-making was a hypothetical lottery decision where participants could choose to gamble hypothetical winnings of $100,000 between $0 and $100,000 in $20,000 increments in a gamble that offered a 50% chance of doubling the amount they gambled and a 50% of losing half the amount they gambled. Participants in the job loss condition were more likely to choose to gamble their bonus than participants in the control condition (Odds Ratio = 2.64, 95% CI = [1.48, 4.83], z = 3.24, p = 0.001) and chose to gamble more of their hypothetical earnings than participants in the control condition (b = 0.31, 95% CI = [0.03, 0.58], t = 2.20, p = 0.029). These results are consistent with the hypothesis that a job loss leads to increases in risky decision-making.

In Study 2, we examined the relationship between job loss and three types of risk-related outcomes (two in the financial domain and one in the health domain) using a cross-sectional survey administered to 32,368 participants (17% of whom report job loss). Our three outcomes are decisions in a gambling task (e.g., 10% chance of $100 versus 100% chance of $50), lottery ticket purchases, and hypothetical COVID-19 health-related risky decisions (i.e., social distancing). In addition, we assessed whether recency of job loss was associated with the magnitude of risky decision-making. If individuals who have recently lost their job are more risk-seeking than those who lost their job further in the past, this would suggest both that risk-preferences are tied to recent job loss rather than to longer-term unemployment and also that job loss leads to risk-seeking rather than the converse.

We find that job loss (1=lost job, 0=did not lose job) is positively associated risky choices on the gambling task (B = .28, 95% CI = [.25, .32], t = 17.90, p<.001), lottery ticket purchases (B = .37, 95% CI = [.34, .40], t = 23.11, p<.001), and health-related risky decision-making (B = .25, 95% CI = [.22, .28], t = 15.73, p<.001). These findings persist after controlling for income, education, socioeconomic status, and employment-related covariates. In addition, the recency of job loss (1= did not lose job to 8 = lost job < one week ago) is associated with risky decision-making on the gambling task (B = .14, 95% CI = [.12, .15], t = 24.03, p<.001), lottery ticket purchases (B = .15, 95% CI = [.14, -.16], t = 26.92, p<.001), and health-related risky decision-making (B =.12, 95% CI = [.11, .14], t = 22.05, p<.001) such that participants who have lost their jobs more recently prefer greater risk. Importantly, we find that each of these relationships between job loss and risky decision-making are partially mediated by self-reported financial fragility and negative affect. In supplemental analyses, we find evidence for these same relationships with a hypothetical stock investment outcome.

Our results have important implications for consumer behavior and consumer well-being during times of financial crisis. Although our results suggest that the relationship between job-loss and risk-taking may be time-limited, even brief shifts in risky decision-making could lead people to engage in riskier behaviors (e.g., gambling, unhealthy eating) with consequences that extend beyond the short-term.

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The Meaning of Minimalism: What Consumers See in Minimalist Aesthetics (And What They Don't)

Chair: Linda Hagen, University of Southern California, USA
Discussant: Claudia Townsend, University of Miami, USA

Paper #1: Consumer Minimalism
Anne Wilson, Wharton School/University of Pennsylvania, USA
Silvia Bellezza, Columbia Business School, USA

Paper #2: The Unwillingness to Pay for Minimalist Product Aesthetics
Lauren Min, University of Kansas, USA
Cary Anderson, University of Pittsburgh, USA
Peggy J. Liu, University of Pittsburgh, USA
Kate E. Min, Wheaton College, USA

Paper #3: Differential Effects of Minimalist Visual Branding on Expected Utilitarian and Hedonic Capacity
Linda Hagen, University of Southern California, USA

SESSION OVERVIEW

Over the past decade, minimalist aesthetics have resurged in popularity (e.g., Cook 2019; Sokol 2012). This trend is evident in consumer interest in a minimalist *lifestyle* (e.g., phenomena like the "Tiny House" movement, "capsule wardrobes," and Mari Kondo); the popularity of minimalist *product aesthetics* (e.g., brands like Muji, Everlane, and Apple); and the trend of minimalist *marketing aesthetics* (e.g., Starbucks' logo growing more minimalist; McDonald's' "picto" campaign; or Public Goods' visual branding).

Although it is well-known that visual aesthetics meaningfully influence consumer evaluations (e.g., Hagtvedt and Patrick 2008; Hoegg, Alba, and Dahl 2010; Reimann et al. 2010; Townsend 2017) and qualitative consumer research has studied advertising creatives' beliefs about minimalism (Prajecus et al. 2006) as well as how consumers strategically downsize to become more minimalist (Mathras and Hayer 2019), virtually no quantitative consumer research has examined consumer reactions to minimalist aesthetics in the marketplace. This Special Session fills this gap by first empirically deriving consumers' conceptualization of minimalism and then experimentally studying consumers' positive and negative reactions to one fundamental dimension of minimalism: minimalist aesthetics.

First, **Wilson and Bellezza** showcase a comprehensive, multi-method approach to studying what minimalism means to consumers and identify three key dimensions that define minimalism: a preference for (i) owning few possessions, (ii) a sparse, minimalist aesthetic, and (iii) mindfully curating possessions. They introduce the Minimalist Consumer Scale, which captures these dimensions and predicts consumer behavior, including the look of people's actual living spaces (rated by independent coders), home décor preferences, and willingness to forego free gifts. The subsequent two papers focus on the minimalist aesthetic dimension of consumer minimalism and investigate when minimalist aesthetics are beneficial—and when they are not.

Min, Anderson, Liu, and Min examine minimalist (vs. complex) *product* aesthetics, and in particular, how preference elicitation method influences whether people prefer minimalist or complex product design. They find minimalist and complex design are often similarly preferred in choice, which is determined chiefly by individual taste. However, minimalist design is devalued in willingness-to-pay, which is governed by production cost considerations. Ac-

cordingly, framing minimalist design as the result of effort-intensive paring-down can boost minimalism's merit in WTP.

Finally, **Hagen** investigates minimalist (vs. complex) *packaging/branding* aesthetics and how they shape expectations about product attributes. She finds that (equally attractive) minimalist (vs. complex) design enhances expected utilitarian capabilities, driven by greater perceived focus on essentials, but diminishes expected hedonic capabilities, driven by perceived lack of stimulation. As a result, utilitarian (vs. hedonic) purchase goals boost choice of products with minimalist (vs. complex) packaging design.

Minimalist aesthetics are under-studied. Expanding our theoretical and substantive understanding of it is important—not just because it is pertinent to current marketing practice, but also because of its implications for sustainability (e.g., focus on reducing waste; potential for less resource-intense production; promise of longer product lifespan due to design timelessness). This session begins to offer such insights, by sharing novel research and inviting discussion (led by aesthetics expert **Claudia Townsend**).

Consumer Minimalism

EXTENDED ABSTRACT

American consumerism is often characterized by overt materialism, opulence, and an insatiable desire to acquire. This celebration of accumulation, however, has often been accompanied by an embrace of simplicity and austerity in consumption. More recently, minimalism has risen to the forefront of consumer culture, with many people embracing notions of decluttering, sparse living spaces, and reduced consumerism.

Nonetheless, the concept of minimalism is not presently well-defined or concretely understood. To address this gap in the literature, we define consumer minimalism by identifying three key dimensions of the construct (i.e., number of possessions, mindfully curated consumption, and sparse aesthetic) and develop the twelve-item Minimalist Consumer Scale assessing these dimensions. A series of studies, using samples from a variety of populations (*N*=3,342), demonstrates the validity and reliability of the tridimensional Minimalist Consumer Scale, situates the measure conceptually and empirically within a broader nomological network of related constructs (e.g., voluntary simplicity, frugality, green values, materialism), and documents the scale's ability to predict relevant consumer behavior.

Construct Development. To develop consumer minimalism, we used an approach aligned with grounded theory (Glaser and Strauss 1967). This process involved collecting and aggregating data from various sources before engaging in open-coding, selective coding, and theoretical coding (Urquhart 2012). First, we collected an abundance of qualitative data relating to minimalism from popular press and media—including books, television shows, news and media outlets, store visits, and Google image searches. We also joined over twenty minimalist-themed private Facebook groups to survey self-ascribed minimalists (*N*=96) and recruited lay consumers via Amazon Mechanical Turk (*N*=200).

Next, we analyzed our data using a bottom-up open-coding procedure to create a list of conceptual categories found in the data, followed by a selective coding process organizing the codes into higher-order concepts and a theoretical coding procedure relating the

higher-order selective codes to each other (Urquhart 2012). This process resulted in our identification of consumer minimalism's three fundamental dimensions: number of possessions, mindfully curated consumption, and sparse aesthetic. This process also allowed us to identify the nature of the construct of minimalism as a consumer value and to theoretically distinguish minimalism from adjacent constructs.

Scale Development. We generated an initial pool of 150 items (50 items per dimension). After eliminating ambiguous and repetitive items, eleven faculty and Ph.D. students evaluated a revised pool of 105 items for clarity and representativeness of the defined dimensions. Based on the judges' ratings, we retained 45 items. These items were formatted into seven-point Likert-type response scales (1=Strongly Disagree, 4=Neither Agree nor Disagree, 7=Strongly Agree) and rated by a sample of American Prolific Academic respondents (N=422; 51% female, M_{age} = 32.2). We evaluated the items based on interitem correlations, average corrected item-to-total correlations, and average factor loadings, as well as clarity of meaning and face validity. These analyses resulted in a final set of twelve items, four items per dimension (see Table 1). A subsequent series of exploratory and confirmatory factor analysis validated each of the scale items and tri-dimensional structure. All three factors had high alphas (all $\geq$ .86), and the alpha for the full scale was α=.88.

Scale Validity & Reliability. We assessed the discriminant and convergent validity of the Minimalist Consumer Scale by examining its relationship with other related existing constructs and its precursors—including voluntary simplicity, frugality, GREEN consumer values, experiential buying, product retention, materialism, fashion orientation, and distinction. American Amazon Mechanical Turk respondents (N=621; 54.3% female; M_{age}=39.5) completed scales assessing each of the constructs. As expected, the Minimalist Consumer Scale was positively and significantly related to voluntary simplicity (r=.26, p<.001), frugality (r=.46, p<.001), GREEN consumer values (r=.32, p<.001), and experiential buying tendency (r=.21, p<.001). The relationships with materialism (r=–.31, p < .001) and product retention tendency (r =–.26, p<.001) were negative and significant, while the Minimalist Consumer Scale was not significantly correlated with fashion orientation (r=.02, ns) or distinction (r=.04, ns). The results of this survey provide evidence for the expected discriminant and convergent validity of the scale.

We then demonstrated the scale's known-groups validity by showing that members of minimalist Facebook groups scored significantly higher on our scale than members of reading Facebook groups (N=104; 96% female; M_{age}=47.8). Moreover, we confirmed our scale's test-retest reliability in two samples (163 graduate students, 39.3% female; M_{age}=28.1, and 393 participants recruited through Prolific Academic, 45.5% female, M_{age}=33.2) with different time lags between collections: one week and five weeks.

Next, we assessed the predictive validity of the scale across three studies. First, participants completed our scale and uploaded photos of rooms in their homes (N=112; 43.8% female, M_{age}=41.2). Three independent research assistants, blind to the purposes of the research, rated the images on the three dimensions of consumer minimalism. Scores on the Minimalist Consumer Scale significantly predict the extent to which consumers' actual home environments reflect the three dimensions of minimalism. Second, we showed that scores on our scale significantly predict preferences for minimalist (vs. non-minimalist) apartment interiors (N=200, 50.5% female, M_{age}=40.2). Finally, we showed consequences in a hypothetical consumption choice scenario, demonstrating that higher scores on the Minimalist Consumer Scale predict lower interest in receiving

products—even when the products are all presented as part of a free giveaway (N=203, 55.8% female; M_{age}=39.9).

In sum, we demonstrate that consumer minimalism is a unique construct situated within a broader nomological network of related constructs, such as voluntary simplicity and frugality, but not fully captured by any of them. We identify three core dimensions of minimalism—number of possessions, mindfully curated consumption, and sparse aesthetic—that unify the variegated displays of minimalism observed in the marketplace and validate a scale for measuring consumer minimalism.

The Unwillingness to Pay for Minimalist Product Aesthetics

EXTENDED ABSTRACT

Products with minimalist aesthetics have proliferated alongside products with more visually complex aesthetics (Cook 2019). Given the prevalence of minimalist aesthetics in the marketplace, and the robust influence of aesthetics on consumer judgments and choices (e.g., Hagtvedt and Patrick 2008; Hoegg, Alba, and Dahl 2010), we investigate which aesthetics consumers prefer in products. Specifically, we examine whether, when, and why the preference for minimalist versus complex aesthetics varies based on how preferences are elicited.

Whereas standard economic theory assumes procedure invariance, past research documents that preferences are often reversible, context-dependent, and constructed as elicited (e.g., Bettman, Luce, and Payne 1998; Lichtenstein and Slovic 1971; Tversky and Thaler 1990). Building on this literature, we suggest that preference elicitation mode influences the weight that consumers place on their personal aesthetic tastes versus their beliefs about the product's production costs.

Four pre-registered experiments identify a robust preference reversal: minimalist products are more preferred when preference is elicited via choice versus WTP. This reversal occurs because WTP reflects consumers' beliefs that minimalist (vs. complex) products have lower production costs, whereas choice is more reflective of consumers' personal aesthetic tastes.

Experiment 1A (N=300) documents the preference reversal effect when both goods' identical manufacturer suggested retail price (MSRP) is displayed. In this and all experiments, participants were first randomly assigned to an elicitation mode condition (choice vs. WTP). Participants in the choice condition chose between the minimalist and complex version for each set of goods, with no preference as a third option, whereas participants in the WTP condition indicated their maximal WTP for each good. We classified WTP participants as preferring the option for which they indicated a greater WTP (those who indicated equal WTP were classified as indifferent). In this and all experiments, indifferent participants were excluded consistent with prior research (Slovic, Griffin, and Tversky 1990). As hypothesized, participants were more likely to prefer the minimalist good in choice (45.5%) than in WTP (11.4%); χ^2=40.09, p<.001.

Experiment 1B (N=402) replicates the reversal using an incentive-compatible design. Participants in the choice condition were entered into a raffle to receive the product they choose and participants in the WTP condition had WTP elicited via the incentive-compatible Becker, DeGroot, and Marschak (1964) mechanism. Participants expressed greater preference for the minimalist good in choice (44.0%) than in WTP (19.5%), χ^2=23.76, p<.001.

Experiment 2 (N=252) tests whether the reversal is mediated by a differential situational focus on production costs, visual appeal, or both, using parallel mediation. After expressing their preference,

participants responded to the two mediator measures, which gauged a situational focus on production costs and a situational focus on visual appeal. WTP (vs. choice) promoted a situational focus on production costs, which predicted preference for the complex (vs. minimalist) good—mediating the preference reversal (b=-.54, SE=.11, z=-5.15, p<.001). By contrast, choice (vs. WTP) promoted a situational focus on visual appeal; a focus on visual appeal did not in turn exert a systematic influence on preference for the minimalist (vs. complex) good, (b=.0007, SE=.16, z=.005, p=.996), reflecting that consumers vary on which kind of aesthetic they find more visually appealing.

Experiment 3 (*N*=602) tests whether framing the production value of the minimalist (vs. complex) design as higher eliminates the preference reversal in a 2(elicitation mode: choice vs. WTP) × 2(relative production value of the minimalist design: lower [add-on frame] vs. higher [reduction frame]) between-subjects design. Participants evaluated minimalist and complex versions of a website design purportedly created by the same web designer. The minimalist design was framed as the result of an effortful paring-down process in the reduction frame, as opposed to a lack of building up elements in the add-on frame. Choice participants indicated their preference between the minimalist and complex versions of a website design, whereas WTP participants indicated which they would be willing to pay more for. All participants responded on a 9-point scale. The interaction between elicitation mode and relative production value of the minimalist design was marginally significant (Wald $\chi^2(1)$=3.18, p=.074): the effect of elicitation mode on preference was only significant in the add-on frame (Wald $\chi^2(1)$=15.79, p<.001), but not in the reduction frame (Wald $\chi^2(1)$=2.16, p=.142).

Overall, we identify a novel preference reversal as a function of product design aesthetics. In doing so, we add to understanding preferences for product minimalism—a popular yet not well-understood aesthetic dimension. We show that elicitation mode—by shifting consumers' relative focus on their personal aesthetic tastes versus their beliefs about the product's production costs—is one important determinant of expressed preference for minimalist design in consumer goods.

Differential Effects of Minimalist Visual Branding on Expected Utilitarian and Hedonic Capacity

EXTENDED ABSTRACT

Beyond being popular in product design, a minimalist visual aesthetic has become increasingly prevalent in visual branding (e.g., Sokol 2012), and highly aesthetically appealing examples of both minimalist and complex marketing aesthetics co-exist across diverse product categories—from chocolate to personal care, wine to household cleaners. Visual aesthetics clearly shape consumer evaluations (e.g., Hagtvedt and Patrick 2008; Reimann et al. 2010; Townsend 2017), yet the consequences of minimalist (vs. complex) marketing aesthetics have not yet been studied in detail. This paper examines when and why a minimalist (vs. complex) marketing aesthetic is advantageous.

Much of the aesthetics literature would suggest that higher aesthetic appeal positively shapes various product inferences (e.g., Reimann et al. 2010; Townsend and Shu 2010; Wu et al. 2017). In contrast, we propose that—independent of aesthetic appeal—minimalist (vs. complex) visual aesthetics specifically convey *higher utilitarian* capacity, but *lower hedonic* capacity, as a function of perceived product richness.

Five pre-registered experiments document consistently that minimalist (vs. complex) aesthetics enhance expected performance but diminish expected enjoyment. This pattern is driven by minimalist (vs. complex) design suggesting a more focused, but less stimulating, product.

Experiment 1A (*N*=201) tested if minimal (vs. complex) packaging design conveys superior utilitarian capacity, but inferior hedonic capacity. Participants evaluated a shampoo whose packaging featured either a minimal or complex version of a black-and-white shapes or of a multi-colored zigzag design (using two designs for robustness). Note that in this and all other studies, stimuli pre-tested as differentially minimalist but equally aesthetically appealing (except for Experiment 2B, which controls for aesthetic appeal differences)—therefore, aesthetic appeal or liking cannot explain results. Participants rated, in random order, their impression of the shampoo's utilitarian (e.g., effective) and hedonic capabilities (e.g., enjoyable), plus perceived expensiveness as a potential covariate, on 7-point scales.

Participants expected higher performance for the shampoo with minimalist (vs. complex) design (F(1, 199)=14.31, p<.001), but lower pleasure for the minimalist (vs. complex) shampoo (F(1, 199)=39.30, p<.001). All results held independent of perceived expensiveness.

Experiment 1B (*N*=202) extended these findings to a different product (sunscreen) and different designs (minimal and complex versions of a blue flecks base design), while providing additional product information (e.g., price) and measuring perceived uniqueness as a different potential covariate. All findings replicated, and were independent of perceived uniqueness.

If minimalist (vs. complex)-looking products promise higher utilitarian but lower hedonic value, a consequence should be that they will be preferred more strongly when consumers pursue utilitarian (vs. hedonic) goals. Experiments 2A&B tested this prediction with hypothetical choice (using lab-controlled packaging designs) and real choice (using real products available in the marketplace).

In **Experiment 2A** (*N*=401) participants adopted a utilitarian or a hedonic goal for purchasing hand soap (between-subjects) and then evaluated two hand soaps: one with a minimalist packaging design and one with a complex packaging design (within-subject). To disguise our focus on minimalism in this within-subject design, participants were shown minimal and complex versions of different designs: either a minimalist version of an art-deco design and a complex version of a doodle design, or the opposite combination. They rated utilitarian and hedonic capabilities and chose which product they would buy, in random order.

Participants expected higher performance for the minimalist (vs. complex) soap (F(1, 399)=119.43, p < .001), but lower pleasure for the minimalist (vs. complex) soap (F(1, 399)=243.18, p<.001). These expectations translated into choice: goal predicted product preference ($\chi^2(1$, N=401)=81.78, p<.001), such that a utilitarian goal made people more likely to choose the minimalist soap (80.1%) than the complex soap (19.9%; p<.001), but a hedonic goal fully reversed this preference pattern (minimalist: 35.5% vs. complex: 64.5%; p<.001).

Experiment 2B (*N*=400) extended this finding to consequential choice behavior (20% chance to win chosen product) and to a college sample. We used a real minimalist soap and created a complex counterpart in the same color scheme, labelling the two soap bottles with two real brand names (counterbalanced). Students happened to find the minimalist (vs. complex) soap more aesthetically appealing, which we control for in the analyses.

Participants again expected higher performance, but lower pleasure, for the minimalist (vs. complex) soap, which again shaped choice: goal predicted choice ($\chi^2(1$, N=363)=11.26, p=.001), such

that for a utilitarian goal people were more likely to choose the minimalist soap than the complex soap, but for a hedonic goal this preference significantly diminished (by roughly 20%), as signified by χ^2. Controlling for aesthetic appeal differences revealed an unsurprising positive effect of aesthetic appeal on choice, but more importantly, a persistent and *strengthened* effect of goal on choice (B=.82, SE=.25; p<.001; Exp(B)=2.27).

A replication with an adult sample who happened to find the complex soap more aesthetically appealing replicated these results and yielded the same crossover as Experiment 2A.

Experiment 3 (N=400) tested the proposed mechanisms driving the pattern of results, specifically, that minimalist design diminishes perceived arousal potential (which is known to be hedonically engaging, e.g., Kaplan et al. 1972) but boosts perceived focus on essentials (which we hypothesize enhances utilitarian value). Participants evaluated a nutritional breakfast shake whose packaging featured either a minimal or complex version of a geometric pattern.

Participants rated utilitarian (e.g., healthy) and hedonic (e.g., delicious) capabilities as well as how focused-on-essentials and how stimulating the product appeared. Participants expected higher performance for the minimalist (vs. complex) breakfast shake (F(1, 398)=13.06, p<.001), which was mediated by enhanced perceived focus-on-essentials (F(1, 398)=34.78, p<.001; B=.46, SE=.08, 95% CI [.32, .62]). They also expected lower pleasure for the minimalist (vs. complex) breakfast shake(F(1, 398)=39.42, p<.001), which was mediated by diminished perceived stimulation (F(1, 398)=44.04, p<.001; B=−.42, SE=.07, 95% CI [−.57, −.28]).

In sum, minimalist and complex visual aesthetics are beneficial in different contexts, depending on whether consumers seek functionality or fun. These insights advance our theoretical understanding of minimalist aesthetics and offer implications for branding.

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Green 2.0: New Findings on the Misses and Motivations in Sustainable Consumption

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Paper #1: Effortlessly Green: When and Why Effort Impacts Environmentally Friendly Consumption

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Paper #2: The Price Entitlement Effect: When and Why High Price Entitles Consumers to Purchase Socially Costly Products

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Karen Page Winterich, The Pennsylvania State University, USA

Paper #3: Cost of Sustainability: The Green = Expensive Heuristic

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Paper #4: Sustainable Processes vs. Materials: Which Matters and Why?

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SESSION OVERVIEW

A rise in global awareness and environmental concerns is evident in recent decades, leading consumers to buy fewer products that cannot be reused or recycled (Pew Research Center 2019). Nevertheless, prior research has identified a gap between consumers' purchase intentions of environmentally friendly products and actual purchases (Block et al. 2016; Brough et al. 2020; Tezer and Bodur 2020; White et al. 2019). This session brings together four papers that examine what hampers sustainable choices and identify consumers' beliefs about environmental consumption, in an aim to mitigate this gap. These research streams provide novel perspectives on sustainable consumption, involving well-powered and well-developed field, laboratory, and online experiments.

The first two papers investigate factors that potentially decrease sustainable consumption. In the first paper, **Goor and Zwebner** show that effort decreases the likelihood to choose environmentally friendly products over conventional products. They find that this preference arises because exerting effort makes consumers feel deserving and focused on self rather than on others.

In the second paper, **Lee and Winterich** investigate the "price entitlement effect," and show that upper-class consumers are more likely to purchase high-priced products that involve social costs but hold consumer benefits. This effect is driven by feelings of entitlement and is mitigated when consumers choose for others (vs. self).

The final two papers examine perceptions of environmentally friendly products. Further addressing price inferences of sustainable products, in the third paper, **Haltman and Donnelly** demonstrate a bidirectional green = expensive heuristic. They find that consumers perceive environmentally friendly products as expensive, and that perception holds even when products are sustainable by default but lack explicit green attributes.

Finally, in the fourth paper, **Guo and Lamberton** compare consumers' perceptions of sustainable processes and sustainable materials. They find that sustainable processes increase purchase interest compared to sustainable materials, as choosing the former products helps consumers envision a better future.

Taken together, these four papers highlight the importance of consumers' beliefs concerning sustainable consumption, and reveal potential antecedents that may hinder environmentally friendly behaviors. Thus, this session focuses on timely and compelling problems, develops useful theories, and offers pragmatic solutions that hopefully promote consumers' engagement in environmentally friendly consumption, addressing what the world needs now.

Effortlessly Green: When and Why Effort Impacts Environmentally Friendly Consumption

EXTENDED ABSTRACT

Choices between environmentally friendly products and conventional products are commonplace in consumers' lives (e.g., Mazar and Zhong 2010; Turdel 2019). In recent years, increasing global awareness and concerns about the environment have led to remarkable market growth of environmentally friendly products (BCG Report 2020). As a result, understanding the drivers of consumers' environmentally friendly choices is more important than ever. This work addresses a recent call for research on the antecedents of sustainable consumption (Trudel 2019) by demonstrating that consumers' effort may lower their preference for environmentally friendly products, producing what we call *the effortlessly green phenomenon*. Furthermore, we find that this effect arises because exerting effort makes consumers feel deserving and focused on the self rather than on others. This work contributes to consumer psychology literature that seeks to identify the drivers of environmentally friendly consumption (e.g., Ebeling and Lotz 2015; Irwin and Baron 2001; Luchs et al. 2010; Peloza et al. 2013), and to research that focuses on effort that has demonstrated its impact on consumers' decision making (e.g., Labroo and Kim 2009; Kivetz 2003; Luce et al. 1999; Schrift et al. 2011) but has yet to examine the impact of effort on consumers' deliberation between conventional and environmentally friendly options. Using a mixed-method approach, combining actual purchases on an e-commerce platform, field studies, and incentive-compatible lab studies, we show that high (vs. low) effort reduces consumers' preference for environmentally friendly products across consumption contexts and consumer populations.

A pilot study provides evidence for the effortlessly green phenomenon in a natural setting, using actual sales data from a large e-commerce website (which includes millions of transactions made during 10 months across the U.S.). As a proxy of effort we used time of day: A pre-test confirmed that consumers' effort was higher in the evening (7pm-11pm) compared to the morning (7am-11am; $p<.001$). As expected, effort was associated with a decline in environmentally friendly purchases ($p<.001$): In the evening (vs. morning) consumers were less likely to purchase environmentally friendly products ($M=0.033\%$ and $M=0.042\%$, respectively).

Study 1 was conducted at a fitness studio to examine the effect of physical effort on preferences for environmentally friendly products. Gym-goers who purchased a cold drink at the studio's cafeteria were given the choice of a conventional plastic straw or an environmentally friendly cornstarch straw. The straws were identical in quality, shape, and texture, and were placed in containers labelled "regular straws" and "ecological straws." For 16 summer days, a research assistant who was blind to the hypothesis documented 106 purchas-

ers of cold drinks who used a straw (50% of the purchases were made after a workout). Consumers showed a general preference for environmentally friendly straws (70.1% chose the ecological straw), yet, importantly, they were *less* likely to choose the environmentally friendly straw *after a workout* (56.6%) compared to before a workout (84.9%; χ^2=10.26, *p*=.001).

Study 2 tested the effect in a controlled lab setting using a cognitive effort task and an incentive compatible design. One-hundred and forty undergraduates read an act from Hamlet. In the high (vs. low) effort condition, they were given a difficult (vs. easy) task of identifying words in the text. As a token of appreciation, participants entered a raffle to win a water bottle of their choice: either an environmentally friendly water bottle or a leak-proof water bottle. Participants were less likely to choose the environmentally friendly product after exerting high effort (54.93%) compared to low effort (71.01%; χ^2=3.878, *p*=.049), supporting the effortlessly green conjecture.

In Study 3, we included a baseline (i.e., control) condition and explored the mediating role of sense of deservingness. Participants (*N*=581; Mturk) imagined that they were on their way home after an 8am-to-4pm workday. They were randomly assigned to one of three conditions. In the high (vs. low) effort condition, participants imagined they had a busy and effortful (vs. easy and relaxing) day. In the control condition, they had a typical day. Then, they indicated their preferences (on a scale from 1 to 7) for a ride home on a fuel train and a environmentally friendly electric train. The effect of effort on product preference was significant (*F*(2,578)=9.47, *p*<.001): high effort reduced participants' preference for the environmentally friendly train (*M*=3.11, *SD*=2.19) compared to low effort (*M*=4.06, *SD*=2.20, *p*<.001, *d*=.433) and control conditions (*M*=3.60, *SD*=2.18, *p*=.029, *d*=.23). Furthermore, low effort increased the likelihood of choosing the environmentally friendly train compared to the control condition (*p*=.043, *d*=.208). Importantly, the effect of effort on deservingness was significant (*F*(2,578)=17.77, *p*<.001): high-effort increased deservingness (*M*=4.80, *SD*=1.87) compared to low effort (*M*=3.70, *SD*=1.80, *p*<.001, *d*=.60) and control (*M*=4.20, *SD*=1.88, *p*=.002, *d*=.32). Low effort reduced sense of deservingness compared to the control condition (*p*=.008, *d*=.27). Sense of deservingness mediated the effect of effort on preference for environmentally friendly products (model 4 in PROCESS, Hayes 2013; *a×b*=-.33, *SE*=.06, 95%CI=[-.44,-.22]). Notably, the effect of effort on guilt was not significant (*F*(2,578)=1.34, *p*=.263) with no significant simple effects comparing each pair of conditions (*p*s>.105).

Finally, Study 4 demonstrated the egocentric nature of the underlying mechanism. Participants (*N*=402; Mturk) were randomly assigned to high (vs. low) effort conditions and imagined the same workday scenario as in Study 3. Then, they indicated their preferences for a ride home on a fuel train or an environmentally friendly electric train. A serial mediation analysis (model 6 in PROCESS, Hayes 2013) revealed that sense of deservingness increased self-focus (e.g., "focus on myself rather than on others"; "my own needs are more important than others' needs"), which, in turn, reduced the preference for environmentally friendly products (*a×b*=-.20, *SE*=.13, 95%CI=[-.11,-.03]). Sense of deservingness alone (95%CI=[-.01,.15]) as well as self-focus alone (95%CI=[-.10,.055]) did not mediate the effect of effort on environmentally friendly consumption, highlighting the unique egocentric nature of the mechanism underlying the effortlessly green phenomenon.

Our work is the first to demonstrate the implications of consumers' everyday effort on environmentally friendly product choices. The findings add useful insights to marketing theory and practice.

The Price Entitlement Effect: When and Why High Price Entitles Consumers to Purchase Socially Costly Products

EXTENDED ABSTRACT

Although many consumers indicate they prefer products offering social benefits such as green products (Haws, Winterich, and Naylor 2014), these consumer attitudes are not always reflected in purchases (Carrington, Neville, and Whitwell 2010). Consumers still purchase products with social costs such as non-green products when the products provide benefits such as convenience or performance (Luchs et al. 2010; Ottman et al. 2006). This research investigates who purchases products with consumer benefits but social costs, explicating when and why.

Oftentimes consumer benefits of socially costly products come at a higher price, due to higher costs of materials, production, and environmental harm (e.g., Schwepker Jr. and Cornwell 1991). Though both paying a higher price and social costs are general deterrents for product purchases, we demonstrate upper-class consumers are more likely to purchase a product with consumer benefits but social costs when it has a higher price, driven by feelings of entitlement, which we term 'the price entitlement effect'.

Entitlement refers to individuals' perceptions that they deserve better outcomes than others, which can be activated by situational factors (Campbell et al. 2004; Ding et al. 2017). We suggest that upper-class consumers will feel greater entitlement for the benefits from purchasing a socially costly product when the product price is perceived as higher than those of alternative options. Upper-class consumers are more likely to feel entitlement based on the higher price of a product due to the more prevalent exchange orientation (Berkowitz and Friedman 1967; Muir and Weinstein 1962) arising from their self-focused mindset (Kraus, Côté, and Keltner 2010).

Studies 1A-1C explored the proposed price entitlement effect in various contexts. Study 1A (two-group [price: same vs. higher] design) examined choice of convenient, but environmentally harmful plastic utensils. Participants imagined being at home ordering food for lunch. After participants selected the food items, they were asked to select any extra items they want. The first extra item was plastic utensils priced at either $.05 (same) or $.15 (higher) depending on the price condition. The second extra item was the salt and pepper in paper packets priced at $.05. A two-way interaction between price and social class (measured) on choice of plastic utensils revealed that when the price of plastic utensils was higher, social class increased choice, but when the price was same, social class did not affect choice. Also, for upper-class participants, choice was greater when the price was higher (vs. lower). As a comparison, choice of salt and pepper was not influenced by social class or price. Study 1B (two-group [price] design) examined products with other types of social costs (noise). After reading a news article about how noise from their home can bother their neighbors, participants considered two home exercise programs that varied in social costs (noise) and consumer benefits. The two-way interaction between price and measured social class indicated that social class increased choice of a more socially costly option when the price was higher than the other option ($15/$12), but this effect did not occur when the price was same ($15/$15). For upper-class participants, choice of the socially costly option was greater when the price was higher (vs. lower). Study 1C (2 [price] × 2 [social class] design) manipulated subjective social class and replicated the price entitlement in the choice between green versus non-green bathroom cleaner options.

Study 2 (two-group [price] design) examined actual product purchase. Participants received two dollars to spend on a purchase and considered two Purell hand sanitizer options, which varied in

environmental harm and consumer benefits, inferred from ad appeals highlighting greenness versus performance. The interaction between price and measured social class on choice was replicated: social class increased actual purchase of the unsustainable option only when it was higher-priced ($1.50/$2.00) (vs. same-priced; $1.50/$1.50), and price increased purchase of the unsustainable option by upper-class participants.

Study 3 (two-group [price] design) examined the mediating role of entitlement perceptions. After reading a news article making salient environmental cost of synthetic fabric, participants considered a shopping scenario involving a backpack made of synthetic fabric. The interaction effect of price (same vs. higher) and social class on purchase intention of the backpack was significant with a pattern identical to earlier studies. Importantly, the moderated mediation via entitlement was significant.

Study 4 identified necessary conditions for the effect in a 2 (salience of social cost) × 2 (salience of product benefits) between-subjects design. The positive effect of social class (measured) on purchase intention for a higher-priced product occurred only when the product involved salient social costs and consumer benefits but not in other conditions, suggesting that price entitlement by upper-class consumers occurs only when the product involves salient social costs and product benefits.

Finally, Study 5 examined a boundary condition for the price entitlement effect. Because entitlement is a self-focused process and not experienced on behalf of others, when consumers are considering what others should do, the price entitlement effect should be mitigated. As predicted, a three-way interaction between social class (measured), choice target (self vs. other), and price (same vs. higher) was significant on choice of socially costly option (home exercise context same as study 1B). The interaction of price and social class was significant only when consumers were making a choice for the self (vs. others).

Together, these findings demonstrate that social class increases the perceptions that a higher price entitles consumers to purchase a product that offers personal benefits but generates social costs. This price-entitlement effect is mitigated when consumers are induced to think what others should do, which reduce entitlement for personal benefits and lead consumers to purchase more socially beneficial products.

Cost of Sustainability: The Green = Expensive Heuristic

EXTENDED ABSTRACT

While sustainable products are marketed with the intention of attracting consumers who believe the product will be better for the environment, there's a growing body of work that's demonstrated a number of other potential inferences. For example, Luchs et al. (2010) showed that there can be consequences for sustainable attributes, wherein for certain product categories environmentally friendliness can actually signal inferior quality. On the other hand, recent work by Tezer & Bodur (2020) demonstrated that sustainable attributes can result in increased enjoyment of a consumption experience. Even still, beyond positive and negative attribute inferences, there's more nuance to consider. As Gershoff & Frels (2015) show, even the centrality of the green attribute itself can affect the resulting perceptions of how sustainable a product actually is.

With all of the work that's been dedicated to understanding sustainability appeals, it's surprising that there have been, to our knowledge, no papers on the topic of price inferences related to sustainability. This lack of empirical evidence is especially stark when considering that there's been a growing emphasis on understanding

the "attitude-behavior gap" of intentions for consumers to act sustainably, and the failure to follow through (White et al. 2019). Seeing as how price is often a driving factor in purchase decisions, it's an important consideration for marketers when deciding how to position their goods. Prior work has largely been built on the assumption that sustainable products are seen as more expensive by consumers, but has failed to consider the nuance of that sentiment. In the work that follows, we seek to address this gap.

Acknowledging that it's arguably an intuitive premise, that sustainable products command a premium, we extend our findings by also considering two previously unexplored Hypothesis related to this lay theory. First, we seek to demonstrate that the lay theory is bidirectional, and the explicit absence of ethical attributes leads to inferences of affordability. This is a particularly interesting consideration for marketers, as it's a technique that's not been traditionally used, and may be effective for price-conscious shoppers. Second, we demonstrate that neutral product labeling (i.e., labels without explicit ethical attributes) are viewed to be relatively sustainable, and therefore more expensive, by default.

To test for the existence of a green = expensive lay belief, two initial studies were run to demonstrate that, ceteris paribus, altering the perceived sustainability of a product alters price perceptions. The first of these studies used a box of disposable cutlery, which was either shown to have a sustainability grade of 'A' or a grade of 'C.' A manipulation check for perceived sustainability yielded a significant result, wherein the product with an 'A' grade was seen as significantly more sustainable than the product with the 'C' grade ($F(1, 197)=5.82, p<.001$). Further, the product with an 'A' grade was predicted to be significantly more expensive than the product with a 'C' grade ($F(1, 196)=9.68, p<.001$). We then ran the same manipulation with a different product to show that the effect is robust across product category, product type, and that the effect holds for both disposable and non-disposable items. The same experiment, run with picture frames, yielded consistent results; the 'A' rated product was seen as both significantly more sustainable, ($F(1, 154)=23.74, p<.001$) and was predicted to be significantly more expensive ($F(1, 154)=14.27, p<.001$).

Having demonstrated the existence of the lay theory, we turn our attention to our other proposed Hypothesis, regarding an unsustainable = affordable intuition, and a baseline assumption of sustainability for neutrally labeled products. For the former of these predictions, we designed an experiment to measure perceptions of a notebook that was either advertised as being sustainable (made from 100% recycled material), specifically unsustainable (made from 0% recycled material), or control (no information related to recycled material given). A one-way analysis of variance (ANOVA) run on the manipulation check of perceived sustainability yielded a significant difference between the three conditions ($F(2, 440)=207.86, p<.001$). A planned contrast post hoc comparison using a Bonferroni Correction indicated that the unsustainable 0% recycled notebook ($M=2.53, SD=2.01$) was seen as significantly less sustainable than the control notebook ($M=4.03, SD=1.11$), which was seen as significantly less sustainable than the 100% recycled notebook ($M=5.97, SD=1.03$). An ANOVA on price inferences also yielded a significant difference between conditions ($F(2, 440)=14.85, p<.001$). Supporting our hypothesis, planned contrast using a Bonferroni Correction showed that the unsustainable notebook ($M=3.68, SD=1.58$) was seen as significantly less expensive than the control notebook ($M=4.07, SD=1.18$), which was seen as significantly less expensive than the 100% recycled notebook ($M=4.58, SD=1.48$).

In order to elaborate on the results of the previous study, we designed an experiment to understand how the lack of any specifi-

cally provided sustainability information is perceived in comparison to products labeled as sustainable. Specifically, we used a between-subject design, and altered the environmental attributes of a computer monitor, described to have been made with 0%, 10%, 90%, or 100% renewable energy, or with no information given (control). An ANOVA run on price inferences ($F(4, 502)=24.92, p<.001$), and sustainability inferences ($F(2, 440)=148.93, p<.001$), both yielded significant differences between groups. A planned contrast post hoc comparison showed that, compared to the computer monitor that used 0% renewable energy ($M=2.55, SD=1.76$), the computer monitor without sustainability information given ($M=3.68, SD=1.07$) was seen as significantly more sustainable. The rest of the contrasts were also significant, except for the comparisons between the 90% monitor ($M=6.03, SD=.81$) and the 100% monitor ($M=5.71, SD=1.13$). Further, the computer monitor that used 0% renewable energy ($M=3.49, SD=1.38$) was seen as significantly more affordable than the one with no sustainability information given ($M=4.06, SD=1.17$). This provides support our other hypothesis that, without any sustainability information given, consumers infer that a neutral product is relatively environmentally friendly, and relatively more expensive as a result.

To our knowledge this is the first work to empirically demonstrate the sustainable = expensive lay belief, show that it is bidirectional, and show that even when not mentioned, products are seen as relatively sustainable and relatively more expensive by default.

Sustainable Processes vs. Materials: Which Matters, and Why?

EXTENDED ABSTRACT

Many brands consider sustainability an important product feature due to consumers' awareness of environmental impacts in their consumption (White, Habib, and Hardisty 2019). However, the nature of sustainability can vary: While prior research typically operationalizes sustainability as the amount and type of sustainable raw materials used in products (i.e., sustainable materials; Olson 2013; Winterich, Nenkov, and Gonzales 2019) it is also possible for firms to be sustainable by altering their energy usage or resource waste during the manufacturing process (i.e., sustainable processes; (Ljungberg 2007; Davim 2013). As both may involve substantial costs, offering clear guidance on the importance of these different aspects of sustainability matters (Luchs et al. 2010). Which matters most to consumers, and why? Is investing in both types of sustainability justified by potential increases in consumer preference?

Drawing on the construal level theory and temporal frame matching research (Trope and Liberman 2010; Pounders, Lee, and MacKert 2015; Spassova and Lee 2013), we argue that there is a natural temporal fit between sustainable processes (vs. materials) and long-term environmental benefits, making products with sustainable processes more appealing. Specifically, since sustainable materials are visible and tangible, they may lead to more concrete thoughts, and in turn, heightened short-term orientation. By contrast, sustainable processes are invisible and intangible, potentially leading to more abstract thoughts, and in turn, heightened long-term orientation (Goldsmith, Newman, and Dhar 2016). Therefore, because of the temporal (mis)match between sustainability features and environmental values, we predict that sustainable processes (vs. materials) will allow individuals to project more environmental values in the future. Envisioning a better future prompts consumers to feel more motivated to choose sustainable products (Winterich and Haws 2011).

In experiment 1, 369 Prolific participants (M_{age} = 36.50, M_{income} = \$67,082; 194 females) were randomly assigned to one of five conditions: control (without mentioning sustainability features), conventional ("100% virgin fiber and 100% conventional manufacturing process"), sustainable materials ("100% recycled fiber and 100% conventional manufacturing process"), sustainable processes ("100% virgin fiber and 100% eco-friendly manufacturing process"), and dual sustainability (i.e., both sustainable materials and processes). Participants indicated their purchase likelihood of a Gucci shirt on a two-item seven-point scale (i.e., "Overall, how likely would you be to buy this Gucci shirt?" "Overall, how much do you like this Gucci shirt?"; 1 = "Not at all" and 7 = "Very"; ρ = .78; Haws, Winterich, and Naylor 2014).

Results revealed a significant main effect of condition ($F(4, 364)$ = 7.86, p <.001). As expected, participants' product purchase likelihood was lower in the conventional materials (M = 3.69, SD = 1.85) versus control (M = 4.45, SD = 1.81, p = .05) condition, suggesting that making consumers aware of non-sustainable practices has an adverse effect. However, pairwise comparison showed that participants were more likely to purchase this Gucci shirt made with sustainable processes (M = 4.75, SD = 1.39) versus sustainable materials (M = 3.88, SD = 1.70; p = .02). Interestingly, the difference between sustainable processes and dual sustainability (M = 4.96, SD = 1.52) conditions were non-significant – sustainable processes alone seemed sufficient to boost purchase likelihood.

Experiment 2 replicated these findings using a dichotomous-choice dependent measure. Participants (N = 189 on Prolific, M_{age} = 34.86, M_{income} = \$94,772.75; 107 females) were randomly assigned to choose from one of three pairs of Patagonia fleeces: Pair 1 (conventional vs. sustainable materials), Pair 2 (conventional vs. sustainable processes), and Pair 3 (conventional vs. dual sustainability). Binomial tests revealed that more participants chose the sustainable versus the conventional option (Pair 1: $N_{conventional}$ = 21, $N_{materials}$ = 38, p = .04; Pair 2: $N_{conventional}$ = 4, $N_{processes}$ = 60, p < .001; Pair 3: $N_{conventional}$ = 11, N_{dual} = 55, p < .001). However, binary logistic regression results showed that sustainable processes (vs. materials) significantly increased the likelihood of choosing the sustainable product (Pairs 2 vs. 1: B = 2.12, SE = .58, Wald $\chi^2(1)$ = 13.13, p < .001; Pairs 3 vs. 1: B = 1.02, SE = .43, Wald $\chi^2(1)$ = 5.64, p = .02). Again, there was no benefit of dual sustainability over sustainable processes alone.

Experiment 3 replicated previous findings and tested the underlying process. Participants (N = 363, Prolific, M_{age} = 32.56, M_{income} = \$75,779.70; 202 females) were randomly assigned to one of four conditions: conventional, sustainable processes, sustainable materials, and dual sustainability. After indicating their purchase likelihood of an American Eagle Outfitters' hoodie in the same scale as Experiment 1, they completed the following potential mediation measures in randomized order: innovativeness (e.g., "This hoodie is highly innovative"), perceived luxuriousness (e.g., "This hoodie is a luxury/necessity for everyone"), future outlook (e.g., "The future seemed bright"), self-expressiveness (e.g., "This hoodie helps ascertain my self-identity"); adapted from Grewal, Mehta, and Kardes (2004). Again, participants were more likely to purchase the hoodie with sustainable processes (processes: M = 5.08, SD = 1.35; dual: M = 5.31, SD = 1.35; processes vs. dual: p = .30) versus sustainable materials (M = 4.38, SD = 1.51; ps < .01). Mediation analyses (PROCESS model 4) with all potential mediators simultaneously showed that the effect of sustainability feature on purchase likelihood was only mediated by individuals' future outlook (indirect effect$_{[processes\ vs.\ materials]}$ = 1.86, CI$_{20,000bootstrapped}$ = [.53, 3.63]; indirect effect$_{[dual\ vs.\ materials]}$ = 1.90, CI$_{20,000bootstrapped}$ = [.51, 3.74]).

Overall, we find that sustainable processes (vs. materials) make individuals feel more positive about the future, which leads to higher sustainable consumption tendency. We also find that adding sustainable materials to sustainable process has neither an additive nor multiplicative effect. Future research will attempt to further quantify the bonus that sustainable processes provide, such that firms may be able to determine the optimal investment in both – as well as the malleability of sustainability features in terms of their temporal nature.

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Relationship Closeness in Dyadic Consumption Sharing
Chair: Sherrie Ying Ying Xue, INSEAD, Singapore

Paper #1: Shared Time Scarcity and the Pursuit of Extraordinary Experiences

    Ximena Garcia-Rada, Texas A&M University, USA

    Tami Kim, University of Virginia Darden School of Business, USA

Paper #2: Common Cents: Merging Bank Accounts Preserves Marital Quality among Newlyweds

    Jenny G. Olson, Indiana University, USA

    Scott I. Rick, University of Michigan, USA

    Deborah A. Small, University of Pennsylvania, USA

    Eli J. Finkel, Northwestern University, USA

Paper #3: Too Close for Comfort: The Adverse Role of Heterosexual Standards in Male Dyadic Consumption Sharing

    Sherrie Ying Ying Xue, INSEAD, Singapore

    Stephanie C. Lin, INSEAD, Singapore

    Christilene du Plessis, Singapore Management University, Singapore

Paper #4: Shared-Solitary Combined Experiences: The Desire for Some Solitary Time in Social Consumption Experiences

    Theresa A. Kwon, University of Pittsburgh, USA

    Peggy J. Liu, University of Pittsburgh, USA

SESSION OVERVIEW

Consumers often share consumption with others: for example, they order a shared platter with a colleague, watch a movie with a friend, and merge their bank accounts with a spouse. How does such consumption-sharing affect consumers' interpersonal relationships with their partners? Prior research examines how relational consequences affect people's decision-making in joint consumption decisions (Liu, Dallas, and Fitzsimons 2019; Simpson, Griskevicius and Rothman 2012). For instance, research has found that consumers trade off their own and partners' preferences to maintain relationships (e.g., Dzhogleva and Lamberton 2014; Etkin 2016; Wu, Moore and Fitzsimons 2019). Our four papers further examine relationship considerations in consumption sharing—in particular, we examine consumers' motivation to increase or reduce relationship closeness when they share consumption. Our first two papers examine how consumption sharing can increase relationship closeness (**Garcia-Rada and Kim; Olson, Rick, Small and Finkel**) when sharing an experience or a resource, and our final two papers examine how consumers avoid excessive relationship closeness when sharing a product or an experience (**Xue, Lin and du Plessis; Kwon and Liu**) in the context of friendships, romantic relationships, and work partnerships.

Garcia-Rada and Kim examine how sharing extraordinary experiences can help sustain the well-being of a close relationship. Across four experiments, they find that the perception of shared time scarcity increases consumers' preferences for extraordinary experiences, as consumers believe these experiences will strengthen relationships. **Olson and colleagues** examine how sharing a resource (i.e., merging bank accounts) can improve relationships in romantic relationships. Employing a long-term intervention, they show that newlywed couples assigned to merge finances fared better (greater relationship quality, financial harmony) as they transitioned to married life than those assigned to maintain separate accounts or to a no-intervention condition. As the first papers suggest that consumption sharing strengthens intimacy in relationships, the next papers

examine when this intimacy may be considered excessive, and how this affects co-consumption choice. **Xue, Lin and du Plessis** examine how male consumers avoid excessive relationship closeness when sharing oral consumption (e.g., food or drink) with other men. Because consumption sharing reflects relationship intimacy, men are concerned that sharing consumption with other men would violate heterosexual standards; they are thus less willing to share food or drink with same-gender partners than women. Finally, **Kwon and Liu** look at how consumers manage too much relational time together during experience sharing (e.g., going shopping or traveling to a city with a friend). Although consumers desire some amount of social time together, they find that people also desire some solitary time in shared social consumption experiences to ease social exhaustion in a relationship.

Our papers use diverse methodologies and theoretical perspectives to study how consumption sharing affects relationship closeness and relevant consumer behavior. Furthermore, our papers shed light on multiple domains of consumption sharing (product sharing, experience sharing, resource sharing) in a variety of relationship types (romantic couples, work colleagues, friends). Thus, each contributes uniquely to consumer research while offering practical implications for marketers and consumers. Our session should appeal to a broad audience at ACR.

Shared Time Scarcity and the Pursuit of Extraordinary Experiences

EXTENDED ABSTRACT

Time with partners, friends, and family is becoming increasingly scarce in this era when consumers often juggle many responsibilities. Situations such as having demanding work schedules, becoming new parents, and being in long-distance relationships are a few of many examples when consumers do not have *enough* time to engage in leisure activities with loved ones. What kind of shared experiences do consumers choose when they perceive their time with a relationship partner as scarce (versus abundant)?

We extend prior work on relationship maintenance strategies (e.g., Rusbult et al. 2001) to suggest that prioritizing extraordinary experiences when one perceives shared time as scarce is a behavioral relationship maintenance mechanism. Given that extraordinary experiences are perceived as more unusual (Bhattacharjee and Mogilner 2014), memorable (Zhang et al. 2014) and exciting (Aron et al. 2000), we predict that when consumers perceive their time with a relationship partner as scarce (versus abundant), they prioritize the extraordinariness of a shared activity over other factors such as convenience and quantity. This effect is driven by a person's belief that extraordinary experiences will help maintain the well-being of a close relationship. We test these predictions in four experiments.

Study 1 is a field experiment conducted on a social media platform to demonstrate the main effect: feelings of shared time scarcity led to preferring extraordinary experiences (AsPredicted.org # 24194). Using the platform's A/B testing feature, we randomly assigned Boston residents to seeing one of two ads—evoking time abundance or time scarcity with loved ones. The ads included a link to a blog post describing extraordinary experiences in Boston and the number of clicks served as our dependent measure. Our ad reached 25,148 users and had a total of 35,848 impressions. Most importantly, more people clicked on the ad when they felt that their time with

their loved ones was scarce (8.85%) versus abundant (7.50%; $\chi^2(1)$ = 15.26, $p < .001$).

Study 2 employs a writing task to manipulate perceptions of shared time scarcity and examines the psychological mechanism (AsPredicted.org # 47141). Participants currently in a romantic relationship ($N = 393$ Prolific Academic workers; 46% male; M_{age} = 35.35 years, $SD = 11.50$) were first asked to write about how the COVID-19 pandemic had reshaped their relationships and now they had more (*time abundant*) or less (*time scarce*) time to spend with their romantic partner. After, participants indicated the extent to which they thought it was important to select an extraordinary experience for an upcoming date with their partner (1 = Not at all; 7 = To a great extent); participants also indicated the extent to which they thought it was critical for the success of the relationship that they thought about their partner frequently (self-focused relationship maintenance motivation item) and that their partner thought about them frequently (partner-focused relationship maintenance motivation). Participants in the *time scarce* condition indicated that it would be more important to select an extraordinary experience for an upcoming date ($M = 4.70$, $SD = 1.70$) than those in *time abundant* condition ($M = 4.35$, $SD = 1.72$; $t(391) = 2.08$, $p = .038$). Importantly, a mediation model of the relationship between shared time and extraordinary experiences with both relationship maintenance motivation items as parallel mediators revealed a significant indirect effect through the partner-focused maintenance motivation item ($ab = 0.14$, SE = 0.07, 95% CI_{Boot} [0.02, 0.31]) but not through the self-focused one ($ab = 0.05$, SE = 0.06, 95% CI_{Boot} [-0.06, 0.17]).

Study 3 employs a consequential choice to demonstrate that when facing shared time scarcity, consumers prioritize the extraordinariness of the experience over its quantity. Participants ($N = 100$; 31% male; $M_{age} = 21.55$ years, $SD = 5.77$) who came to the university lab were first randomly paired with another participant and engaged in the relationship closeness induction task (Sedikides, Campbell, Reader, and Elliot 1999). Then, dyads were randomly assigned to one of two conditions: those in the *time abundant* condition were informed that they would have two more interactions with the same partner while those in the *time scarce* condition were informed that they would have only one more interaction with the same partner and a second interaction with a stranger. Participants chose between one gourmet chocolate (extraordinary experience) and two regular chocolates (ordinary experience) to share with their current partner during the next interaction. The percentage of participants choosing the extraordinary option was significantly higher in the *time scarce* condition (80%) than in the *time abundant* condition (63%; $B = 0.92$, $SE = 0.47$, *Wald* = 3.81, $p = .051$, $Exp(B) = 2.51$).

Study 4 involves a 2(shared time: abundant vs. scarce) x 2(relationship maintenance goal: weak vs. strong) between-subjects design to demonstrate that consumers prioritize extraordinariness over convenience when facing shared time scarcity (AsPredicted.org # 55725). Participants ($N = 799$ MTurkers; 47% male; M_{age} = 40.77 years, $SD = 13.10$) were shown information of two restaurants for an upcoming dinner with a colleague. They reported their preference by moving a 100-point sliding scale with end-points "definitely the convenient restaurant (i.e., place close to their work)" and "definitely the unique restaurant." Consistent with our relationship maintenance account, we find that relationship goal moderated the effect of shared time on choice of restaurant ($F(1, 795) = 6.30$, $p = .012$). In the strong relationship goal condition, participants in the shared time scarce condition preferred the unique restaurant ($M = 56.12$, $SD = 37.43$) more than participants in the shared time abundant condition ($M = 48.21$, $SD = 38.37$; $F(1, 795) = 4.71$, $p = .030$). In contrast,

in the weak relationship goal condition, there was no difference in participants' preference for the unique restaurant ($p = .171$).

In conclusion, we demonstrate that evoking shared time scarcity motivates consumers to seek out extraordinary experiences as a means to sustain the focal relationship. These findings advance our understanding of the antecedents of experiential choices in close relationships.

Common Cents: Merging Bank Accounts Preserves Marital Quality among Newlyweds

EXTENDED ABSTRACT

Are romantic partners better off keeping their money in separate accounts or pooling their money into a joint account? *A priori*, the answer is not obvious. On the one hand, pooling money might lead to uncomfortable revelations and contentious conversations. On the other hand, opening a joint account might help to cultivate a "communal" mindset among partners (e.g., by turning "your money" and "my money" into "our money"). Prior work suggests marriages are happier when characterized by stronger communal mindsets, even in the early stages of relationships (Clark et al. 2010). Some non-experimental research demonstrates a positive correlation between merging finances and relationship quality (Addo and Sassler 2010; Garbinsky, Gladstone, and Mogilner 2019; Kenney 2006; van Raaij, Antonides, and de Groot 2020), an intriguing association with ambiguous causality. Even with longitudinal elements, these studies retain ambiguity about whether joint accounts improve marital quality or whether happier couples are more likely to merge their financial lives.

As the first causal investigation of its kind, we conducted a longitudinal field experiment to examine the influence of banking arrangements over time. Specifically, we randomly assigned 230 engaged or newlywed couples to merge their finances in a joint bank account (Joint Condition), to keep their finances in separate accounts (Separate Condition), or to a condition where they received no banking instructions (No-Intervention Condition). We conducted six waves of data collection across the first two years of marriage; this time window is known as the *connubial crucible*, a critical period during which couples' relational dynamics "foreshadow their long-term marital fate" (Huston et al. 2001). Couples earned up to $250 ($125 per partner) for completing one intake survey and five follow-up surveys.

Across the three experimental conditions, we anticipated the greatest attrition in the Joint Condition because those couples were required to exert the most effort to comply with instructions; all couples entered the study with a separate account structure (i.e., an eligibility requirement unbeknownst to participants), so couples in the Joint Condition were the only ones required to deviate from the status quo. To address this asymmetry while still producing approximately equal numbers of participants across conditions, we randomized more participants to the Joint Condition. Specifically, for every seven couples, we randomly assigned three to the Joint Condition, two to the Separate Condition, and two to the No-Intervention Condition. In accord with expectations, 34% of couples in the Joint Condition, 12% in the Separate Condition, and 6% in the No-Intervention Condition failed to complete any follow-up surveys after the intake survey (i.e., couples lost to attrition). We revisit this (anticipated) selective attrition issue when discussing robustness checks below.

We preregistered key elements of our data-analytic plan on Open Science Framework (https://osf.io/ycem7/), where we also share complete model specification, example syntax, ancillary analyses, and robustness checks (https://osf.io/2m7sv/). Importantly, we

pre-registered guidelines for determining compliance with study instructions. We coded Joint and Separate Condition couples as having strictly complied with our instructions (i.e., they fully transitioned to joint account(s) in the Joint condition or fully remained with separate accounts in the Separate condition), liberally complied (e.g., opening a joint account but still using separate accounts in the Joint condition), or not complied. We used dyadic growth curve modeling (Kenny, Kashy, and Cook 2006) and multilevel conditional process modeling (Bauer, Preacher, and Gil 2006) to examine intervention effects on relationship quality (e.g., "My relationship with my partner makes me happy"; Funk and Rogge 2007) and financial harmony (e.g., "When it comes to our finances, my partner and I see eye-to-eye"; Rick, Small, and Finkel 2011) over two years.

The results provide clear evidence that couples randomly assigned to the Joint Condition fared better as they transitioned to married life. Namely, the trajectory for Joint couples was significantly more positive than the trajectory for either Separate or No-Intervention couples. Simple slopes analyses revealed that while couples in the No-Intervention and Separate Conditions exhibited significant declines in relationship quality over time (i.e., a pattern commonly observed in longitudinal studies of newlyweds' relationship satisfaction; Huston et al. 2001), couples in the Joint Condition did not. After two years, couples in the Joint Condition exhibited significantly greater relationship quality than couples in the other two conditions, which did not differ. Subsequent multilevel mediation analyses revealed that Joint couples experience relatively positive relationship outcomes, in part, due to increases in financial harmony over time.

We also performed a series of robustness checks to examine how sensitive our results are to different data-analytic decisions (e.g., potential sex differences; controlling for demographic covariates including income, age, race, and education; using liberal vs. strict compliance rules). We draw substantively similar conclusions across all checks. We also anticipated (and subsequently observed) the greatest attrition and non-compliance in the Joint Condition (i.e., these couples had to exert the greatest effort to comply with experimental instructions). In addition to oversampling this condition, we compared relationship quality and financial harmony at study entry across participant groups as a function of compliance. We observe no significant differences between Joint compliers and Joint non-compliers, Joint compliers and Separate compliers, or Joint compliers and Non-Intervention compliers. Collectively, our results suggest that, on average, merging finances helps couples preserve marital well-being as they transition to marriage.

Too Close for Comfort: The Adverse Role of Heterosexual Standards in Male Dyadic Consumption Sharing

EXTENDED ABSTRACT

Due to the rigidity of traditional male gender roles, self-identified men feel pressured to adhere to traditional gender norms (Bosson et al. 2005; Bosson and Michniewicz 2013; Brough et al. 2016). Although legal and social acceptance of LGBTQ+ rights has grown lately (King 2021; Masci et al. 2020), self-identified men may maintain an internalized traditional gender norm that "true" men should behave in ways that convey unambiguous heterosexuality (Herek 1986). We argue that, even if they do not endorse such norms, men (vs. women) feel uncomfortable showing intimacy with same-gender others because it violates heterosexual standards. As sharing consumption has been shown to reflect intimacy (Argo et al. 2008; Miller et al. 1998) and even romantic attraction (Alley et al. 2013), we hypothesize that self-identified men (vs. self-identified

women) believe that sharing consumption with same-gender others would violate heterosexual norms (due to its romantic connotations), leading them to avoid consumption sharing. We show how this adversely affects men's consumption choices, leading them to give up desirable options, choose less variety than they want, order bigger portions than needed, and pay a higher price to have their own individual consumption.

In study 1 (N=200 dyads), we tested the basic hypothesis in a field setting using a 2 (dyad gender: male vs. female) × 2 (tea option: one big bottle to share vs. two separate bottles) design, in which we asked dyads to choose between green tea and water. The green tea option was presented as either one big bottle to be shared or two separate bottles. Male dyads chose green tea less often when it had to be shared (28.00%) than when it did not (62.00%), B=−1.43, SE=.43, $p<.001$. However, female dyads did not differ in the green tea choice between the shared (39.22%) and separate condition (48.98%), B=−.40, SE=.40, $p=.326$; $B_{interaction}=−.26$, SE=.15, $p=.079$.

Study 2 (N=401) used a 2 (participant gender: male vs. female) × 2 (dyad gender composition: same- vs. opposite-gender) design to test whether men are less willing to share with other men (rather than simply other people). Participants imagined dining with a same or opposite gender friend and indicated how likely they would be to propose splitting two desirable dishes rather than picking one for themselves. Men were less likely to suggest sharing ($M=2.40$) than women ($M=3.20$) when dining with same-gender partners, $t(397)=−4.30$, $p<.001$; this did not occur for opposite-gender partners ($M_{male}=2.75$, $M_{female}=2.74$), $t(397)=.05$, $p=.958$; $t_{interaction}(397)=−3.06$, $p=.002$. Furthermore, anticipated heterosexual norm violation mediated the effect of participant gender on sharing for same-gender pairs, $CI_{95}=[−.963, −.500]$, but not for opposite-gender pairs, $CI_{95}=[−.296, .130]$, moderated mediation $CI_{95}=[−.949, −.344]$.

Study 3 (N=400) (pre-registered) used a mixed-subject design to test whether men's aversion to consumption sharing is internally endorsed—that is, if they believe they should avoid sharing consumption. Participants indicated how much they think they should share and how much they actually would share a dish that is too big with a same-gender friend. Men believe they should share ($M=3.54$) more than they actually would share ($M=3.25$), $t(398)=3.70$, $p<.001$, and as much as women believe they should share ($M=3.70$), $t(398)=−1.29$, $p=.199$. Women, on the other hand, did not display a difference in their belief about what they should do ($M=3.70$) and what they would actually do ($M=3.73$), $t(398)=.32$, $p=.750$; $t_{interaction}(398)=−2.84$, $p=.005$. This suggests that although men realize that adhering to this gender norm of not sharing consumption with other men is undesirable, they may still be uncomfortable violating such gender norms.

Studies 4a (N=990) and 4b (N=1177) (both pre-registered) examined the moderating role of situation romanticness, further testing the role of anticipated heterosexual norm violation. In study 4a, participants imagined dining with one (romantic condition) or two (unromantic condition) same-gender friend(s), and indicated how likely they would be to suggest sharing appetizers rather than ordering one for themselves. Men were less likely to share with one man ($M=3.72$) than two men ($M=3.96$), $t(986)=−2.60$, $p=.010$; however, women did not show this effect ($M_{one}=4.34$, $M_{two}=4.31$), $t(986)=.40$, $p=.692$; $t_{interaction}(986)=−2.12$, $p=.034$. Anticipated heterosexual norm violation mediated the effect of the number of dining partners on sharing for men $CI_{95}=[−.273, −.030]$, but not women $CI_{95}=[−.065, .080]$, moderated mediation $CI_{95}=[−.301, −.016]$.

In study 4b, participants chose between sharing a dish (either with or without romantic connotation) with a same-gender partner, or ordering a half portion at a per-volume price mark-up for them-

selves. Men were less likely to share the romantic dish [chocolate-covered strawberries] (M=3.90) than the unromantic dish [fries] (M=4.09), t(1173)=−2.08, p=.038; however, women did not show this effect ($M_{romantic}$=4.48, $M_{unromantic}$=4.34), t(1173)=1.78, p=.075; $t_{interaction}$(1173)=−2.74, p=.006. Anticipated heterosexual norm violation mediated the effect of food romanticness on sharing for men CI_{95}=[.181, .440], but not women CI_{95}=[−.012, .110], moderated mediation CI_{95}=[.122, .400].

Study 5 (N=120 dyads) tested a theoretical extension that if forced to share consumption, men would do so in a way to avoid further intimacy. We predicted that men would avoid exchanging bodily essence (i.e., saliva) when sharing food, which has been shown to further levels of intimacy (Alley 2012; Rozin et al. 1995). We asked dyads in-lab to share and finish an individual sticky snack by both biting out of it. Male dyads (vs. female dyads) felt that sharing the snack by both biting out of it would violate heterosexual standards (M_{male}=3.24; M_{female}=2.47), t(118)=3.26, p=.001, leading men to avoid contamination (e.g., by tearing the snack with their hands) marginally more (26.53%) than women (14.08%), B=.79, SE=.47, p=.093. Anticipated heterosexual norm violation mediated the gender effect on contamination avoidance, CI_{95}=[.030, .220].

Practically, our research underscores important consumer behavioral and well-being consequences of the pressure to adhere to heterosexual standards in male consumers. Theoretically, our research contributes to a broader understanding of gender roles in consumer behavior (Brough et al. 2016; Dzhogleva and Lamberton 2014; Gorlin and Dhar 2012; Liu et al. 2019, 2020; Nikolova and Lamberton 2016) by examining *when* consumers prefer to share a product over consuming individually.

Shared-Solitary Combined Experiences: The Desire for Some Solitary Time in Social Consumption Experiences

EXTENDED ABSTRACT

Hedonic consumption experiences are often shared with close others. Indeed, much research has compared shared experiences with solitary experiences, showing that shared experiences amplify enjoyment of hedonic consumption activities and are thus often preferred to solitary experiences (Caprariello and Reis 2013; Raghunathan and Corfman 2006; Ramanathan and McGill 2007; Ratner and Hamilton 2015). The present research asks: how can marketers and consumers structure optimal social experiences? In particular, does consumers' robust preference for shared experiences for hedonic consumption activities always persist?

We propose that as the actual or perceived duration of experience increases, consumers' default preference for entirely shared experiences reduces in favor of "shared-solitary combined experiences"—experiences wherein some time is spent with others and some time is spent solitarily. We further propose that this shift occurs because of a desire to mitigate anticipated social fatigue.

We focus on experiences for which entirely shared experiences are often normative: hedonic consumption experiences occurring within typical reasonable durations for spending entirely with a friend (i.e., less than one day), such as a shopping trip at the mall or a trip to a city. We report six experiments (all pre-registered).

Experiment 1 (N=572) had a 2(duration: short vs. long)×2(choice set: "shared vs. combined" vs. "shared vs. solitary") between-subjects design. Participants imagined making plans for relatively short (2-hour) versus long (6-hour) mall shopping experiences with a friend and indicated their preferred experience type, either between shared versus solitary experiences or between shared versus combined experiences, where combined experiences would

have equal proportions of shared and solitary time. Analysis revealed a significant interaction (p=.040). In the "shared vs. solitary" choice set condition, choice shares did not differ between the duration conditions (short$_{shared}$:88% vs. long$_{shared}$:87%; p=.875). By contrast, in the "shared vs. combined" choice set condition, choice shares differed between the duration conditions (p<.001). Preference for shared experiences reduced in favor of combined experiences as duration increased (short$_{shared}$:83% vs. long$_{shared}$:64%). Experiment 2 (N=631) further tested the role of duration but examined preferences from a choice set with all three types of experiences (shared, combined, solitary). Again, the choice shares of experience types differed between the short versus long duration conditions (p<.001). Choice of shared experiences decreased as duration of experiences increased (short$_{shared}$:77% vs. long$_{shared}$:65%), shifting towards combined experiences (short$_{combined}$:17% vs. long$_{combined}$:32%). Choice of solitary experiences was relatively low (short$_{solitary}$:6% vs. long$_{solitary}$:3%).

Experiment 3 (N=224) tested the underlying role of anticipated social fatigue and the generalizability of the effect to a different context: traveling to a city with a friend. Participants wrote about making plans for a trip that would last either a short (2-hour) or long (8-hour) duration. They then chose their preferred experience type between three options (shared, combined, solitary). Next, participants indicated their motive to address anticipated social fatigue (3-item; α=.67). As pre-registered, we focused on comparing the choice of shared versus combined experiences to simplify analysis (as few participants ever chose the solitary experience). Generalizing the key effect to this different hedonic consumption context, preference for shared experiences reduced in favor of combined experiences as duration of experience increased (short$_{shared}$:94% vs. long$_{shared}$:72%; p<.001). This shift was mediated by heightened motives to address anticipated social fatigue for long (vs. short) experiences (95%CI[-.65,-.09]). An alternative account based on the motive to address variety-seeking was not supported (95%CI[-.19,.22]).

Experiment 4 (N=604) used a consequential choice task where participants chose which trip agenda to receive. Rather than manipulate actual experience duration, we held experience duration constant and framed a particular length of time (eight hours) as short or long, addressing the alternative explanation that constraints associated with budgeting specific time periods account for the effects. Participants were first randomly assigned to write about how eight hours is either a short or a long amount of time to spend with a friend. They then considered making plans for either a short or long 8-hour trip with a friend to a nearby city and chose between three travel agendas: an agenda containing activities to do with a friend (shared experience), an agenda containing activities to do by themselves (solitary experience), or an agenda containing some activities to do with a friend and some activities to do by themselves (combined experience). Participants received their chosen agenda. Results (focusing on comparing the choice of shared vs. combined experiences; pre-registered), showed that when the duration was long (vs. short), preferences for an agenda shifted from shared experiences towards combined experiences (short$_{shared}$:80% vs. long$_{shared}$:67%; p<.001). The shift was again mediated by higher motives to address anticipated social fatigue (95%CI[-.19,.22]).

Experiments 5a (N=211, undergraduate lab sample) and 5b (N=606; online panel sample) had a similar manipulation as experiment 4. However, rather than a 3-option choice set, participants chose their preferred agenda type for their social trip (8-hour) from a 5-option choice set. We systematically varied the proportions of shared-solitary time elements, such that the choice set included two additional agendas featuring variants of combined experiences: combined experiences with relatively more shared time (shared

6-hour+solitary 2-hour) and combined experiences with relatively more solitary time (shared 2-hour+solitary 6-hour). Results of experiments 5a-5b revealed that choice of agenda for shared experiences decreased as the duration increased (short$_{5a}$:68% vs. long$_{5a}$:50%; p_{5a}=.007; short$_{5b}$:67% vs. long$_{5b}$:39%; p_{5b}<.001), shifting towards combined experiences with a relatively larger proportion of shared time (short$_{5a}$:25% vs. long$_{5a}$:37%; p_{5a}=.075; short$_{5b}$:23% vs. long$_{5b}$:29%; p_{5b}=.109) or combined experiences with equal proportions of shared and solitary time (short$_{5a}$:5% vs. long$_{5a}$:12%; p_{5a}=.064; short$_{5b}$:7% vs. long$_{5b}$:24%; p_{5b}<.001). Few participants opted for combined experiences with a relatively larger proportion of solitary time (0%-6%) or for solitary experiences (1%-2%). Altogether, these findings suggest that consumers viewed the trip as primarily social experience—into which they would like to incorporate some (no more than half) solitary time.

Overall, this research proposes and systematically examines a novel experience structure—shared-solitary combined experiences—diverging from prior work focusing on entirely social or entirely solitary experiences. This work identifies how to structure optimal social experiences by demonstrating that consumers view combined experiences as a potential solution for enjoying social experiences while relieving potential social fatigue.

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The Power of Words: How Language Shapes Brand Perceptions

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Paper #1: Brands that Use Bae: Does Slang Help Brands?

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Paper #2: Influencer Typicality and Brand Reference Group Associations

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Paper #3: The Role of Word Familiarity in Positive and Negative WOM

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Paper #4: Country Brand Personality DNA: Creating Instant Brand Personalities for New Brands

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SESSION OVERVIEW

Words have tremendous power. The world has witnessed how words can either harm and divide, or heal and unite. What brands say (and when they say it), can have a major impact on how consumers perceive their brands. For instance, while some brands have expressed support this year for issues such as racism, COVID-19 vaccinations, and climate change, others have stayed silent or provided opposing views. In line with the conference theme, *What the World Needs Now*, this session offers novel insights into how language impacts brand perceptions.

If the CDC is planning a communications campaign to encourage the public to receive COVID-19 vaccines, this session could offer insights for more effective communication. First, the message source matters (Pyrah and Wang). If the message comes from the CDC directly, it would be more effective if it avoids using informal language such as slang, because the audience expects formality and authority in messages from brands and institutions. However, the CDC can also encourage the public to share their vaccination experiences on social media. In such social media posts, the use of informal language, such as slang, may help people connect with each other. Second, if the CDC plans to use user-generated content in social media to help convince individuals to get vaccinated, then it may consider using moderately typical influencers (i.e., moderately typical brand consumers), because the public will consider all vaccinated people as more similar (i.e., homogenous) when the influencers are not too typical or too atypical (Junqué de Fortuny and Lee). When analyzing online chatter about related topics, the CDC can also examine and suggest influencers to increase the use of unfamiliar words if their posts are negative (Li and Kronrod). Last but not least, stereotypical perceptions about countries can help new brand names acquire instant brand personality. Whereas Pfizer has a foreign sounding brand name (German) and may hence inherit particular personality traits

associated with the country of origin (e.g., rigorous, love of order), Moderna may elicit other country-of-origin associations.

This set of papers opens new avenues of research on how consumer linguistics impacts brands. Overall, these papers offer insights into distinct aspects of language (the use of slang, a holistic view of influencer content, the familiarity of words, and the sounding of brand names) and its impact on consumer perceptions of brands and their messages. Due to the increasing importance of branding and the burgeoning work on consumer linguistics, this session is likely to have a broad appeal to the ACR audience and attract researchers interested in branding, consumer linguistics, and word-of-mouth. More importantly, this session answers the important call of the conference theme, *What the World Needs Now,* with language and brand perceptions being at the forefront of many issues around the globe. The papers represent an advanced stage of completion and offer a multimethod approach. Overall, they comprise 13 studies employing text analysis of online content, a large-scale survey, and experiments. We anticipate that this session will provide novel insights and spark important questions.

Brands that Use Bae: Does Slang Help Brands?

EXTENDED ABSTRACT

Firms often employ slang in their marketing messages, such as Mountain Dew ("Mountain Dew is the bae") and Burger King ("This whopper bruh"), to connect with their target customers (Aaker, Brumbaugh, and Grier 2000), However, the impact of slang on persuasive messaging is unclear. We theorize and show that the use of slang by brands violates consumers' expectations, ultimately harming brand attitudes.

Slang refers to a fluid set of words and phrases that individuals use to establish social identity, cohesiveness with a group, or with a trend or fashion in society (Eble 1996). Two defining characteristics of slang are its informality and sociability. Slang moves discourse in the direction of informality (Dumas and Lighter 1978; Moore 2014), and is socially motivated, to establish one's social identity (Eble 1996) or form camaraderie (Kiesling 2004).

We propose that slang in marketing messages affects brand attitudes in different ways depending on the source of the messages—sent by brands or fellow consumers. In brand messages, consumers desire formality and professionalism (Bullard and Snizek 1988), and when these qualities of formality fall short, perceptions of brand quality diminish (Ofir and Simonson 2001). Additionally, the use of slang assumes a particular familiarity between communicators (Dumas and Lighter 1978), and overly friendly behaviors by unfamiliar others can be met with skepticism by consumers (Main, Dahl, and Darke 2007; Sela, Wheeler, and Sarial-Abi 2012). On the other hand, consumer messages are informal in nature (Westbrook 1987) and socially motivated (Dubois, Bonezzi, and De Angelis 2016; Syn and Oh 2015), matching both the informality and sociability characteristics of slang. Thus, we propose that the use of slang will be inappropriate in brand messages, leading to less favorable brand attitudes. However, the use of slang in consumer messages should be more acceptable.

We test our Hypothesis across 5 studies. In study 1, we showed that in brand messages, the use of slang (versus not) leads to less favorable brand attitudes. Undergraduate students (N = 301) viewed

a tweet that either contained slang or not (slang words validated in a pre-test). Participants reported less favorable attitudes in response to the tweet with slang ($M = 3.82$) than when the tweet did not contain slang ($M = 4.39$; $p < .001$).

In study 2, we tested the interaction effect of slang use and slang source on brand attitudes. Undergraduate students (N = 180) were randomly assigned to a 2 (slang use: present vs. absent) x 2 (message source: brand vs. consumer) between-subjects design. Participants read a product review that either contained slang or not and that was sent from either a brand or a consumer. After reading the review, they reported their brand attitudes. A significant interaction ($p < .05$) revealed that when the message source was a brand, the use of slang lead to less favorable attitudes ($M_{present} = 4.16$, $M_{absent} = 5.25$, $p < .001$). When the message source was a consumer, there was no difference in attitudes ($M_{present} = 4.88$, $M_{absent} = 5.23$, $p > .18$).

In study 3, we sought to extend our results to real purchase behavior. Community members (N = 102; recruitment was halted because of COVID-19 health concerns) were recruited and assigned to the same design as used in study 2. Participants viewed a product description about ChapStick and had a chance to purchase lip balms with their own money. Participants bought fewer lip balms when brand messages used (vs. didn't use) slang ($M_{present} = .48$, $M_{absent} = 1.00$; $p < .034$). Such difference was not found when the message source was a consumer ($M_{present} = .46$, $M_{absent} = .22$; $p > .15$).

In study 4, we tested our mediator through expectancy violations. MTurk participants (N = 503) were randomly assigned to the same 2 (slang use: present vs. absent) x 2 (message source: brand vs. consumer) between-subjects design. After reading a tweet, participants reported their brand attitudes and expectancy violations (adapted from Bettencourt et al. 1997) in a counterbalanced order. A significant interaction ($p < .05$) revealed that the use of slang by a brand negatively impacted brand attitudes ($M_{present} = 5.24$, $M_{absent} = 5.67$, $p = .003$), but there was no difference when the source was a consumer ($M_{present} = 5.86$, $M_{absent} = 5.91$, $p > .8$). The same pattern of results emerged for expectancy violations. As predicted, expectancy violations mediated the relationship of slang use and slang source on brand attitudes (95% CI [-.38, -.13]).

To pinpoint expectancy violations as the mediator, we tested our process with a moderation approach (Spencer, Zanna, and Fong 2005) in study 5. Consumers have different expectations for brands with certain personalities (Aaker, Fournier, and Brasel 2004). The use of slang is congruent with the traits of *exciting* brands (daring, spirited, up-to-date), but incongruent with the traits of *sincere* brands (honest wholesome, and warm; Aaker 1997). Therefore, the use of slang should be more (less) appropriate for brands with an exciting (sincere) personality. Undergraduate students (N = 285) were randomly assigned to a 2 (slang use: present vs. absent) x 3 (brand personality: exciting vs. sincere vs. control) between-subjects design. We manipulated brand personality following previous researchers (Aaker et al. 2004; results from a pre-test confirm a successful manipulation). Participants viewed a brand's social media post and reported their brand attitudes. A significant interaction ($p < .05$) revealed that the use of slang negatively impacted attitudes for the control brand ($M_{present} = 3.58$, $M_{absent} = 4.85$, $p < .001$) and the sincere brand ($M_{present} = 3.60$, $M_{absent} = 4.25$, $p = .027$). However, as predicted, for the exciting brand, there was no difference in attitudes ($M_{present} = 3.87$, $M_{absent} = 4.09$, $p > .44$).

Overall, we find that the use of slang by brands violates consumers' expectations and, hence, harms attitudes. However, because expectations for consumer messages differ, the use of slang is more acceptable in consumer messages. Unless a brand has a particular

personality (i.e., exciting) that aligns with the use of slang, this research serves as an important caution against its use by brands.

Influencer Typicality and Brand Reference Group Associations

EXTENDED ABSTRACT

A wealth of research (e.g. Bearden and Etzel 1982, Escalas and Bettman 2005, Berger and Heath 2007, White, Argo and Sengupta, 2012) has explored how reference group associations can influence consumer behavior. However, less is known about how cultural meanings are transferred to brands (e.g. how brands gain reference group associations, e.g. Batra 2019). Given the development of an economy of consumer influencers (Khamis, Ang, and Welling 2017; Marwick 2015; Senft 2013) and the digital "megaphones" (McQuarrie, Miller, and Phillips 2013) that consumers now enjoy in social media, the potential for the creation of reference group associations has never been greater. In this project, we explore how influencers might transfer reference group meanings to brands, by analyzing consumer descriptions of brands after exposure to influencer content.

We leverage research on stereotype change (Hewstone and Hamberger 2000; Maurer et al. 1995) to predict how influencer content can strengthen or change the meanings associated with a brand. An important variable affecting stereotype change is the *perceived typicality* of the person relative to their group (Weber and Crocker 1983). While prototypical individuals strengthen existing stereotypes (e.g. a football player who is dumb), atypical individuals may be able to change stereotypes (e.g. a football player who is a smart). Furthermore, highly atypical individuals (e.g. a football player who is a Rhodes Scholar) can lead to "subtyping," whereby they are seen as "exceptions to the rule" and may even strengthen pre-existing associations about a group (Taylor 1981). As brand reference group associations have also been described in terms of stereotyping (Grubb and Hupp 1968; Levy 1959; Sirgy 1982), we extend insights from the stereotype change literature to the topic of branding, reference groups and social media.

We designed a survey inspired by Tucker (2015), constructing a set of 125 Instagram posts published by social media influencers (averaging 150,000 Instagram followers) about one of 25 major brands. The set of posts was constructed from a major influencer networking site, and we selected the top five posts per brand (averaging 5,000 likes) based on number of likes per post. After participants viewed a post[1], we asked them to provide five nouns and five adjectives describing the type of person who wears the brand. Subsequently, for each text entry provided, we asked participants to indicate whether the word or phrase was characteristic of people who wear the brand (1 = Very uncharacteristic, 7 = Very characteristic) to capture reference group "association strength". To capture the perceived typicality of the influencer, we asked participants whether the influencer in the post was typical of someone who wears the brand (1 = Highly atypical, 7 = Highly typical). Finally, to explore the perceptions held regarding the homogeneity of a brand's consumers, we asked "how similar to each other are people who wear this brand" (1 = Extremely dissimilar, 7 = Extremely similar). All items were adapted from the stereotype change literature.

We found that influencer typicality is associated with a brand's perceived homogeneity ($\beta = .082$, $t = 4.78$, $p < .001$), and that this relationship is actually quadratic ($\beta = .074$, $t = 9.31$, $p < .001$). Second, we found that typicality is associated with reference group associa-

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1   Note that a subset of our participants did not view influencer posts and served as a baseline condition upon which we could compare main survey participants' responses

tion strength (β = .083, t = 6.48, p < .001), and that this relationship is also quadratic (β = .043, t = 7.39, p < .001). Using Hayes' MEDCURVE, we found evidence of curvilinear mediation. The linear effect of typicality on perceived homogeneity was significant (β = .083, t = 4.77, p < .001), as was the quadratic effect (β = .074, t = 9.31, p < .001). Also, the effect of perceived homogeneity on association strength was significant (β = .149, t = 10.65, p < .001). Yet typicality remained significant on both linear (β = .071, t = 5.61, p < .001) and quadratic effects (β = .032, t = 5.54, p < .001) after accounting for the intervening role of perceived homogeneity.

We considered the text responses provided by our participants. For each participant, we computed two measures capturing the tightness of reference group associations: the degree of differences among a participant's responses (termed "embedding variation"), and the number of reference group categories mentioned by the participant. These measures were constructed by associating each participant's individual words or phrases with a unique ConceptNet word embedding vector (Speer, Chin and Havasi 2018). For the second measure, we employed a Weighted Dirichlet Process Gaussian Mixture Model to link each response to one of 100 overarching reference group clusters, and we took a greater number of clusters mentioned to reflect a more diverse set of brand associations held by the participant. By employing Hayes (2017) PROCESS Model 6 in two separate exercises, we found that typical influencers generated greater perceptions of homogeneity, which increased participants' strength of reference group associations and ultimately reduced participants' embedding variation (effect = -.0013, SE = .0004, LLCI = -.0020, ULCI = -.0006) and the number of clusters participants described for the brand (effect = -.0054, SE = .0022, LLCI = -.0098, ULCI = -.0013).

Overall, these findings suggest that when influencers post on social media, their perceived typicality for the brand can shift the perceived homogeneity of a brand's consumers, strengthening or changing the groups that come to mind for the brand. Furthermore, at certain levels of atypicality, influencers may begin to lose their ability to increase perceived homogeneity and weaken reference group associations. Finally, a word embedding analysis revealed that typical influencers can tighten brand associations by increasing the likelihood that participants will think of brand descriptors that are both more similar and representative of fewer reference group categories. In short, this work bridges cultural theories in consumer research (e.g. McCracken 1989), insights on stereotype change, and novel methods in computer science, to better characterize the effects of influencer content on brand reference group associations.

The Role of Word Familiarity in Positive and Negative WOM

EXTENDED ABSTRACT

Word of Mouth (WOM) has a significant influence on product evaluations and purchase decisions (Park, Lee, and Han 2007; Trusov, Bucklin, and Pauwels 2009; Mauri and Minazzi 2013). Extending current research, we focus on the influence of word familiarity on these processes.

As language is developing, novel, unfamiliar words keep emerging and appearing in WOM. Therefore, it is important to understand the role of word familiarity in the effect of WOM. Familiarity is defined as knowledge regarding something/someone following previous encounters with that something/someone (Bridger, Bader, and Mecklinger 2014; Zajonc 1968). On the one hand, familiarity leads to positive attitudes and liking because of the pleasure with the familiar (Zajonc 1968, 1980; Alter and Oppenheimer 2008; Garcia-Marques, et al. 2010). On the other hand, excessive familiarity elicits boredom and disliking (Kronrod and Lowrey 2016), while unfamiliarity can increase the feeling of interest and novelty (Kashdan and Silvia 2009; Turner and Silvia 2006). Extended to language, these mixed results beg the question: how will familiar and unfamiliar language in WOM influence readers?

Importantly, WOM can be positive or negative. Previous research suggested that linguistic familiarity has a different effect within positive and negative contexts (Kronrod and Lowrey 2016). We build our predictions relying on this notion and on the finding that when processing negative information, people are more diagnostic and attentive (Lee, Park, and Han, 2008; Homer and Yoon 1992; Maheswaran and Meyers-Levy, 1990), and tend to collect and expect new information (Noguchi, Gohm, and Dalsky, 2006). In contrast, in positive contexts, people tend to use heuristic processing and more holistic top-down thinking (Bless, 2001; Erber and Erber, 2001; Fiedler, 2001). In other words, people in negative situations are more likely to be in an information seeking mindset, compared with positive contexts.

Based on the differences in mindset between positive and negative contexts, we predict that unfamiliar words have a replenishing effect on attitudes when processing negative WOM, because these words fit with consumers' diagnostic and detail-oriented processing of information, and their information-seeking mindset. However in positive WOM, these effects are attenuated. Thus, we predict that word familiarity interacts with WOM valence, such that:

Hypothesis 1: *unfamiliar words in negative WOM lead to higher attitudes and purchase intention, compared with familiar words. In positive WOM this effect is attenuated.*

Mediation of information seeking mindset. In this work we also investigate information seeking mindset as a potential underlying mechanism. Prior literature showed that unfamiliar words are viewed as novel stimuli (Kashdan and Silvia 2009; Turner and Silvia 2006), and that novel stimuli are consistent with states of seeking novel information (Berlyne, 1954, Loewenstein, 1994). Thus, we suggest that the reason that unfamiliar words replenish the effect of negative WOM on attitudes is that they are consistent with the increased information seeking mindset in these contexts. Formally,

Hypothesis2: *Information Seeking mindset mediates the interaction effect of word familiarity and WOM valence on attitudes.*

We test our Hypothesis across four studies that examined the effect of word familiarity on consumer decisions in positive and negative WOM. **Study 1** is a text analysis of a thousand online Amazon reviews for various products obtained from an online source available for academic use. We found a significant interaction between word familiarity and WOM valence ($p = .046$), such that for negative reviews, unfamiliar words increase helpfulness ratings ($M_{unfamiliar} = 4.84$, $M_{familiar} = 2.79$, $p = .001$), whereas for positive reviews, word familiarity does not matter ($M_{unfamiliar} = .98$, $M_{familiar} = .70$, $p = .66$). In **Study 2a**, participants read an online product review for a backpack which used familiar (e.g., bright, weak) or unfamiliar (e.g., glistening, frangible) words, and indicated purchase intentions. Supporting H1, we found that unfamiliar words in negative WOM lead to higher purchase intention ($M_{unfamiliar} = 2.67$, $M_{familiar} = 2.03$, $p = .039$). However, the effect of word familiarity was not significant in positive WOM ($M_{unfamiliar} = 4.03$, $M_{familiar} = 4.13$, $p = .75$). **Study 2b** replicated this interaction effect with a different product (a film) and WOM type (a tweet). In negative WOM, unfamiliar words lead to

higher purchase intention ($M_{unfamiliar}$ = 3.76, $M_{familiar}$ = 2.96, p < .001), whereas this effect is not significant in positive WOM ($M_{unfamiliar}$ = 4.61, $M_{familiar}$ = 4.35, p = 0.19). **Study 3** tested the interaction effect with a different product (a jacket), and also tested the potential mediator of seeking more information. Supporting H2, the moderated mediation analysis showed that seeking information mediates the interaction effect of word familiarity and WOM valence on purchase intentions (B = .2832, SE = .0791, 95% CI: [.1373, .4536]). We also explored attitude certainty as the potential mediator, and the results showed that in positive WOM, unfamiliar words significantly reduce attitude certainty ($M_{unfamiliar}$ = 4.34, $M_{familiar}$ = 4.80, p < .000), which is consistent with our theory.

This research extends the literature on the way WOM influences consumer decisions, as well as the research on familiarity, by analyzing the different effects of word familiarity in positive and negative WOM. Using valence as a moderator contributes to our understanding of the way WOM aspects can have a different effect depending on the valence of the text. We also identified information seeking as a mediator that can explain how word familiarity works when reading positive and negative WOM about products.

From a practical standpoint, this research can help marketers and managers make better predictions about future sales based on WOM and design better marketing plans based on the understanding of what textual characteristics make up the most influential WOM. It also provides insights for sellers about how to understand the effects of negative WOM. Marketers could take our findings into consideration when solving questions about the most influential WOM or considering ways to promote their products.

Country Brand Personality DNA: Creating Instant Brand Personalities for New Brands

EXTENDED ABSTRACT

This research introduces "Country Brand Personality DNA" – the unique combination of four personality traits associated with a country – and explores the way this unique DNA can be "inherited" by brand names that sound like they originated from a particular country. Drawing from literature on branding, country of origin, and country stereotypes, we test how foreign sounding brand names can trigger associations with their country of origin, eliciting associations with a specific set of personality traits that are associated with that country.

Literature on brand personality has established that people associate specific personality traits with brands (Aaker, 1997). Literature on country of origin (COO) shows that consumers have certain expectations of products, such as quality, depending on their COO (Bilkey and Nes 1982; Johansson, Douglas and Nonaka 1985; Maheswaran 1994). Extending these literatures, and using the DNA metaphor, we suggest that countries have a "Country Brand Personality DNA" - a unique and identifiable combination of four personality traits that are associated with the country. Just like the four chemical bases that make up the genetic code that is stored in DNA, we suggest that brand names that sound like they originated from a particular country "inherit" that country's personality DNA, resulting in consumers associating the unique combination of that country's four DNA traits with the brand. This inheritance occurs through the process of instant activation of stereotypical personality traits associated with the country. Thus, a country can act as a "parent" to the "child" brand by passing down its own distinct personality DNA to the brand name that sounds like it came from that particular country.

We therefore predict that: 1. People are able to associate a set of four personality traits uniquely with particular countries; 2. Con-

sumers associate similar traits with brand names that sound like they came from these countries. Thus, a brand name that resembles a particular country-of-origin language should carry the perceived DNA (four personality traits) of its parent country.

We conducted three studies to test our predictions. We examined the combinations of four personality traits that are associated with two different countries: France and Japan. **Study 1** was designed to test the prediction that countries have a Country Brand Personality DNA – a unique combination of four Core Genes (personality traits); 203 participants rated 29 personality traits on the extent to which they could represent France, or Japan, if these were people. Results of this study suggest that the Country Brand Personality DNA for France consists of the following traits: *Glamorous, Sophisticated, Elegant and Romantic.* As for Japan, we found the following traits: *Reliable, Intelligent, Stable and Dignified.* These traits loaded on the same one or two factors in a factor analysis, and had the highest ratings of the extent to which they were considered representative of their respective countries.

Next, **Study 2** tested the prediction that brand names that sound like they originate from a certain country "inherit" the Country's Brand Personality DNA, that is, the four personality traits uniquely associated with that country. 392 participants ranked the 29 personality traits from Study 1 on the extent to which the traits accurately described each of four fictitious brand names (2 French sounding and 2 Japanese sounding). Subsequently, participants guessed the COO for each of the four brand names. 195 participants guessed the country correctly, and analyses were conducted with this sub-sample. Results showed, as predicted, a significant overlap between the human traits that participants assigned to each of the brand names and the four traits of the corresponding country's Brand Personality DNA. Specifically, the four DNA traits of France were rated as significantly more representing the French brand names than the Japanese brand names, and vice versa. Finally, **Study 3** aimed to provide further support to our theory by testing whether typical French or Japanese human first names evoke the same associations with the four unique personality traits as the countries and the foreign sounding brand names did in Studies 1 and 2. The study followed the same procedure as Studies 1 and 2, except that participants rated typical French and Japanese human names (e.g. François and Fujiko). As expected, participants associated typical foreign first names with a similar set of four personality traits as we found in Studies 1 and 2, representing their COO Brand Personality DNA.

In summary, results suggest that countries possess a personality DNA – a unique combination of four personality traits, and that when brand names are recognized as being from a particular country, they "inherit" the country's DNA, such that they evoke these same personality traits as those associated with the country itself. Our study is the first to identify inheritable country personality traits and to link them to branding, thereby contributing to existing research on branding, and informing brand managers on the use, process, and outcomes of foreign brand naming. Consequently, this work provides a new and promising avenue for branding managers and entrepreneurs: Utilizing the new Country Brand Personality DNA model as a marketing tool could allow marketers, brand managers, and entrepreneurs to create brand names that can instantly evoke a strong brand personality, which could help improve the efficacy of branding and marketing strategies of firms worldwide.

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Message Characteristics and Their Downstream Consequences on Judgment

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Paper #1: The Impact of Linguistic Structure on Judgment Confidence and Source Attitudes
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Paper #2: The Persuasive Present (Tense)
Grant Packard, York University, Canada
Jonah Berger, University of Pennsylvania, USA

Paper #3: 15 Reasons Why You Should Attend This Talk: How Overjustification Increases Source Bias and Source Expertise
Mohamed Hussein, Stanford University, USA
Rhia Catapano, University of Toronto, Canada
Zakary L. Tormala, Stanford University, USA

Paper #4: Power Decreases Consumers' Efforts to Support Their Own Position but Increases Their Demand that Others Do So
Linying (Sophie) Fan, Hong Kong University of Science and Technology, Hong Kong
Derek D. Rucker, Northwestern University, USA
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

SESSION OVERVIEW

Marketers constantly strive to create messages that persuade consumers, and customers communicate with each other to influence their choices and behavior (e.g. word-of-mouth). Researchers have long studied the factors that affect attitudes and persuasion, concentrating for the most part on message content and the message source's characteristics and identity. The four research projects in this session find that the structural elements of a message—beyond its content—can have an impact on persuasion. Specifically, all of these papers study how different types of message construction characteristics—from linguistic cues, to the number of arguments contained in persuasive communications—drive consumers judgments by shaping perceptions of the message source.

Maimone, Karmarkar, and Amir examine how the *linguistic structure* of a statement can elicit different cognitive processes that affect recipient judgments. For example, a politician's seemingly equivalent statements "I will not accept any form of bribery" and "I will not tolerate any form of bribery" bear subtle structural differences that can lead voters to experience different levels of processing speed and judgment confidence. The authors additionally show that such differences impact attitude certainty toward the message source more then toward the message content. Their findings provide a new theoretical framework relating message structure and consumer judgments, impacting settings ranging from product claims to political speech.

Packard and Berger study how using present versus past tense to describe things impacts persuasion. People often pay little attention to verb tense when sharing their opinions (e.g., "That movie is/ was great!"). Employing field data and experiments, the authors find that present (vs. past) tense increases audience perceptions of how helpful the information is, and how much they think they'll like the product. This happens not because of something related to time itself (e.g., information currency, memory, usage over time) but instead, perceptions of the source's certainty about the topic.

Hussein, Catapano, and Tormala examine whether overjustification in a message can influence perceived source bias. They find

that compared to communications with a small or moderate number of arguments (e.g., 2 or 3), messages including a large number of arguments (e.g., 15) increase perceptions of source expertise but also increase perceptions of source bias. These perceptions have competing effects on downstream consequences such as recommendation adherence and future interactions with the source.

Finally, **Fan, Rucker, and Jiang** study how states of personal power exert a bi-directional influence that shapes consumer behavior regarding the type of communications people send as well as the type of communications they prefer to receive. Specifically, they find that a high-power state reduces consumers' need-for-justification and lowers the degree of support put into communications. However, they nevertheless prefer others do so. Consequently, consumers in high-power states are less persuaded by others' communications with a low degree of support (e.g., feeling-based arguments, more concise language).

Overall, these four papers provide a new and insightful glance on the importance of several structural aspects of communication, and how they can influence consumers' judgments, experiences, and source perceptions.

The Impact of Linguistic Structure on Judgment Confidence and Source Attitudes

EXTENDED ABSTRACT

Past research has shown how numerous facets of message content and message source characteristics are key factors in persuasion and attitude change (e.g., Karmarkar and Tormala, 2010; Petty and Cacioppo, 1986; Priester and Petty, 1995; Tormala and Petty, 2004). In this work we add another dimension to our understanding of persuasive communication. We demonstrate the message's *linguistic structure* itself can affect people's judgment confidence related to the message. Imagine, for example, a campaigning political candidate giving a speech that includes one of the two following statements:

Statement 1: "I will not tolerate any form of bribery."
Statement 2: "I will not accept any form of bribery."

While equivalent in sentiment, their structure bears a subtle difference that can be described as an interaction of their *concept polarity* and their *statement framing*, which we describe below.

Generally speaking, statements have *claim types* that can be affirmations (I will tolerate) or negations (I will not tolerate). Related to this, Mayo et al. (2004) defined *concept polarity* as the "reversibility" of a concept. A concept is uni-polar if expressing its opposite requires negating the original concept (e.g., "tolerate", "not tolerate"). A concept is bi-polar if people express its opposite by using an antonym (e.g., "accept", "reject"). Negations of uni-polar concepts engage a cognitive process they call *Schema-Plus-Tag*. For example, when reading the uni-polar negation "I will not tolerate any form of bribery", people process "I will tolerate" first (Schema), and then process 'not' (Tag). In contrast, negations of bi-polar concepts involve a *Fusion* process. So, "I will not accept any form of bribery" triggers antonym retrieval, and it is processed as "I will reject".

We provide some of the first evidence showing that Schema-Plus-Tag and Fusion have downstream consequences on judgments. In real life, people aren't passive listeners; they judge whether or not the messages they receive are truthful (Gilbert, 1991). This judgment can be influenced by their prior beliefs on this topic, and people

can feel more or less confident about their judgments of veracity. A voter's judgment of the truthfulness of our politician's statement— together with the claim type—determines the *statement framing*. Specifically, when the voter's belief is congruent with the statement, they will judge it to be true; when their belief is incongruent with the statement, they will judge it to be false. We identify three conceptual classes of statement framing: 1) belief congruence with an affirmation claim type results in an *Affirmation frame*, 2) both belief congruence with a negation claim type and belief incongruence with an affirmation claim type result in a *Negation frame*, and 3) belief incongruence with a negation claim type results in a *Double Negation frame.* So, if a voter believes the politician's statement "I will not tolerate any form of bribery" to be true, that combines a negation claim type with a congruent belief, leading to a Negation frame. If, the voter believed the statement to be false, we would have a negation claim type and an incongruent belief, leading to a Double Negation frame.

Our research takes the novel approach of interacting our three classes of *statement framing* with *concept polarity*. We propose that, when people hold beliefs about a message, bi-polar Negation frames (not bi-polar negation claim types) engage the Fusion process, while all the other combinations engage Schema-Plus-Tag. This framework allows us to predict that statements engaging Schema-Plus-Tag will be faster to process, will lead to greater confidence about the truthfulness of the statement, and will lead to stronger attitudes than those engaging Fusion.

We tested our Hypothesis across three pre-registered experiments (AsPredicted links: Study 1 http://aspredicted.org/blind. php?x=824t8w, Study 2 http://aspredicted.org/blind.php?x=p7fk3a, and Study 3 https://aspredicted.org/blind.php?x=y2ti7q). Study 1 (N = 270) examines participants' response time and their judgment confidence when judging twelve pre-tested Trivia-like statements as true or false (repeated-measures). As predicted, we find that statements engaging Schema-Plus-Tag lead to shorter processing times (in milliseconds, $t(1619.36) = -2.63$, $p = .009$) and greater confidence (9-point Likert scale, $t(1715.02) = 3.54$, $p < .001$) than those engaging Fusion. Study 2 (N = 280) investigates how this effect might impact attitudes emerging from a persuasive message in a political domain. As predicted, statement structures engaging Schema-Plus-Tag lead to stronger attitudes (7-point Likert scale, $t(278) = 2.99$, $p = .003$) about the politician's claim than the same content using structures engaging Fusion. Study 3 (N = 1048) then disentangles whether these structural differences impact the recipient's attitude toward the message content, the message source, or both. This experiment replicates the main effect finding that Schema-Plus-Tag engagement leads to stronger attitudes ($F(1, 1044) = 14.14$, $p < .001$) in a marketing context involving a reviewer's product recommendations. Furthermore, we find a significant interaction ($F(1, 1044) = 7.44$, $p = .006$) demonstrating that this effect is stronger for attitudes towards the message source (the reviewer) than the message target (the product).

Overall, this paper offers new insights related to designing persuasive messaging in consumer and policy domains by improving our understanding of how communication's linguistic structure impacts judgment.

The Persuasive Present (Tense)

EXTENDED ABSTRACT

Word of mouth is both frequent and important. Consumers talk about products they like, books they enjoyed, or experiences they've had, and such interpersonal communication has a significant impact on evaluations, choice, and purchase.

But word of mouth can vary in the tense used to share information. Someone who saw a movie, for example, could say "I like that movie" (i.e., present tense) or "I liked that movie" (i.e., past tense). Similarly, someone could share their attitude about a vacation destination by saying "the beach is beautiful" (present tense) or "the beach was beautiful" (past tense).

While these might seem like subtle variations, could they impact how helpful the information seems and its persuasive impact? And if so, why?

Analysis of over 500,000 online reviews across two major websites and two experiments begins to address these questions. We suggest that present tense should make information seem more helpful, and be more persuasive, because it communicates a sense of certainty. While past tense indicates that something was true, or that someone had a specific experience with a product or service at a particular point in time, present tense suggests something broader. That this opinion may be true more generally. This is consistent with suggestions that present tense may be used rhetorically for states that are "always in effect, always happening" (Fahnestock 2011, 155). Consequently, when a speaker uses present tense, it suggests they are confident enough to make an assertion (Austin 1962; Searle 1969). Not just that something was, but that it is. This increased sense of certainty, in turn, should make the audience find the information more helpful, and make them more likely to take action based on it (Karmarkar and Tormala 2010; Price and Stone 2004).

Study 1 analyzed over 100,000 Amazon book reviews to examine the relationship between verb tense and helpfulness. For each review, we collected how many people rated it as helpful or not, and used part-of-speech tagging to identify the presence of verbs, and whether they were past or present tense.

As predicted, reviews that used more present tense were seen as more helpful ($b = .09$, $p < .001$). This relationship persists including a range of controls (i.e., review length and valence, number of helpfulness ratings, product price and rating, review themes captured using a topic model, and a variety of other language features; $b = .03$, $p < .001$) and whether present tense verbs are treated as a proportion of words or a simple count.

While this initial result is intriguing, one could wonder whether it was due to something specific to the product category examined. Alternatively, maybe it only holds for things that are consumed once, or products but not services. To test these possibilities, Studies 2, 3, and 4 examine alternate product domains.

Across three different product categories present tense was more helpful (Study 2 (music), N = 164,435; $b = .13$, p < .001; Study 3 (consumer electronics), N = 157,649; $b = .04$, $p < .001$; Study 4 (restaurants on Yelp), N = 103,659; $b = .01$, $p < .001$). In all cases, results are robust to inclusion of the controls used in Study 1.

Study 5 tested the causal impact of tense on persuasion as well as the hypothesized process. Participants (N = 118) imagined hearing about a book, and we manipulated whether the source used past or present tense ("The plot was [is] interesting."). As our dependent measure, we asked how much participants thought they would like the book.

Consistent with the field data, shifting word of mouth from past to present tense increased persuasion (5.29 vs. 4.71; F(1, 116) = 8.22, $p = .005$).

To test the hypothesized process, we collected a two-item measure of communicator certainty (certain, confident; r = .67; Karmarkar and Tormala 2010). Consistent with our theorizing, a bias corrected mediation model (PROCESS model 4; Hayes 2018) found

that perceived certainty mediated the effect of tense on persuasion (indirect effect = .12, 95% CI [.03, .22]). Using present tense made the communicator seem more certain (b = .25, p = .015) which increased persuasion (b = .47, p < .001).

This pattern of results was replicated using perceived helpfulness as the outcome measure (as in the field data studies), and using different stimuli. Ancillary analysis revealed that time-related factors (e.g., memory, recency) can't explain the results.

Study 6 further tested the hypothesized process through moderation. If present tense boosts persuasion because it makes communicators seem more certain, then providing another cue of source certainty should mitigate the effect ("mediation-via-moderation"; Bullock, Green and Ha 2010).

Participants (N = 358) were randomly assigned to condition in a 2 (Tense: past vs. present) x 2 (Certainty: baseline vs. cued) between-subjects design. Tense was manipulated using the stimuli from Study 5. For participants in the certainty cue conditions, we added the word "definitely" so it read "The plot definitely was [is] interesting." Manipulation of perceived certainty was supported (F = 4.04, p = .045).

In addition to main effects of tense (F = 5.57, p = .012) and certainty (F = 5.35, p = .021), results of a 2 x 2 ANOVA revealed the predicted interaction (F = 6.32, p = .012). In the baseline condition, consistent with our prior studies, moving from past to present tense boosted persuasion (5.54 vs. 5.02; F = 12.05, p < .001). Supporting the hypothesized role of perceived certainty, however, boosting certainty through an alternate cue mitigated the effect ($M_{Present}$ = 5.52 vs. M_{Past} = 5.54; F = .01, p = .914).

In conclusion, while a great deal of research has examined word of mouth, and word of mouth always involves a verb tense, there has been little attention to how tense might impact consumer behavior. Six studies, looking across the lab and field, demonstrate that present tense increases helpfulness and persuasion, and does so because it makes communicators seem more certain. The work sheds light on word of mouth and deepens understanding around how language impacts consumer attitudes and perceptions.

15 Reasons Why You Should Attend This Talk: How Overjustification Increases Source Bias and Source Expertise

EXTENDED ABSTRACT

Consumers generally believe that more is better in persuasion—and for good reason. Past research has found that providing more justification for one's position can lead to more favorable persuasion outcomes (Petty & Cacioppo 1984; Pelham et al., 1994; Wallace et al., 2020). For example, giving nine, compared to three, cogent arguments in favor of one's position has been found to result in greater attitude change (Petty & Cacioppo 1984). But is more always better in persuasion? We propose that providing greater justification for one's position is a double-edged sword: On the one hand, it can cast the source as having greater expertise. On the other hand, it can cast the source as more *biased*; that is, as having a vested interest in a specific outcome or a skewed and slanted perspective (Wallace et al., 2020). These two forces—greater perceptions of expertise and greater perceptions of bias—can have competing influences on downstream consequences, such as recommendation adherence and interest in future interactions with the source.

Across three studies, we manipulated the amount of justification (e.g., number of arguments) provided by the source to be either low or high, and tested how it influenced perceived source bias, source expertise, and downstream consequences (e.g., recommendation adherence and interest in future interactions with the source). We found that providing greater justification for one's position (e.g., more arguments) increased perceptions of both source bias and source expertise (Studies 1-3). Moreover, these two forces worked in conflict. Providing more justification for one's position led to higher perceived expertise, which increased recommendation adherence and interest in interacting with the source, but also led to higher perceived bias, which *decreased* those outcomes (Studies 2-3). These results were robust to different manipulations of justification amount (the number of arguments within a message and the total number of messages) and were observed across domains (public health communications and restaurants reviews).

In Study 1, we provided participants (N=502) with a persuasive message that contained a high or a low number of arguments and measured their perceptions of the source's expertise and bias. Participants were told that they would read a message from another participant, who was instructed to write as few or as many messages as they would like. Participants were then shown a message advocating for wearing masks in public that contained either twelve or two arguments. Next, participants rated the source on bias (e.g., how biased does the person who wrote these arguments seem?) and expertise (e.g., how knowledgeable do you think the person who wrote these arguments is on this issue?). Results indicated that participants who saw twelve arguments rated the source as more biased (M=3.38, SD=1.95) and more expert (M=5.25, SD=1.27) compared to participants who saw two arguments (M_{bias}=2.79, SD_{bias}=1.74, b=.59, t(500)=3.58, p<.001; $M_{expertise}$=4.38, $SD_{expertise}$=1.39, b=.87, t(500)=7.26, p<.001).

In Study 2, we investigated how perceptions of expertise and bias might have competing effects on downstream consequences, such as interest in future interactions with the source. Study 2 followed the same procedure as Study 1 with two changes: First, we measured interest in future interactions with the source (e.g., how willing would you be to read the source's thoughts on other issues?). Second, we added another condition containing six arguments. Thus, participants were assigned to read either two, six, or twelve arguments. For brevity, we collapse across the two- and six-arguments conditions. Replicating the results from Study 1, we found that participants who saw a high number of arguments rated the source as more biased (M=3.18, SD=1.85) and more expert (M=5.03, SD=1.33) compared to participants who saw a low number of arguments (M_{bias}=2.88, SD_{bias}=1.64, b=.29, t(700)=2.06, p=.04; $M_{expertise}$=4.52, $SD_{expertise}$=1.31, b=.51, t(700)=4.81, p<.001). Next, we examined the effect of number of arguments on interest in future interactions with the source. Perceived bias and expertise had opposing effects on this outcome. That is, we found a suppression effect (b=.037, t(700)=.32, p=.75) such that there was a negative effect through perceived bias (indirect: -.047, SE=.024, 95% CI [-.094, -.005]) and a positive effect through perceived expertise (indirect: .15, SE=.037, 95% CI [.077, .22]).

In Study 3, we extended these findings to online reviews and manipulated overjustification using the number of reviews posted. Participants (N=400) were asked to view the Yelp page of a new restaurant. In one condition, participants saw one review recommending the restaurant. In the other condition, participants saw ten reviews written by the same source all recommending the restaurant. Participants were then asked to provide a star rating of the restaurant, to report their interest in trying out the restaurant, and to report their interest in reading reviews about other restaurants from the same source. Participants were also asked to rate the source's perceived bias and expertise. Participants in the ten-reviews condition saw the source as more biased (M_{bias}=5.06, SD_{bias}=1.94) and more expert ($M_{expertise}$=4.94, $SD_{expertise}$=1.25) compared to participants in the one-review condition (M_{bias}=3.52, SD_{bias}=1.39; b_{bias}=1.54, t(372)=9.23, p<.001; $M_{expertise}$=4.43, $SD_{expertise}$=1.14; $b_{expertise}$=.51, t(372)=4.13, p<.001). These per-

ceptions again had opposing effects on downstream outcomes. That is, there was a suppression effect on participants' ratings of the restaurant (b=-.09, t(372)=-1.08, p=.28), interest in trying the restaurant (b=.14, t(372)=.87, p=.39), and interest in reading more reviews from the same source (b=-.25, t(372)=-1.63, p=.10). For all three outcomes, this suppression reflected a positive effect through perceived expertise and a negative effect through perceived bias.

In sum, giving more justification for one's position (e.g., more arguments or messages) is a double-edged sword. It casts the source as more of an expert, but also makes the source seem more biased, and these perceptions have opposing implications for persuasion-relevant outcomes. Implications for persuasion theory and practice will be discussed.

Power Decreases Consumers' Efforts to Support Their Own Position but Increases Their Demand that Others Do So

EXTENDED ABSTRACT

Modern marketing communications between consumers and companies, as well as among consumers, are both highly visible and influential when it comes to consumers' decisions and behavior (Keller and Libai 2009; Taylor 2003). Academics have aimed to understand how various properties of these communications are influenced by environmental factors (e.g., social density, self-construal; Berger and Iyengar 2013; Chen 2017; Moore and McFerran 2017) and motivational tendencies (e.g., persuasive intent, self-enhancement; De Angelis et al. 2012; Rocklage et al. 2018). Yet, in spite of this growing body of knowledge, our understanding of the ways that psychological states shape people's communication remains limited. To help fill this gap, this work explores how a pervasive psychological state—power—affects consumers' construction of, preference for, and response to communications.

On one hand, we predict that a high-power state reduces consumers' need-for-justification and subsequently lowers the degree of support they put into their own communications. This is presumably because that the feeling of powerfulness enhances consumers' perceptions of self-efficiency and assertiveness in decision making (e.g., Anderson and Galinsky 2006; See et al. 2011) and consequently reduces their need to justify they decisions and actions to others. We focus on one consequence of the reduced need-for-justification, that is consumers in a high-power state will put less emphasis on and effort into supporting the position in their communications—or what we term "degree of support." It can be manifested in various representations: *reduced effort in information search*, *lower reliance on rational-based arguments*, and *more concise language*.

On the other hand, high-power states lead to a heightened sensitivity to asymmetric control and can produce a double-standard for the self and others (e.g., Magee and Galinsky 2008; Rucker et al. 2012). Thus a state of high power might lower the extent to which consumers feel they need to justify their position to others, yet they may nevertheless prefer others to do so. Consequently, consumers in high-power states are less persuaded by others' communications with a low degree of support.

Power and Degree of Support Sought As Message Senders

The first study (N = 180) investigated our basic hypothesis that the feeling of powerfulness decreases the degree of support that consumers put in their communication. We randomly assigned participants to one of three power conditions (high vs. low vs. baseline). We first manipulated participants' feeling of power through a recall task (Galinsky et al. 2003; Rucker and Galinsky 2008). Next, all partici-

pants were given two consumption scenarios (one positive and one negative) and were asked to write a review aimed at a popular customer-review website. Degree of support in the form of message length was calculated by counting the number of words. Participants in the high-power condition wrote shorter reviews compared to their low-power counterparts and participants in the baseline condition. And we did not observe a similar difference between low-power and baseline conditions.

Study 2 (N = 200) provided direct process evidence by showing the mediating roles of need-for-justification. Power was manipulated through an imagination task (adopted from Rucker et al. 2011). Next, participants were invited to express their thoughts in support of having the innovation day and share them via Facebook later. We provided them some relevant information to inform or support their arguments. We measured how many pages (from 0 to 7) that participants actually read and how long each participant persisted in this search task. Finally, we measured their perceived need-for-justification via three items (Hsee et al. 2003). Results showed that participants in the high-power condition exerted less effort searching for information (standardized and combined the number of pages participants actually read and the time duration in the task) than those in the low-power condition and this effect is mediated by need-for-justification.

Power and Degree of Support Sought As Message Recipients

The last two studies illustrated the bidirectional effects of power on communication by showing high-power consumers are less persuaded by others' communications with a low degree of support.

Study 3 (N = 335) used 2 (high power vs. low power) × 2 (message type: feeling-based vs. rational-based) between-subjects design. After the same power imagination manipulation, participants evaluated an advertisement for blood donation (one ad emphasized benefits of blood donation through feeling-based arguments vs. another the ad emphasized benefits of blood donation through feeling-based arguments, Cesario et al. 2004). Previous research has shown that rational-based arguments are perceived as more elaborated and more evidence-based than feelings-based arguments (Hong and Chang 2015; Kahneman and Frederick 2002). The results demonstrated that high power participants were less persuaded by feeling-based (vs. rational-based) messages and low power consumers did not show this difference.

Study 4 (N = 317) replicated the effect with a real incentive-compatible behavior. It is a 2 (high power vs. low power) × 2 (concise information vs. detailed information) between-subjects design. Power manipulation was same as in Study 3. Participants were given an opportunity to bid for a box of six assorted color highlighters (Roux et al. 2015; Wertenbroch and Skiera 2002).

Degree of support was manipulated via the length of marketing information provided in ads. As expected, participants in the high-power condition bid lower prices for the highlighters accompanied by concise (vs. verbose) product information. Participants in the low-power condition did not show this difference.

In summary, the present work demonstrates how a fundamental and pervasive psychological state, power, affects consumers' construction of and response to communications. Different from past research has examined the effects of power on communications from a unidirectional perspective, we found that power exerts a bi-directional influence that shapes consumer behavior with regard to the type of communications people send as well as the type of communications they prefer to receive. Finally, the present findings provide implications to marketers seeking to design effective marketing communications.

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Control Over Negative Outcomes

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Paper #1: I'd Rather Die by My Own Hands

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Paper #2: Information and Control: What is the Value of Knowing about an Undesirable, Unavoidable Future?

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Paper #3: A Dark Side of Hope: Why People Cling onto Losing Stocks

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Paper #4: People Behave as if they Anticipate Regret Conditional on Experiencing a Bad Outcome

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I'd Rather Die by My Own Hands

EXTENDED ABSTRACT

Attribution theory (e.g., Heider, 1958) and self-serving bias (e.g., Shepperd et al., 2008) predict consumers prefer to attribute positive events to internal factors (e.g., their own personality or skills), and negative events to external causes (e.g., chance or other people). We hypothesize that there are instances in which consumers prefer to be responsible for negative outcomes. Consider, for example, being involved in a fender bender accident with your own car. Would it be more painful if you had made a mistake at the wheel, or if a friend of yours had done so? Or imagine performing a math task—if you pick the correct answer, you win $100,000, otherwise, you get $0. Now imagine a wrong answer is picked, so you forgo the opportunity to win $100,000. Would you rather have picked the wrong answer yourself or that a third person picked the wrong answer for you? Although attribution theory and self-serving bias predict consumers would rather attribute such negative outcomes to others, we show consumers would prefer owning them. We call this the "I'd Rather Die by My Own Hands" (DBMOH) preference.

We consider three potential explanations for this preference: *overplacement*, *impact bias*, and the *isolation effect*.

Overplacement—a variety of overconfidence—denotes consumers' belief to be better than others (Moore and Healy, 2008). Consumers may prefer getting negative outcomes by themselves because they believe that—despite how the outcome turned out—they had maximized their probability of success. If this was the underlying mechanism, we should observe DBMOH preferences only among those who exhibit *overplacement*.

Impact bias is the tendency to overestimate the affective impact of future events. Past research on *impact bias* shows that individuals' affective forecasts are influenced by the intensity of past instances that come to mind, and the ease with which these instances are recalled (Morewedge, Gilbert and Wilson, 2005). Consumers may be able to recall only not-so-negative events when thinking about past instances in which they got a negative outcome by themselves, and recall more negative ones when thinking about instances in which they got a negative outcome because of someone else's actions. If this was the underlying mechanism for DBMOH preferences, consumers should recall *less* negative instances, and *less* easily, when thinking about getting negative outcomes by themselves than by somebody else.

Isolation effect is the tendency to disregard common characteristics and instead focus on characteristics that distinguish choice alternatives from each other (Tversky, 1972). When eliciting DBMOH preferences by choice (i.e., in joint evaluation mode; Hsee, 1996), the negative outcome information is common to all options, whereas the agent—oneself versus somebody else—is the characteristic that distinguishes the choice options. Focusing on agency, consumers may hence exhibit DBMOH preferences, as they prefer personal control. According to this explanation, consumers in separate evaluation mode should focus equally on the valence of the outcome and on the agent, causing DBMOH preferences to vanish.

In five pre-registered experiments, we demonstrate DBMOH preferences and test their underlying mechanism.

In Study 1 (N = 231; https://aspredicted.org/blind. php?x=qs6az5), we tested the DBMOH preference, and addressed the *overplacement* account. The majority of participants preferred obtaining a negative outcome caused by themselves (51.1%) over somebody else having caused it (13.4%; $\chi^2(1)$ = 50.8, p < .001)[1]. As a test of *overplacement* driving this preference, participants indicated who they thought would have had a higher chance of getting a positive outcome on a bipolar scale ranging from "definitely someone else" to "definitely myself". We repeated our analysis excluding participants who indicated that they themselves had had a higher chance of getting a positive outcome (N = 135). Contrary to *overplacement* driving the results, DBMOH preferences still prevailed ($\chi^2(1)$ = 33.9, p < .001).

Study 2 (N = 69—two independent RAs agreed 32 participants did not perform the task correctly; https://aspredicted.org/blind. php?x=44tm6b) was designed to test *impact bias* as underlying DBMOH preferences. Participants described their past experiences of negative outcomes—one caused by themselves (Self condition) and one by someone else (Other condition)—and indicated how negative, difficult to recall, and recent each memory was. In the Self condition, participants reported recalling both *more* negative ($t(68)$ = 5.18, p < .001) and easier to recall ($t(68)$ = -2.80, p = .007) outcomes/memories than those in the Other condition, speaking against *impact bias* as the underlying mechanism for DBMOH preferences. A sentiment analysis run on participants' descriptions of their experiences corroborated these findings. (Memories did not vary in recency across conditions.)

In Study 3 (N = 444; https://aspredicted.org/blind. php?x=fa5am3) we manipulated the evaluation mode to test whether the *isolation effect* may cause DBMOH preferences. As predicted, in joint evaluation mode we replicated DBMOH preferences as participants reported that they would be *less* dissatisfied with the negative outcome when it was caused by themselves than by somebody else

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[1] Participants preferred obtaining the negative outcome caused by themselves (51.1%) also over caused by chance (35.5%; $\chi^2(1)$=6.48, p=.011).

(t(146) = -2.91, p = .004). In separate evaluation, in contrast, dissatisfaction with the negative outcome did not differ across conditions (t(295) = -0.52, p = .604). These results suggest that DBMOH preferences could be driven by the *isolation effect*.

Study 4 (N = 389; https://aspredicted.org/blind.php?x=gj2kv8) further tests the *isolation effect* account. We hypothesized that evaluating the negative outcome *after* a positive one would cause people to focus not only on agency, but also on outcome valence. As predicted, when people evaluated the negative outcome first, we replicated the DBMOH preference (t(189) = -2.5, p = .012), but when they evaluated the negative outcome after having imagined the positive, the DBMOH preference vanished (t(198) = -0.4, p = .659). Studies 3 and 4 show the *isolation effect*—which makes people focus on agents of outcomes when all outcomes have the same valence—underlies the DBMOH preference.

Finally, Study 5 (N = 326; https://aspredicted.org/blind.php?x=hf5we9) replicates the null result in separate evaluation mode in a consequential setting (t(206) = -0.24, p = .810), suggesting the "I'd Rather Die by My Own Hands" effect is effectively a misprediction.

Information and Control: What is the Value of Knowing about an Undesirable, Unavoidable Future?

EXTENDED ABSTRACT

Rapid technological developments in the medical field, including direct-to-consumer genetic testing and artificial intelligence, make it increasingly easy to know in advance the likelihood of developing specific health conditions, including life-threatening and untreatable ones. We examine the psychological consequences of knowing, versus not knowing, about the occurrence of an undesirable, unavoidable future. Research suggests that such advance knowledge has potential advantages after the event has occurred, because it may allow consumers to prepare for it and increase perceived personal control (Folkman et al. 1986); it also has potential disadvantages before the event has occurred, because it can decrease emotional well-being and foster negative anticipation (Galak and Meyvis 2011; Harris 2012). Nevertheless, current trends in direct-to-consumer genetic testing indicate that people prefer to know in advance. We therefore hypothesize that consumers are hyperopic in this domain (Kivetz and Keinan 2006): they value more uncertain, future psychological advantages of advance knowledge more than less uncertain, current psychological disadvantages. We study this phenomenon with hypothetical scenarios, real data, and consequential lab studies.

In the first two studies participants imagined going to the doctor for an annual check-up and learning about a new genetic test that reveals with certainty the presence of a mutation associated with a disease that causes blindness. They were then asked whether they would take the test to learn whether they have the mutation (1a; N=291) and whether they would take the test in advance of developing the symptoms assuming they had the mutation (1b; N=292). The majority chose to take the test and to take it in advance; in both cases, the main reason was to be prepared.

Study 2 (N=485) examines the consequences of advance knowledge on general affect, life satisfaction, and perceived control. We used the same scenario as in study 1a and manipulated whether participants learned in advance that they would develop the disease, because they received a positive test, or not, because they did not test. In the first part of the experiment, participants in the Test condition imagined how they would feel over the year after testing, whereas participants in the Baseline condition did not read any scenario and simply reported their feelings over the next year. Participants who imagined testing positive felt worse on all measures than those in the Baseline condition. In the second part, participants in the test condition imagined developing the symptoms whereas those in the Baseline condition imagined developing the same symptoms and taking the test that confirmed the illness. Participants in the Test condition (those who knew in advance) reported feeling and coping no better than those in the Baseline condition (those who knew after developing the symptoms).

Study 3 (N=182) tests for external validity and hedonic adaptation. We ran a survey with asymptomatic members of several Huntington's Disease (HD) associations. HD is a neurodegenerative disease that usually develops around mid-age; a genetic test can predict HD with certainty in advance of developing the symptoms. Participants reported whether they had tested and answered questions like those in Study 2. Those who tested positive, who knew in advance that they would develop HD, did not score higher on affect, satisfaction, and control than those who did not test; not surprisingly, they scored lower on the same measures than those who tested negative. We used the time elapsed since testing as a continuous proxy for knowledge: contrary to hedonic adaptation, those who had known for a longer time felt worse than those who had known for a shorter time. In addition, the longer the time, the worse those who tested positive scored on all measures relative to those who tested negative.

Study 4 (N=173) tests this effect in the lab. Participants were told that they would perform two tasks: the first online and the second in the lab. Before they were given any information about these tasks, they were asked to schedule the second task within three days from the first. Next, participants in the Future Known condition were informed about both tasks: watching a video online (a neutral, present event), and eating a disgusting yogurt in the lab (an undesirable, unavoidable future event). Participants in the Future Unknown condition were informed only of the first task and told that they would learn about the second task when they came to the lab. Future Known participants reported lower satisfaction, affect, and control while watching the video (before the undesirable event had occurred) than Future Unknown participants; the two groups did not differ on the same measures taken after eating the yogurt (after the undesirable event had occurred). In addition, we measured the time elapsed between the first and the second task and found that the longer Future Known participants had known about the unpleasant future event, the less satisfied, happy, and in control they felt with their present life in general. Despite these results, which conceptually replicate our previous findings, a follow-up study (N=198) showed that the majority of participants would like to know in advance whether they would eat a disgusting yogurt so that they could prepare.

To test for participants' ability to forecast the consequences of knowing in advance, Study 5 (N=196) illustrated study 4's procedure and asked participants to predict how they would feel after knowing or not knowing in advance about the undesirable future task. Participants correctly predicted most of the consequences of advance knowledge, both before and after the undesirable event has occurred; however, they incorrectly predicted that advance knowledge would make them feel more in control after the event's occurrence.

Consumers prefer knowing in advance about an undesirable, unavoidable event, despite correctly predicting that this knowledge hurts or does not improve their psychological well-being before and after the event has materialized; however, they incorrectly predict that it increases personal control after the event has materialized. These results indicate a hyperopic tendency, such that people value the future advantages of advance knowledge more than its current

disadvantages. This tendency can be counterproductive, because future advantages are more uncertain than current disadvantages.

A Dark Side of Hope: Why People Cling onto Losing Stocks

EXTENDED ABSTRACT

Consumers often sell winning stocks too quickly and hold on to the losing too long (Shefrin & Statman, 1985; Odean, 1998), despite this "disposition effect" being irrational. Stocks that did not perform well in the past tend to do poorly in the next period, so it would be rational to sell the losing stocks and keep the winning stocks (Baberis & Xiong, 2017). We examined the question: Why do people keep their losing stocks, given it is not optimal to do so?

We propose that people cling on to losing stocks in hope of these bouncing back and them breaking even. This explanation was first suggested, but not investigated, in the seminal article by Shefrin and Statman (1985). The hope explanation also fits well with several theoretical accounts of the disposition effect such as prospect theory (Kahneman & Tversky, 1979), mental accounting (Thaler, 1985), regret aversion (Shefrin & Statman, 1985), and self-control (Thaler & Shefrin, 1981).

Hope is "*the desire for a positive outcome and a belief in the possibility of this outcome*" (Luo et al., 2021), and it emerges in difficult situations (Bruiniks & Malle, 2005; Bury et al., 2016). Seeing a drop in stock price is such a situation. Kahneman and Tversky (1979, p. 287) already realized that a "person who has not made peace with his losses is likely to accept gambles that would be unacceptable to him otherwise". The pain of loss leads to a hope to break even which can erase the possibility of losing, and thus people keep their losing stocks. Indeed, people make decisions as if they could achieve what they hope for (Goldsmith & Amir, 2010). We hypothesized that: hope is positively correlated with the inclination to keep losing stocks (hypothesis1); losing (vs. not-losing) leads to a stronger hope to break even, but not hope to make a profit (hypothesis 2), and a stronger inclination to keep (hypothesis 3); reducing hope decreases the inclination to keep (hypothesis 4). We examined this in a newly developed paradigm. We found support for hypothesis 1. Trait hope (Study 1a) and state hope (Study 1b) correlated with the likelihood of keeping losing stock. Study 1a ($N = 147$, $M_{age} = 35.95$) used Snyder et al.'s (1991) hope scale. Study 1b ($N = 294$, $M_{age} = 36.10$) used a new self-developed four-item trait hope scale (based on Luo et al., 2021). In these studies, participants read a scenario in which their stock invested a year ago has lost value and were asked their inclination to keep the stock. We found positive correlations across Studies 1a ($r = .15$, $p = .06$) and 1b ($r = .12$, $p = .04$). In Study 2 ($N = 145$, $M_{age} = 37.69$), participants read that their investment lost value, and they indicated whether they hoped that the stock price would increase and whether they would keep or sell their losing stocks. State hope and the inclination to keep correlated ($r = .43$, $p < .001$).

We found support for Hypothesis 2 and 3 in Study 3 ($N = 345$, $M_{age} = 20.26$), using a three-group (condition: losing, "3€" control, "5€" control) between-subjects design. Participants read that the value of the stock they bought last year changed from 5€/share to 3€/share; In the two control conditions they read that the stock value stayed at 3€/share or 5€/share. We introduced two control conditions to examine whether it is the experience of loss, and not the height of the stock prices, that influences people's willingness to keep. Participants indicated both their hope to break even and their general hope that the stock would be worth more than before (i.e., hope to win more). Subsequently, participants indicated their inclination to keep. As predicted, losing (vs. not-losing) indeed leads to a stronger hope to break even ($M_{losing} = 5.43$, $SD = 1.10$; $M_{3€control} = 2.46$, $SD = 1.14$, $F(1, 342) = 363.54$, $p < .001$; $M_{5€control} = 2.40$, $SD = 1.33$, $F(1,342) = 342.63$, $p < .001$) and stronger inclination to keep ($M_{losing} = 4.56$, $SD = 1.56$; $M_{3€control} = 3.63$, $SD = 1.56$, $F(1, 342) = 23.06$, $p < .001$; $M_{5€control} = 3.83$, $SD = 1.77$, $F(1,342) = 14.73$, $p < .001$). Exploratory mediation analyses revealed that the hope to break even mediates the effect of losing on people's inclination to keep stocks (Losing vs. "3€" control: $B = -.77$, SE $= 0.25$, 95% CI[-1.28, -0.31]); losing vs. "5€" control: $B = -.75$, SE $= 0.25$, 95% CI[-1.27, -0.29]).

We found support for Hypothesis 4 in Study 4 ($N = 758$, $M_{age} = 31.91$). A 2 (losing vs. losing & reduced hope) + 1 ("3£" control) between-subject design was used. We used the control condition to show a baseline of inclination to keep. The results revealed that indeed when hope is reduced, people's inclination to keep decreases significantly ($M_{losing} = 4.65$, $SD = 1.67$, $M_{losing\&reduced\_hope} = 4.04$, $SD = 1.86$, $t(755) = 3.80$, $p < .001$). Moreover, the losing & reduced hope condition is as likely as the control condition to keep the stocks ($M_{control} = 3.78$, $SD = 1.79$, $t(755) = 1.62$, $p = .11$).

This series of studies provides support for the idea that hope can drive people's decision to keep losing stocks. Furthermore, the results also demonstrate that the hope to break even, but not the hope to win more, explains the effect. Finally, the results show that reducing one's hope decreases people's willingness to keep their losing stocks, and can as such be used as an intervention preventing people from making such suboptimal decisions. We believe the current research importantly adds to the disposition effect literature, by showing the role of hope as a potential explanation of the effect.

People Behave as if they Anticipate Regret Conditional on Experiencing a Bad Outcome

Many decisions involve uncertainty. Managers determine whether to invest in risky personnel restructurings, doctors choose between costly procedures with differing success rates, and intelligence analysts evaluate how likely expensive initiatives are to prevent terror attacks. Normative theories of decision-making propose that people make these decisions by first considering the probability of both good and bad outcomes, and then weighing the consequences of each outcome by those probabilities. Of course, a large literature on risky decision-making suggests that decision-makers often inaccurately weigh both probabilities and outcomes (Baron and Hershey 1988; Kahneman and Tversky 1979). In addition, counterfactuals—possible alternative outcomes—influence how people make risky decisions (Kahneman and Miller 1986; Roese 1997). For example, negotiators are more risk-seeking and less likely to accept an agreement when they expect to receive counterfactual information about a competing firm's offer (Larrick and Boles 1995). Models that incorporate the effects of such counterfactuals on decisions are known as regret models (e.g., Loomes and Sugden 1982).

Formal models of regret assume that decision-makers accurately predict the probability of experiencing regret ("What is the proportion of *all* outcomes I could have improved if I had acted differently?"). We demonstrate that decision makers instead anticipate regret conditional on experiencing a bad outcome ("What is the proportion of *bad* outcomes I could have improved if I had acted differently?"). This biased anticipation leads to risk preferences that violate normative standards.

In our studies, participants indicate their valuation of changes in probabilistic lotteries (e.g., how much they would pay to increase their chances of winning a lottery from 20% to 30%). This design, adapted from Lewis and Simmons (2020), keeps the size of probability changes constant (e.g., a 10 percentage point increase) while varying starting probabilities (e.g., increases from 20% to 30% or

from 70% to 80%). Keeping the size of probability changes the same necessitates that one's objective chances of experiencing regret also change by the same amount. However, 10% increases in one's chances of winning a lottery can have very different effects on the proportion of bad outcomes. Increasing a 10% chance of winning to a 20% chance eliminates 1/9 of losing outcomes, while increasing an 80% chance of winning to a 90% chance eliminates 1/2 of losing outcomes. Thus, if people indeed anticipate regret conditional on bad outcomes, these identical changes in chances—which have different effects on the proportion of bad outcomes—will be valued very differently.

This illustrates our primary hypothesis: Valuations of changes in chances are best described by a model that assumes decision-makers anticipate regret conditional on obtaining a *bad* outcome (as opposed to *all* outcomes). In contrast with existing theories in psychology and economics—including regret theory (Loomes and Sugden, 1982) and prospective outcome bias (Lewis and Simmons, 2020)—our conditional regret model predicts that participants' valuations of changes in chances follow a convex pattern. This shape follows directly from our theorizing: As starting probabilities increase, changes in chances lead to ever-larger proportional decreases in bad outcomes (and therefore, higher valuations).

In Pilot Studies 1-3 (N=487) participants answered a series of questions that elicited their willingness-to-pay (WTP) to increase their chances of winning ~30 probabilistic lotteries (e.g., "*How much are you willing to pay to change a 20% chance of winning \$10 to a 30% chance?*"). Our conditional regret model—with the percent reduction of bad outcomes as a predictor—better fit the data than models that used absolute chances in chances or ending win chances after the change as predictors (all $ps < .001$). Ultimately, participants valued normatively identical absolute changes very differently (going from an 80% to 90% chance to win \$10 was valued roughly three times more than going from a 10% to 20% chance).

Study 1 extended on the pilot studies in two primary ways. First, we tested if this pattern held when participants' valuations were incentive-compatible. Second, we included additional trials with higher starting probabilities. This allowed us to better chart participants' valuations at these probabilities, where changes have the most pronounced effect on bad outcomes. Again, we replicated the convex pattern of valuations observed in the pilot studies: our conditional regret model better predicted participants' valuation than competing models (all $ps < .001$). Further, for trials that have starting probabilities below 70%, participants were *risk-averse*: On average, they paid less than the expected value of the change in chances. But for trials that had starting probabilities above 70%, participants were *risk-seeking*.

Study 2 (N=2421) tested our mechanism directly. A frame that drew participants' attention towards the proportional decrease in bad outcomes implied by changes in chances ("decrease chances of losing by ½") does not affect participants' valuation of a change, implying it may already be applied. On the other hand, a frame that drew attention away from the proportional decrease in bad outcomes ("increase chances of winning by 1/8") full eliminated our effect, suggesting that participants do not spontaneously apply this frame.

In several ancillary studies, we find that the biased anticipation of regret leads to non-normative choices. For example, participants given the opportunity to decrease their likelihood of becoming ill prefer a less-effective drug (but which decreases a larger proportion of bad outcomes than an alternative). We conclude by discussing how our conditional regret theory can offer a psychological explanation for existing findings (such as the certainty effect), while also

illustrating the clear applicability of our model to decision-making in medical, investment, and insurance contexts.

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Beyond One-Shot Decisions

Co-Chairs: Evan Weingarten, ASU, USA
On Amir, UCSD, USA
Coby Morvinski, Ben Gurion University of the Negev, Israel
Discussant: Jonathan Levav, Stanford, USA

Paper #1: Consumers Undervalue Multi-Option Alternatives in Two-Stage Choice

Stephanie Smith, UCLA, USA
Stephen Spiller, UCLA, USA

Paper #2: A Reference Value Theory of Sequential Choice

On Amir, UCSD, USA
Coby Morvinski, Ben Gurion University of the Negev, Israel
Evan Weingarten, ASU, USA

Paper #3: "What-the-Hell:" Dishonest Behavior Can Escalate to Continuous Ethical Transgression

Crystal Reeck, Temple University, USA
Nina Mazar, Boston University, USA
Dan Ariely , Duke University, USA

Paper #4: I'll Do it Differently Next Time: How Consumers Structure Repeated Experiences

Chaumanix Dutton, ASU, USA
Kristin Diehl, University of Southern California, USA

SESSION OVERVIEW

Not all decisions are one and done. Consumers make thousands of decisions each day, some of which span the same overarching purchase (e.g., car add-ons or customizations), and many of which will span across multiple domains (e.g., clothing, food) or be repeats of previous purchases. While these decisions may only be somewhat interrelated on their face, in reality, much work has suggested a great intertangling of how earlier and later choices relate. Later decisions in a sequence may be prone to fatigue effects (Levav et al. 2010), earlier purchase decisions can affect later ones (Dhar et al. 2007), and whether choices are bracketed close together temporally can influence preference (Read et al. 1999). Further, consumers may schedule or select into sequences of decisions that improve or decline in quality (Loewenstein and Prelec 1993) or acceptability (Gino and Bazerman 2009).

While decades of literature have investigated separate ordinal position effects or sequential decision-making, there remains myriad unanswered questions. How does a choice being multi-stage or not influence what alternatives consumers pick? How does an unrelated prior purchase (or failure to purchase) influence later purchase likelihood? How do consumers transition into (and what will help them transition out of) dishonest behavior? How does a structure of a previous experience (i.e., increasing or decreasing enjoyment) influence how consumers build subsequent experiences? The present session answers these questions and more.

First, **Smith** and **Spiller** show in six studies how decisions in a first stage can be influenced by later stages of decisions. That is, the choice share of an option relative to its alternative increased when that alternative became a multi-stage choice (i.e., first A vs. B or C, then choose between B and C)– even if the subsequent choice between B and C involved a dominated decision. Second, **Amir**, **Morvinski**, and **Weingarten** present twelve studies regarding how initial purchase decisions in unrelated domains can influence subsequent purchases in unrelated domains. They also report how later ordinal positions across unrelated decisions have lower purchase rates. Third, **Reeck**, **Mazar**, and **Ariely** provide evidence across

three studies about how behavior can tip into continuous dishonesty in ethical decisions. However, they also find costly pre-commitment and making salient one's actions can curb this what-the-hell effect. Finally, **Dutton** and **Diehl** illustrate in three studies that when structuring a series of experiences, those who initially plan an experience to proceed with a decreasing trend (i.e., most enjoyable pieces first) regret their decision more (relative to increasing trends) and are more likely to plan their next experience as an improving sequence.

Importantly, this session ties into the conference theme of "What the World Needs Now" by examining how consumers can keep ethical and design optimal experiential and purchase sequences as countries turn to a new normal. These four papers will appeal to both practitioners and researchers who study judgment and decision-making, time, dishonesty and ethical decision-making, retailing, and experiences and experiential consumption. These papers employ both laboratory and field data, and all papers have at least three studies completed.

Consumers Undervalue Multi-Option Alternatives in Two-Stage Choice

EXTENDED ABSTRACT

Only rarely does a consumer's full decision process conclude at the moment of choice. Instead, each node in a decision tree typically leads to more decisions. Sometimes these choice sequences are implicit, as when choosing a home implies choices among where to eat, where to shop, and who to visit. Other times they are explicit, as when choosing a restaurant implies choosing items from a menu or choosing to watch TV implies choosing a show. Even this narrower case of explicit multi-option alternatives is ubiquitous. Multi-retailer gift cards, airline choices, food/drink tickets (e.g., at fairs/festivals), and game tokens (e.g., at arcades) all constitute multi-option alternatives.

There are two competing Hypothesis regarding how consumers might misvalue multi-option alternatives relative to the best sub-option (i.e., the normative baseline). Consumers might value a multi-option alternative more than the maximum value of its component options due to the fact that the multi-option alternative enables choice (Brehm 1966; Bown, Read, and Summers 2003; Mochon 2013; Shin and Ariely 2004). Alternatively, consumers might undervalue a multi-option alternative if they use a weighted average of the values of the components (Brough and Chernev 2012; Chernev and Gal 2010; Gaeth, Levin, Chakraborty, and Levin 1991; Yadav 1994; Shenhav and Karmarkar 2019; Weaver, Garcia, and Schwarz 2012; Troutman and Shanteau 1976). Only two prior papers have directly examined this question (Le Lec and Tarroux 2020; Spiller and Ariely 2020). In both of these cases, the studies considered WTP (rather than choice) in particular contexts (internet surfing options and media of exchange). Both sets of authors found evidence consistent with the weighted-averaging process.

Here, we seek to better understand how consumers integrate across options in a choice set when deciding among such multi-option alternatives. We ran six preregistered studies in two domains: consumer goods and incentivized risky gambles. In each study, participants made (at least) two types of choices: control choices and

test choices. In the control choices, participants chose between two single-option alternatives (e.g., A vs. B). In the test choices, participants chose between a single-option alternative (e.g., A) and a multi-option alternative (e.g., B or C, where the value of B is greater than the value of C). Choosing this multi-option alternative allowed the participant to make a (later) choice between B and C. In some studies, the dominance relationship between B and C was engineered to be more (vs. less) transparent. For example, a more transparent dominance relationship might be: B: win $4 if you roll a 1 or 2 or 3 on a die; C: win $4 if you roll a 1 on a die. Alternatively, a less transparent dominance relationship might be: B: win $4 if you flip heads on one coin; C: win $4 if you roll a 1 on a die.

We compared choice proportions for A between test and control choices to test for the presence of undervaluation. In all studies (1, 1b, 2, 2b, 2c, 3), participants chose A significantly more often when it was contrasted with a multi-option alternative (B or C) than when it was contrasted with the highest-valued option from the multi-option alternative (B) (paired t-tests, all ps < .001). In other words, adding C (as a component option with B) made people less likely to choose "B or C" than they were to choose B. Moreover, the difference in value between B and C is predictive of the size of the effect; as the value of C gets worse relative to the value of B, participants show a greater degree of undervaluation (clustered-SE regression; Study 1: p < .001; Study 1b: p < .001; Study 2: p = 0.07; Studies 2b, 2c, and 3 did not allow suitable tests of this hypothesis).

In Study 3, we also examined the information acquisition patterns of participants via a custom mouse-tracking interface. Mouse-tracking revealed that participants who spent more time on A in test choices demonstrated a greater degree of undervaluation (r(207) = 0.27, p < .001). In addition, participants who attended more to the dominated option (C) in a test choice were less likely to choose the multi-option alternative (b = –1.70, SE = 0.24, p < .001). However, participants spent less time on the dominated option (C) when the dominance relationship between B and C was more transparent (M = 0.01, 95% CI = [0.002, 0.02], t(207) = 2.46, p = .01). Participant choices mirrored this attentional shift; undervaluation was reduced when the dominance of B was more transparent (M = –0.03, 95% CI = [–0.06, –0.01], t(208) = –2.76, p = .006), and participants with greater mouse-tracking differences between high- and low-transparency decisions showed greater differences in choice behavior between high- and low-transparency decisions (r(206) = 0.13, p = 0.06).

We also ruled out several alternative explanations. One alternative explanation is that participants do not want to have to make an additional choice later on. We ruled this out by requiring our participants to acknowledge that they would make the same number of choices in the study, regardless of what they chose in any particular trial. Moreover, in comparing the test choices (e.g., A vs. B or C) to dominated-option choices (e.g., A vs. C), we found that participants chose the multi-option alternative (B or C) more often than its worst component option (C) (M = 0.18, 95% CI = [0.15, 0.22], t(175) = 10.93, p < .001). This demonstrates that people do not have an extreme aversion to making future choices. We also address inattention as an alternative explanation for our results. Using a variety of attention checks, we show that our effect does not diminish – and if anything, gets stronger – when we exclude inattentive participants from our analyses.

Across all of our studies, participants regularly sacrifice a chance at maximizing their subjective value by inappropriately integrating the value of less-attractive options. Overall, this work contributes to our understanding of multi-stage consumer decision-making and how consumers assess and integrate the overall value of multi-option alternatives.

A Reference Value Theory of Sequential Choice

EXTENDED ABSTRACT

Consumers make many purchase decisions in daily life across multiple domains, be it whether to buy candy, whether to purchase a book, or whether to pick up an extra flash drive for a conference. However, despite these decisions being nominally unrelated, is it possible that the decision for one purchase might have an impact on the subsequent decisions? Notably, in other contexts, the order in which decisions unfold matters. For example, parole decisions become harsher the later in the day they are (up until lunch; Danziger et al. 2011), and people become more likely to pick defaults in voting or customization decisions later in a sequence or after difficult decisions with many options (Augenblick and Nicholson 2016; Levav et al. 2010).

We build a reference-value theory of sequential unrelated purchase decisions. We argue that across even unrelated purchase decisions, consumers carry a reference point based on the acceptable expected value from prior purchases decisions. Concretely: each purchase consumers face may fall into one of three categories: something to definitely reject, something to definitely buy, or something that consumers could see themselves being willing to buy or not to buy. We contend that following a purchase decision, consumers may update their beliefs about what is or is not an acceptable range of outcome value based on whether they bought or did not buy the previous good (see also Hogarth and Einhorn 1992; Schrift et al. 2018). That is, after making a purchase, consumers may widen their standard for what an acceptable degree of value is for subsequent purchases, and after rejecting a purchase, consumers may narrow their standard for what is an acceptable degree of value.

According to this theory, we suggest there is a prior purchase effect by which following an initial purchase, people may be more willing to make subsequent purchases, and following a rejection, people may be less willing to make subsequent purchases. However, due to a stronger impact of rejections (relative to purchases) on updating (see Baumeister et al. 2001), we further expect a negative ordinal position effect: purchase rates in later ordinal positions in a sequence should, on average, be lower. Importantly, we are able to unite insights from previously-unrelated streams of research on how prior purchases influence future purchases (Dhar et al. 2007) and how turning down initial opportunities spurs rejecting further opportunities (Tykocinski et al. 1995) within one theory in the context of unrelated purchases.

In field data from Fiverr, Inc consisting of six months of customer transaction data, we find initial evidence of a prior purchase effect and a negative ordinal position effect when looking within shopping trips spanning multiple different unrelated categories (e.g., podcast editing, programming) constructed over eight-hour intervals (or six-hour intervals for robustness). That is, relative to the purchase probability for a customer with no prior purchases, the likelihood of subsequent prior purchases increased when customers have a prior purchase. Further, we observed evidence consistent with a negative ordinal position effect: the purchase rate declined across each ordinal position (first, second, third, fourth).

In a preregistered incentivized laboratory study (N = 728), we replicated the findings from the field. Participants made a series of three purchase decisions in one of six counterbalanced orders for three goods: a portable charger, a flash drive, and chocolates. Further, to ensure the study was incentive-compatible, one in every fifty

participants had one of their purchase decisions enacted at random. Descriptively, consistent with a prior purchase effect, we find that conditional on making a first purchase, people are more likely to make a second purchase; similarly, conditional on not making a first purchase, people are more likely not to make a second purchase. Consistent with a negative ordinal position effect, we find that the purchase rate declined over ordinal positions. These results held analytically in binary logistic regressions. Further, we replicated these results in a preregistered non-incentivized study (N = 588) that expanded the number of decisions to six goods over three.

Further, consistent with the importance of the reference value from an initial decision, manipulating the attractiveness of the initial decision influenced the emergence of the negative ordinal position effect. That is, in a large study (N = 1608), we manipulated the attractiveness of the first good participants saw (a Bone Conduction Waterproof Bluetooth headset) to be unattractive (1-star), mildly attractive (3.5-stars), attractive (4.5-stars), or very attractive (5-stars). All participants, following making a purchase decision for this headset, saw a common choice for a 4-star coffee cup. Consistent with the manipulation, participants were more likely to purchase the headset as its rating increased. On the other hand, the purchase rate for the coffee cup was negatively related to the attractiveness of the initial headset. When regressing the two decisions onto ordinal position, the initial rating, and the interaction, we observed a significant interaction by which there was a negative ordinal position effect for the 3.5-star, 4.5-star, and 5-star conditions. Yet, in the one-star condition with a low initial purchase rate, we observed a reversed negative ordinal position effect. That is, the purchase rate of a second good declined as the initial good became more attractive such that the negative ordinal position effect only held with attractive initial purchases.

We also address bracketing explanations of the results (i.e., that people merely bracket the otherwise-unrelated purchase decisions together) in two ways. We run preregistered studies in which either a) the study (N = 715) was framed as either three different studies with three different consent forms (meant to bracket each good narrowly) or one study as before, or b) there was a temporal delay with a filler task for some participants meant to separate the decisions and potentially attenuate the aforementioned results (N = 822). Neither study design found an interaction with bracketing, instead observing prior purchase and negative ordinal position effects. Seven other replications similarly find evidence for a prior purchase effect and negative ordinal position effect while ruling out other alternative explanations.

"What-the-Hell:" Dishonest Behavior Can Escalate to Continuous Ethical Transgression

EXTENDED ABSTRACT

The marketplace and the workplace are characterized by abundant temptations to behave dishonestly. For example, consumers overstate tax deductions, fib about returning items unused, or download pirated music files from sharing servers. Consumers are often victims of others' immoral transgressions as well, from doctors prescribing medicines produced by pharmaceutical companies they receive benefits from to financial advisers steering investors towards options with high commissions without disclosure of their conflicts of interest. Employees may also engage in dishonest acts, from taking credit for others' work to stealing office supplies for personal use to violating professional codes of conduct. Despite the fact that honesty is a universal value (Schwartz 1994) and many of us have strong beliefs about our own morality (Bem 1972), it is easy to deviate occasionally from the path of honesty. However, each individual lapse may not occur independently, and previous ethical transgressions may compound to make future transgressions more likely. In the present paper, we consider whether these infractions are momentary lapses of ethicality from which people quickly recover or if acts of dishonesty beget subsequent acts of dishonesty. Specifically, after repeated transgressions the nature of behavior might transition so that dishonest behavior becomes a pervasive and persistent pattern. After the first few exaggerations on one's tax forms, does one at some point start inflating all subsequent potential deductions? Do we gingerly download a couple songs, only to at some point find ourselves downloading whole albums unabashedly?

If our transgressions were just isolated bumps on an otherwise honest path, the cumulative effect of our dishonest acts would simply equal their individual magnitudes. But, if there exists a tipping point beyond which the behavior becomes a pervasive pattern, then the cost of our transgressions could be much higher, since each additional transgression would also increase the likelihood of an escalation of dishonesty or eschewing honest behavior altogether. If such a tipping point exists, do people understand the risks of repeated temptations for dishonesty and try to avoid them—even if doing so is costly?

Particularly relevant to our focus on the context of a series of opportunities to be dishonest is research on the cheat-at-the-end effect (Effron, Bryan, and Murnighan 2015) and the slippery slope effect (Garrett, Lazzaro, Ariely, and Sharot 2016; Gino and Bazerman 2009; Welsh, Ordonez, Snyder, and Christian 2015). Building on this recent body of work in behavioral ethics research, we consider the very extreme, end result of facing a series of opportunities to cheat over time. That is, the present work moves past this prior research by seeking to document a transition to uncontrolled unethicality, that is continuous maximal cheating. Establishing whether such a "What-the-Hell" (WTH) effects extend to the domain of morality is of central importance. Previous demonstrations of the WTH effect have typically occurred in domains in which behavior largely only impacts the self, such as eating, personal spending, or substance use (Cochran and Tesser 1996; Polivy 1976; Soman and Cheema 2004). Preventing a transition to uncontrolled, maximal unethical actions, however, is of collective importance, as people's unethical actions can have negative impacts on other people. At the same time, there are reasons to anticipate that such WTH effects may not emerge in the moral domain, given the widespread desire to maintain a positive moral-self concept.

The present experiments examine the ethical WTH effect in a task featuring repeated temptations to cheat. Across three incentive-compatible physical laboratory studies, we demonstrate that a subset of people eventually succumb to continuous cheating.

Study 1 (N=36, within-ss manipulation of temptation) establishes the WTH Effect in a continuous decision-making task, showing that 52.8% of participants eventually transitioned to continuous cheating.

Study 2 (N=79, two between-ss conditions: payment feedback vs behavior feedback, within-ss manipulation of temptation) replicates the effect and tests for the role of self-perception in counteracting the WTH effect. Critically, we found that the feedback manipulation significantly impacted the extent to which participants switched to continuous cheating, $\chi^2(1) = 11.86$, $p = .001$, as participants who viewed their responses were much less likely (10.3%) than those who viewed their earnings (45.0%) to exhibit the effect. Even for those participants who did exhibit the WTH effect, those who viewed their actual responses made significantly less money, $t(20) = 2.56$, $p = .019$, and transitioned to WTH behavior marginally later, $t(20) = 1.81$, $p = .086$, than those who viewed their earnings. Thus, making

one's behavior salient during task performance appeared to counteract the tendency to switch to continuous cheating.

Finally, study 3 (N=78, within-ss manipulation of temptation) replicates the effect and tests costly pre-commitment (option to choose to avoid future exposure to repeated temptation) as a means to encourage honesty and rehabilitate those who have transitioned to continuous cheating. Again, we found evidence for a WTH effect. Specifically, 19.2% of participants showed a switch to continuous cheating. More importantly, 56.4% of participants chose to sacrifice earnings to remove subsequent temptation.

The present findings are consistent with previous theories explaining the emergence of the "What-the-Hell" effect in other behavioral domains such as dieting. Survey responses in experiment 2 reveal that those who exhibit the WTH effect know the ramifications of their actions. Both those who do and those who do not transition to continuous cheating view the behavior as similarly unethical and inappropriate, indicating that the effect does not emerge due to complete moral disengagement or a redefinition of what honesty entails.

We document the emergence of continuous cheating following repeated ethical same-domain transgressions, such as illegally downloading multiple songs. Given that in our daily lives we face repeated temptations to be dishonest, and that dishonesty is very costly to societies, the implications of our and future related research may be substantial for policy aimed at preventing people from falling prey to the WTH effect in the context of ethical decision making. Our findings suggest that pre-commitment and making one's actual actions salient represent two means to curb the negative effects of the WTH effect, and we are hopeful that future work will uncover others.

I'll Do it Differently Next Time: How Consumers Structure Repeated Experiences

EXTENDED ABSTRACT

Experiences are important for consumer well-being (Gilovich and Kumar 2015) and are an important contributor to the economy. We focus on one type, *consumer-structured experiences*, which contain unique components that people combine to create an overall experience. Consumers decide the specific components, then arrange them in a sequence. We focus on repeated consumer-structured experiences (i.e., when at least one component has been experienced previously). Consumers find enjoyment in repeated experiences (O'Brien 2019) and popular press has documented the importance of repeat experiential customers (Olson 2013). Further, firms often offer incentives such as season passes and loyalty programs to increase their repeat customers. Despite this, little is known about consumers making repeat decisions when it comes to experiential purchases.

Novel components, and therefore experiences are characterized by uncertainty. Uncertainty may cause people to choose declining sequences (Frederick and Loewenstein 2008), hence, people may be more likely to choose improving sequences for repeated experiences that have less uncertainty. Further, consumers may use their assessment of an initial experience as a diagnostic for a subsequent similar experience (Wilson, Meyers, Gilbert 2001; Feldman and Lynch 1988). Past research suggests that the experience sequenced influences the assessment of the experience (Ariely and Zauberman 2003). If consumers believe that their initial sequencing resulted in an unfavorable experience, they may regret their sequencing decision (Zeelenberg 1999), and change their sequencing type in a repeated experience.

We predict that 1) repeated components are more likely to be structured in an improving sequence and 2), increasing levels of regret predict a consumer's likelihood to change the way they structure a repeated experience. We test these predictions in three studies.

Study 1 provides evidence that prior experience with experience components predicts improving sequences. M-Turk participants (N=202) imagined going to a food market that offered sample-sized portions of up to ten different food items. Participants rated how appealing each item was on a 7-point scale anchored at "not at all appealing" (1) and "extremely appealing" (7). They then indicated which items they wished to taste (at least one and up to ten). Finally, those who selected at least two items (N = 153) indicated their preferred tasting order. To assess prior exposure, participants indicated whether they had previously eaten each food item.

To determine sequencing type of sequence, we estimated individual regression coefficients for each participant by regressing the appeal rating of each selected component on the order in which the participant wanted to experience each component. Based on their individual-level regression coefficients, we classified participants as having created an improving (regression coefficients > 0) or declining (regression coefficients < 0) sequence. Participants were classified as creating a sequence with equally appealing components when their regression coefficients were equal to 0. As expected, we find that the more repeated the experience (i.e., the more items someone has tasted in the past), the more likely participants were to create an improving sequence (0=improving, +1=declining, b=-.19, $X^2(1)$=4.11, p=.04).

In study 2, we manipulated the repeatedness of the components. Undergraduate students (N=200) were randomly assigned to a 2-cell design (completely/partially repeated). Participants rated nine different art pieces that could be a part of an online art gallery using the same scale as study 1, then ranked their appeal relative to each other. For their initial experience, participants were shown their first, third, sixth, and eighth ranked paintings in a declining sequence based on their rankings (i.e., from their most preferred to least preferred painting).

Participants then imagined returning to the online art exhibit. Those in the completely repeated condition saw the same four paintings as in the initial experience. Those in the partially repeated condition were shown two paintings from their initial experience (first and eighth ranked) and two that had not been part of their initial experience (second and seventh). Participants indicated the order in which they wished to view the paintings. People who completely repeated the experience were more likely to change the way they structured their experience to an improving sequence (26%) than those who repeated the experience only partially (13%, $X^2(1)$=4.62, p=.03).

In Study 3, we explored how regret of an initial experience affected the structure of the repeated experience. Undergraduate students (N=175) rated then ranked nine jelly bean flavors the same way they did in study 2. They were shown their second, fifth, and eighth ranked jelly beans, and indicated their preferred tasting order. They ate each jelly bean, then reported their enjoyment of each jelly bean on a 7-point scale. After eating all three jelly beans, participants reported their regret of their chosen sequence a 7-point scale anchored at "do not regret at all" (1) and "regret a great deal" (7). They then were asked to indicate the order they wished to taste the same three jelly bean flavors in a subsequent experience.

We focus our analysis on participants who created an improving or declining sequence (N=167). Those who created a declining sequence reported more regret (M=2.62) than those who created an improving sequence (M=1.83, $F(1,165)$=9.05, p<.01).

To assess sequencing preferences of the repeated experience, we regressed the enjoyment of each jelly bean on their repeated tast-

ing order. Interestingly, while 18% people who initially created an improving sequence changed their repeated experience to a declining sequence, a greater proportion (44%) of people who initially created a declining sequence changed the way they structured the repeated experience (to improving). A McNemar test showed that these differences were significant ($X^2(1)=15.19$, $p<.001$). As expected, the more participants regretted their initial experience, the more likely they were to change the way they structured their repeated experience: $b=.30$, $X^2(1)=8.42$, $p<.01$.

This research is the first to examine how an initial experience can affect the way in which a subsequent experience is structured. We find that repeated experiences are more likely to be structured in an improving sequence. This may result from consumers' negative assessment of their initial experience, and a desire for a more positive repeated experience. Future work will examine the role of consumer lay beliefs on repeated experiences.

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Artificial Intelligence in Marketing and Beyond: Interdisciplinary Perspectives on the Social Impact of AI

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Paper #1: Perception of Justice by Algorithm

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Paper #2: Algorithmic Entitativity and the Overgeneralization of Algorithmic Errors

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Paper #3: Uncovering and Mitigating Algorithmic Bias in Decision-Based Facial Recognition Systems

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Paper #4: A Persuasive Chatbot for Encouraging COVID-19 Vaccination

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SESSION OVERVIEW

New technologies and predictive systems powered by Artificial Intelligence (AI) are being developed by organizations and governments across the world. Today, AI pervades the private and public sector, with profound implications for consumer welfare, the economy, the judicial system, labor markets, and many other core public functions spanning healthcare and education. Yet, the social impact of AI remains unclear. How do consumers respond to AI making decisions pertaining to criminal justice and the provision or core public services? What are AI's blind spots and biases, and can they be mitigated? Can AI be used to deliver persuasive messages that promote social welfare?

Overall, *this symposium brings together a diverse and interdisciplinary set of researchers from marketing, law, computer science, and psychology to present evidence examining the many facets of the social impact of AI.* By showcasing insights from various disciplines and empirical methodologies, this symposium answers the call for multi-method and interdisciplinary submissions.

Specifically, these are topics covered: perceptions of AI algorithms in the criminal justice system and in the provision of core public services; implicit bias embedded in facial recognition technologies, and whether this bias may be mitigated; how to design AI algorithms to maximize well-being.

The first two papers present novel insights with respect to people's perceptions towards AI in the public sector. **Yalcin et al.** investigates how people perceive algorithms (vs. humans) in justice systems. In collaboration with legal scholars, the authors demonstrate that individuals trust algorithmic (vs. human) judges less and have lower intentions to go to court when algorithms adjudicate. They also reveal that trust for algorithmic judges is especially penalized when cases involve emotional complexities (vs. technical complexities).

Continuing the theme of examining perceptions towards AI in the public sector, **Longoni, Cian,** and **Kyung** examine the inferences and generalizations that people make when learning of AI (vs. human) errors in the provision of public services. Studies cross different types of public services show that people mentally represent groups of AI versus humans in fundamentally different ways, and generalize algorithmic errors at a higher rate than human ones. This effect has detrimental downstream consequences for propensity to access public services and trust in the legitimacy of core public institutions.

The third paper by **Wang** and **Rahman** uses a different methodological approach (machine learning) to examine how facial recognition algorithms make recruitment and promotion decisions, and the potential bias that may ensure from these decisions. Leveraging machine learning, the authors introduce the concept of algorithmic *face-ism* in facial recognition systems—the notion that algorithms unfairly express an inherent preference for specific facial morphologies and show that this bias persists even after controlling for other common algorithmic biases.

Finally, **Castelo, Chalaguine** and **Häubl** test the possibility to leverage AI and design persuasive chatbots. The authors build an actual chatbot to deliver persuasive messages and test its efficacy in increasing people's willingness to get the COVID-19 vaccine. The author will also provide a tutorial on how to build and implement persuasive chatbots—a tool that should prove greatly useful for the larger ACR community.

Perception of Justice by Algorithm

EXTENDED ABSTRACT

AI technologies have increasingly been used the justice system to review legal case files, predict legal outcomes, and even make judicial decisions. Accordingly, many governments (e.g., Estonia, Netherlands) and international organizations (e.g., the Council of Europe) have been formulating policies related to the application of AI in courts. To our best knowledge, however, no research has looked at consumers' perceptions towards algorithmic judges. In collaboration with law scholars, we examine how interacting with algorithmic (vs. human) judges affects the extent that people trust them, and their intentions to submit their cases to a local court. Finally, to examine whether there are any potential advantages of algorithmic (vs. human) judges, we explore individuals' perceptions of cost and speed of the judge.

Existing research has documented that individuals rely less on algorithmic (vs. human) decision-makers (Longoni et al. 2019). In line with these findings, we expect consumers to trust algorithmic judges less compared to human judges as well as having lower intentions to submit their cases to a local court. In addition to the effect of

the decision-maker, extant work suggests that the type of task algorithms and humans are given might impact consumers' perceptions (Castelo et al. 2019). One classification that is often used is whether a task is emotional or cognitive in nature. Previous work suggests that non-human entities are perceived as capable of thinking, but not feeling (Rai and Diermeier 2015) and that consumers express more favorable attitudes towards algorithms when tasks are framed as requiring cognition than emotion (Waytz and Norton 2014). Building on these papers, we test whether consumers trust algorithms and humans differently depending on the nature of a legal case. We propose that algorithmic judges will be trusted even less when cases involve emotional complexities (vs. simple vs. technical complexities).

Two studies (*N*=1,822) tested our predictions. In each study, we gave participants a general background of a divorce case and randomly assigned them to the judge (human vs. algorithm) that would take their case. We then manipulated the type of the case: low vs. high emotional vs. high technical complexity. Participants in the low complexity condition were given a straightforward case description, whereas we added details to complicate the case in the remaining conditions. Specifically, we either added technical (e.g., unequal shares of property) or emotional details (e.g., psychological problems). Importantly, we measured participants' trust towards their assigned judge by aggregating four items (1= unfair/biased/not trustworthy/unpredictable; 9= fair/unbiased/trustworthy/predictable). To test whether consumers' perceptions have consequences for their intentions, we also measured participants' willingness to submit their cases to the local court (e.g., "How likely would you be to submit your case that will be resolved by the AI/judge to the local court?", 11-point scale). Finally, to examine whether there are any potential advantages of algorithmic (vs. human) judges, we included two exploratory measures, namely, perceived cost (1= *cheap*; 9= *expensive*) and speed (1= *slow*; 9= *fast*) of the judge.

As predicted, both studies revealed a significant main effect of the judge type (see Table 1 for the details): participants perceived the human judge to be more trustworthy than the algorithmic judge, replicating the general algorithm aversion documented in the literature. Importantly, we also found a statistically significant effect between type of the case and type of the judge in both studies: participants trusted the algorithmic judge even less when the case was high in emotional complexity compared to cases that are not complex and high in technical complexity (see Figure 1). Looking at the downstream consequences of these perceptions, both studies showed a strong main effect of the judge type, revealing consumers' strong aversion to algorithmic judges. The interactive effect of the type of judge and case on consumers' perceptions of trust, however, did not spill over to their intentions to submit their cases. Finally, looking at the exploratory measures we included, people perceived some advantages in algorithmic (vs. human) judges, as they were perceived to be faster and cheaper.

Our interdisciplinary work provides novel insights on the impact of algorithms on consumer judgment and decision-making. First, we document algorithm aversion in an important domain, judicial decision-making, that has not been shown. We also document the impact of case complexity on perceived trust of algorithms and humans and show that trust for algorithmic judges drops especially when legal cases involve emotional complexities. From a practical perspective, we raise important questions for governments, policymakers, legal firms, and societies in general. Our findings indicate that despite some positive aspects of algorithms (i.e., perceived speed and cost), policymakers should expect strong pushback from citizens against courts' adoption of algorithms in adjudication.

Algorithmic Entitativity and the Overgeneralization of Algorithmic Errors

EXTENDED ABSTRACT

Artificial Intelligence is transforming the deployment of core public services. Despite popular belief that the public administration relies on antiquated procedures, automation in the public sector is well underway in the United States. AI decision systems are being deployed to supplant traditional decision-making in many public sectors, from government benefits, to justice, policing, social services, education, and health (de Sousa et al. 2019). For instance, AI algorithms are used to allocate a variety of public benefits, from Medicaid to Medicare, food stamps, unemployment, and Social Security disability.

The spread of AI to the public sector is advocated on the promise of reducing costs and improving service quality, ultimately making agencies more effective and citizens more satisfied. Despite technological improvements, these AI systems are fallible, and might commit errors. In the recent years, the press has reported a number of algorithmic errors in the provision of public services. A key question, then, is how the public responds to AI making errors in the provision of public services. What inferences and generalizations do people make when learning of AI (vs. human) errors? That is the basis of these generalizations? And what are the downstream consequences for the perceived legitimacy of our core institutions?

We answer these questions in a series of experiments (*N*=2442) across a range of public services using both convenience and nationally representative U.S. samples. These experiments show that people manifest *algorithmic transference*—the propensity to generalize algorithmic errors at a higher rate than human errors: when observing an algorithm or a person err, people are more prone to infer that another algorithm, but less so another person, will make the same error. Rather than reflecting generalized algorithm aversion (i.e., preference for humans over algorithms), algorithmic transference stems from a perceptual process that we term *algorithmic entitativity*. People spontaneously perceive and mentally represent a group of algorithms as a group of greater entitativity (i.e., homogeneity and intragroup similarity) than a group of humans. Ultimately, generalization of algorithmic errors has detrimental downstream consequences for propensity to access public services and institutional legitimacy.

Table 1 summarizes our empirical testing. We tested our predictions across several types of public services on both convenience (Amazon Mechanical Turk) and representative U.S. samples (Lucid, Prolific). All of the domains employed are based on actual uses of AI algorithms in the provision of public services.

Experiments 1A-1C provide evidence of algorithmic transference—a higher generalization of algorithmic than human errors to other group members—across three different domains using real news articles. Participants read brief news articles describing the commission of an error in the allocation of disability benefits (1A), calculation of social security benefits (1B), and pre-trial risk assessment (1C). Between-subjects, we manipulated whether the target error was made by an algorithm or by a person. We then measured inferential generalizations via performance (probability estimates that another agent of the same group—algorithm or person—would make the same error) and inferential evaluations (attitudes towards another agent of the same group employed by a different institution). These experiments showed algorithmic transference—greater propensity to generalize algorithmic than human errors.

Experiment 2 offers preliminary evidence of algorithmic entitativity. Participants read brief descriptions of either 6 algorithms or

6 people carrying out various tasks in the public sector and then were asked to evaluate their perceived entitativity. As predicted, people perceived algorithms as having greater group entitativity than humans.

Experiments 3A and **3B** tested the prediction that algorithmic transference stems specifically from algorithmic entitativity via mediation while controlling for error base rates. Study 3A examined the mediational role of algorithmic entitativity on inferential performance, and study 3B on inferential attitudes. We assessed entitativity as perceptions of intra-group similarity and group cohesiveness. In both studies, while controlling for the base failure rate for algorithmic and human errors, algorithmic entitativity mediates the effect of algorithmic transference.

Experiment 4 tests our process account via moderation: attenuating algorithmic entitativity eliminates algorithmic transference. In addition to manipulating agent as an algorithm or person, we manipulated group entitativity by specifying that the erring agent and the target agent shared few similarities, were different from each other, and did not belong to one cohesive group. An algorithm aversion account would predict a main effect where people always infer that other algorithms are more likely to err than other humans. However, an algorithmic entitativity account predicts that reducing entitativity will eliminate algorithmic transference. This is what we find.

Finally, **Experiments 5A** and **5B** tested the negative downstream consequences of algorithmic transference for institutional legitimacy, where perceived institutional legitimacy was mediated by the extent of algorithmic transference.

This research makes theoretical contributions to literatures on psychological responses to automated systems (Castelo et al. 2019; Gill 2020, Granulo et al. 2020; Leung et al. 2018; Longoni and Cian 2020) and to perceptions of algorithmic errors (Dietvorst et al. 2015; Dzindolet et al. 2002). Our research is unique in identifying algorithmic entitativity, a critical perceptual process that characterizes how people mentally represent a group of automated agents—as having a greater entitativity than a comparable group of humans. Our perspective is novel because it is rooted on representational processes at the group-level (i.e., how a collection of automated agents is mentally represented) rather than on lay-beliefs at the individual-level (i.e., what an individual automated agent is presumed capable of doing), as in most prior research. Second, we identify novel inferential implications of this representational process: algorithmic transference. As a type of inferential judgment, algorithmic transference is also novel, given that prior research on automation has largely assessed choice (to rely or reject automated agents) rather than inferences at the group-level. From a substantive perspective, if thoughtfully deployed, AI has the potential to improve the public sector by allowing public institutions to more effectively deliver to their statutory duties and meet rising expectations of responsiveness (Calo and Citron 2020). However, our findings highlight how the premature or unregulated spreading of AI technologies to the public sector might undermine legitimacy of the very institutions it is meant to modernize.

Uncovering and Mitigating Algorithmic Bias in Decision-Based Facial Recognition Systems

EXTENDED ABSTRACT

The use of facial recognition systems (FRS) has increased dramatically in the past decade. Governments, companies, and consumers are integrating FRS to make critical decisions, such as whom to interview (Ryan 2020), hire, trust (Abrams 2016), and even arrest (Hill 2020). Concern over algorithmic bias in these systems, however, is also growing (Lambrecht & Tucker 2019). Recent studies, for example, consistently document lower facial recognition rates for females and racial minorities (Srinivas et al. 2019). However, existing research has not systematically evaluated the objectivity of decision FRS.

To address this gap, we first implemented a leader detection algorithm (Stoker et al. 2016) similar to the ones employed in job-screening systems (Ryan 2020). To evaluate the algorithm, we hand-collected a dataset of leaders, professors, and actors using the judgment sampling method, an industry standard procedure in data collection. Our preliminary analysis shows that the sampling method did not mitigate the effects of covariates, which persisted in virtually all later stages, leading to algorithmic focus bias. Heeding the call to conduct more explainable machine learning (Kroll et al. 2016) and to unpack the "black-box" of decision FRS models, we employed adversarial machine learning techniques and composite rendering of facial images and found that the leader detection FRS indeed "focused" only on covariates such as lighting, clothing, and hairstyle differences. In some cases, blocking facial information actually improved prediction power.

Second, we compared the sample of leaders against the sample of professors and actors using apparent age, attractiveness, and transient facial features extracted using Face++ API. Apparent age was significant after excluding individuals outside 30 to 80 years of age, showing that a person who appears to be relatively younger based on facial image is more likely to be a leader. Attractiveness was also significant, indicating that a person who is less attractive is more likely to be a leader than others. Smiling was significant, even though we aimed to collect neutral facial images. In other words, the results indicate it is more likely that the person in a facial image is a leader if that individual is smiling.

Third, because the judgment sampling method failed to eliminate covariates such as attractiveness and apparent age, we employed propensity score matching, a method commonly applied in econometrics to simulate experimental settings (Caliendo & Kopeinig 2008). Using matched samples we trained and tested a leader prediction model using the Face++ attributes again. The AUC scores of logistic regression prediction after matching (N per class = 600) were 0.532 for leaders vs. professors and 0.533 for leaders vs. actors. The scores dropped to approximately chance level, indicating successful matching based on the given attributes.

Fourth, we employed a deep neural network (DNN) models to see if it could filter out the effects of (transient) covariates without explicitly controlling for them (Kachur et al. 2020). The mean AUC scores before matching were 0.912 for leaders vs. actors and 0.949 for leaders vs. professors. The scores decreased, on average, by 0.029 and 0.032, respectively, after matching. This finding suggests that when classifying leaders and non-leaders the DNN model did not mitigate covariates; rather, it actively capitalized on them to increase predictability.

Finally, we employed adversarial machine learning on the matched samples (Huang et al. 2011). If adversarial attacks removed morphological features, a model relying on such features should fail. On the other hand, if the model did not fail, then more transient features may exist. Figure 2 provides an example of four types of adversarial attacks. On average, no distortions brought prediction power down to chance level, and some distortions even improved prediction power. For example, Masking Step 1 increased AUC scores to 0.833 for leaders vs. professors, and Masking Step 2 further increased this AUC to 0.852. These findings show that the DNN model performed better without facial information (e.g., after applying masking distortions). Inversely, prediction power decreased when non-facial infor-

mation was blocked (e.g., Bordering Step 1 and 2, the opposite of masking).

Overall, we found evidence of algorithmic bias in the sampling, preprocessing, and model implementation stages in algorithmic FRS. These results suggest FRS algorithms are misusing specific features on the face as the primary determinant of a human's traits and capacities, in ways that are systematically biased and misinterpreted. Just as organizations and researchers are starting to become more aware of how biases related to race, gender, disability, and other characteristics influence human decisions, it is our hope that this research will motivate people to pay closer attention to the biases algorithms can perpetuate, broadly and specifically, in FRS algorithms.

A Persuasive Chatbot for Encouraging COVID-19 Vaccination

EXTENDED ABSTRACT

Computer scientists have been attempting to build chatbots that can persuade humans to change their attitudes and behaviors for at least two decades, with limited success (Andrews, Manandhar, and De Boni 2008; Rosenfeld and Kraus 2016). Only recently have researchers succeeded in creating chatbots that can understand human arguments and present relevant and convincing counter-arguments in real time (Hunter et al. 2019).

We developed a chatbot to persuade people to get a COVID-19 vaccine. The development process involved asking many people to argue *against* vaccines, identifying the common categories of arguments (i.e, unknown long-term effects, fast development, etc.), developing counter-arguments for each of those arguments, presenting those counter-arguments to people opposed or hesitant regarding vaccines, collecting their second-level arguments, categorizing those, developing second-level counter-arguments, and so on, for as many rounds of argumentation as we want the bot to be capable of. For each round, a classifier algorithm is used to let the bot automatically classify individual arguments into one of the common categories identified.

We tested whether a chatbot can persuade people to get a COVID-19 vaccine more effectively than a static list of arguments. We also tested whether the chatbot's effectiveness changes if it includes statistics or emotional anecdotes in its arguments, since human persuaders are often more effective when using the latter (Freling et al. 2020).

We recruited participants from Prolific who were not already extremely likely or extremely unlikely to get a COVID-19 vaccine (answering at the endpoints of our $1 - 7$ scale). Those who are extremely unlikely will be much more difficult to persuade and those who are extremely likely do not need persuading. 396 participants chatted with the bot, which used either statistics or anecdotes to open and close the chat. For example, statistics included the current death toll from COVID-19 and anecdotes included emotional descriptions of losing a loved one to COVID-19. The bot began and ended the conversation with either a statistic OR an anecdote, but in between the bot used the same arguments across the two conditions. In the static argument condition, which we view as a control condition, 193 participants read a list of 10 arguments in favor of vaccinations. We measured participants' likelihood of getting the vaccine on a 7-point scale before (T1) and after (T2) the chatting with the bot or reading the list.

Overall, the static list did not shift likelihood of getting vaccinated (T1 = 4.42, T2 = 4.64, p = .145). The bot, with both anecdote and statistic conditions combined, marginally shifted likelihood (T1 = 4.30, T2 = 4.50, p = .069). The two bot conditions were equally

effective. None of the three conditions were significantly more or less effective from each other overall. Neither chatbot condition interacted with age or gender in shaping effectiveness. However, the effectiveness of both bot conditions and of the static condition varied significantly depending on participants' T1 likelihood, as shown in Table 1. Interestingly, the largest effects overall were observed among the people least likely at T1 to get vaccinated.

Work is ongoing to improve the chatbot, both in the vaccine domain and other domains. For example, the current version of the chatbot is not able to answer specific questions about the vaccine, which likely limits its persuasiveness. A question-answering version of the chatbot is currently being developed.

If accepted, this presentation will introduce the marketing community to the development and use of persuasive chatbots and present the development and testing of this specific bot as a case study. The presentation will include a brief tutorial on the basic steps involved in building such a chatbot which audience members can then try themselves. While the results of this particular case study hold promise regarding the effective use of chatbots to change attitudes in this and other domains, they also highlight the challenges in doing so and suggest that highly sophisticated technologies do not always perform better than much simpler approaches.

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Biosociality in Consumer Research

Chair: Eric Arnould, alt, Finland
Discussant: Lorna Stevens, University of Bath, UK

Paper #1: Reflections on "the signs of life and the life of signs
    Søren Askegaard, University of Southern Denmark, Denmark

Paper #2: Ontological Hybridities in Consumption Practices
    Dorian Marchais, Université de Reims Champagne Ardenne, France
    Dominique Roux, Université de Reims Champagne Ardenne, France
    Marie Schill, Université de Reims Champagne Ardenne, France

Paper #3: Ontology and Circulation: Towards an Eco-economy of Persons
    Eric Arnould, alt, Finland

SESSION OVERVIEW

The theme of ACR 2021 is What the World Needs Now. The Conference organizers state that "There are many ways ideas can change the world" and invite participants to "tell us what matters." The three papers in this session are a direct response to this call, arguing that a reconfiguring of the human relationship to the non-human world is a crucial response to the challenges facing humanity, and that consumer researchers have an as yet untapped role to play in this reconfiguring.

As noted by Descola (2013, 2014), foreshadowed by Guattari (1989), and explored by Harraway (2008), the relationship between humans and the global biome is paradigmatic of the challenges of, and the challenges imposing themselves on humanity in this century. For Descola, a non-exhaustive list of these challenges would include "climate change, the erosion of biodiversity, the multiplication of transgenic organisms, the exhaustion of fossil fuels, the pollution of fragile environments and of large urban centers, the accelerating disappearance of tropical forests and coral reefs, all have become issues of public debate at the global scale and fuel the disquiet of numerous inhabitants." In this special session, we reflect on the relationship between consumer culture and biosociality in the face of these and related challenges.

An acknowledgement of the problematic human role in the contemporary anthropocene era rests on the dethroning of humanity as a species outside and beyond the biological. On a more situated level, an understanding of the bio-social anthropos is a precondition for understanding the modes of human desires, seductions and aberrations. The complexity of life and the complexity of the human condition is the starting point for a consumer research agenda and an approach to consumer culture, that can cope with the obvious global challenges to sustainability we are facing.

Biosociality as ontology and epistemology addresses the challenges imposed on the vision of sustainable consumption by the current tendency to reduce the cultural, psychic and biological consequences of consumer culture to predominantly if not exclusively a human affair. Furthermore, it reformulates the enduring attitude-behavior gap between consumers' oft-stated desire for more sustainable consumption and the reality of their behavior in a new way, as a problem related to the systemic misconstrual of the relationship between human economic behavior and the biome. Finally, a biosocial perspective offers an alternative that recognizes the necessity of resource circulation in any imaginable economic system.

This special session explores simultaneous acknowledgement of the sociality of the biological and the biologicality of the social without recourse to flawed, universalizing genetic reductionisms. We aim to open the way for investigations and conversations addressing the possibility of a biosocial renewal of thought in consumer culture theory and on a more sustainable consumption system against the ecological precarity which consumer capitalism produces. As indicated, biosocial renewal is defined by the contingent extension of the principle of sociality to other living beings, and the recognition that all living beings are in communicative relations with significant others, and between whom resources circulate in value co-creation processes.

We offer three papers sharing a common concern for post-human perspectives on consumption and markets that reflect on these topics. Dr. Lorna Stevens, expert in ecofeminism has agreed to serve as a discussant.

Some key terms: anthropocentrism, biosociality, sustainability, posthumanism, biosemiotics, neo-animism, nature, culture, ecosystem.

Reflections on "The Signs of Life and the Life of Signs

EXTENDED ABSTRACT

The purpose of this research is to propose interdisciplinary arguments for a dialogue between consumer culture theorization and biological anthropology and biology. In this sense, it contributes to the "manifesto" for a future interdisciplinary research program published earlier this year (Askegaard 2021). Here it was underlined that an endeavor to open a discussion between the scientific field of CCT with its roots in hermeneutics and other schools of thought in sociology and cultural anthropology and the disciplines of biological anthropology and biology is sorely needed. So far, it is fair to say, there has been very little such dialogue. CCT researchers are generally "culturalists", and rightfully so. But as Morin (1980 - and before him for example also Marcel Mauss) would point out, any attempt to isolate the phenomenon of "culture" from the fact that it exists in and of a biological world is suffering from the same type of reductionism as the one, CCT originated in opposing, i.e. reducing the consumer to a bounded rational decision maker operating independently of her/his cultural contexts and existential reflections. CCT, so far, has been 'missing the boat', as Rose (2013) warns us not to do. He, instead, invites researchers in the human sciences broadly to acknowledge that "much that is specific about our humanity, our individual existence and collective arrangements can be understood in terms of our characteristics as specific kinds of living beings" (*op.cit.* p.8).

It is thus very fair to say, that a "biological turn" has not appeared within the realm of interpretive consumer research. This is very different from the situation in consumer psychology, where neurological research and not least its intellectual derivative, evolutionary psychology, has produced a highly visible "Darwinization". These attempts to advance a biological / evolutionary psychology perspective in marketing and consumer research generally remain caught in the implied assumption that all behavior is goal-oriented and are consequences of evolutionary psychological optimization processes. It is largely based on a relatively hard-wired modular mode of conceiving the human brain and its ensuing adaptive functionality that has been strongly challenged, even by contemporary

neuroscience (David 2002). It is thus easy to criticize research that builds on reductionist applications of Darwin's notion of natural selection, but that is not the same as denying that biology should play any role at all. The question is how interpretive consumer research can come to terms with a non-reductionist biology that neither jumps on the bandwagon of neuromania nor fall prey to an attack of *Darwinitis Vulgarensis*.

This research provides an exploration of a non-reductionist attempt at a mutual rapprochement between biological science and the sciences of the human in order to reflect on the reach and significance for consumer research of such a rapprochement. Inspired from the classical philosophy of semiosis of C.S. Peirce on the one hand, and biologist von Uexküll's exploration of the biological significance of the *Umwelt* (≈ surroundings, environment) on the other, the theory, indeed the paradigm, of biosemiotics first suggested by American semiotician Thomas Sebeok and developed by Danish biologist Jesper Hoffmeyer (Hoffmeyer 2008) represents one potentially very fertile ground for biosocial theorizing. Biosemiotics allows for the fundamental insight that sign processes, "interpretation" and therefore a certain degree of autonomy is not exclusive to the animal, let alone the human world but is constitutive of life itself. Life processes, in other words, are fundamentally semiotic. This has consequences not only for how biology sees itself, although that may be the biggest inherent revolutionary potential, but also, according to Hoffmeyer, to our thinking in other domains such as ethics, aesthetics, health, cognition and technology. This presentation will critically and constructively evaluate these propositions.

Apart from its concrete influence of such central conceptualization for consumer research, biosemiotics as a paradigmatic point of departure invites to a non-reductionist dialogue between scientific disciplines studying the human from biological as well as socio-cultural perspectives, in other words the constitution of a biosocial theorization. Consumer culture theory can – and should – find inspiration in open systems approaches to human biology and culture, such as biosemiotics, in order to anchor its theorizing of behavior in a framing of the human being that includes a complex interactivity not solely in terms of the classical structure-agency relationship of the individual and its social context but also to the bio-communicative characteristics of the species.

As noted by Descola (2013), the relationship between humans and nature will be paradigmatic for the challenges of, and the questions imposing themselves in this century. An acknowledgment of the human role in the contemporary Anthropocene biosphere rests on the dethroning of humanity as a species outside and beyond the biological. On a more situated level, an understanding of the biosocial *anthropos* is, in my view, a precondition for understanding the modes of human desires, seductions and aberrations. The complexity of life and the complexity of the human condition is the starting point for a consumer research and an approach to consumer culture, that is able to cope with the obvious challenges we are facing.

Ontological Hybridities in Consumption Practices

EXTENDED ABSTRACT

This research examines the mingling of human/non-human relationships in Western consumption practices. Since the Enlightenment, relationships to non-human entities, namely nature (Canniford and Shankar 2013), are shaped by a particular modern "ontology" (Descola 2013), or worldview (Redfield 1952). What Descola (2013) terms "naturalism" grants mankind the unique privilege to stand above and apart from nature, owing to its reflexivity and consciousness (Charbonnier 2015; Descola 2013; Latour 2004; White 1967). However, some scholars alert us to the fact that the dissociation of humans from nature, known as the "Great Divide," is a fiction that has been entertained for centuries through Science, Reason and Technique (Latour 2004; Viveiros De Castro 2004). As a result, such epistemological dualism prevents us from understanding relationships that are not part of this dominant paradigm (Choné et al. 2016).

Anthropologists have long established that magical thinking permeates individual and social practices (Frazer 1890; Hirschman 1985; Mauss 1902; St James, Handelman, and Taylor 2011) and continues to do so in so-called highly educated societies (Rozin et al. 1986). Psychologists as well as CCT researchers provide many instances of how sympathetic magic operates (Argo, Dahl, and Morales 2006, 2008; Morales and Fitzsimons 2007; Fernandez and Lastovicka 2011). These studies demonstrate that Westerners may be affected by non-modern ontologies, thus illuminating the entanglement of categories such as nature/culture and humans/non-humans (Canniford and Shankar 2013).

However, in addition to Askegaard's (2021) call about biosociality, more research is needed on ontological porosity and the way consumers hybridize non-naturalist ontologies in their consumption practices. We draw on Descola's (2013) approach of four "ontologies" – animism, totemism, analogism and naturalism – to explore such ontological hybridization within everyday life. Descola's (2013) four "ontologies" rest on the way human societies conceive of "physicality" (form, substance) and "interiority" (intentionality, mind, consciousness) of other beings, which are then perceived to be similar or different. We next briefly describe each ontology that, according to Descola (2013), is connected to both specific cultural groups/societies and geographical areas.

In analogism, all elements, including beings, are differentiated from each other through a discontinuity of both interiority and physicality. This creates a feeling of disorder that is solved by the search for stable correspondences between heterogeneous components (Descola 2013, 2014). Differently, animism considers that most being (humans, animals, plants and certain objects) possess an interiority similar to those of Man (a continuity of interiorities), while being characterized by a discontinuity in their physicalities. Relationships between humans and non-humans are intersubjective. In totemism, particular sets of humans share physical and moral properties with non-humans in the form of a continuity of both their interiorities and physicalities. In naturalism, human beings are the only ones to have a mind, a consciousness, a reflexivity. While naturalism acknowledges a discontinuity of interiorities, it posits a continuity of physicalities of non-humans and humans along a continuum that relies on physical, chemical and biological laws. Due to their formal and informal education, Westerners operate within a naturalist ontology. However, Descola suggests that non-naturalist ontologies may occasionally "infiltrate" the organization of our representations, actions and fields of habits (Descola 2013). We thus further the author's conjecture that ontological boundaries may be porous so as to create ontological hybridities, i.e., the co-presence of several ontologies within individuals.

In order to explore ontological infiltrations in consumption practices, our research adopts an interpretive, phenomenological perspective (Goulding 2005) with 25 consumers. These were initially recruited in the first author's close circle of acquaintances to find the most favorable conditions possible for intimate conversations that require complete trust. Then, a snowball sampling was used in order to bring more variance in terms of cultural variance and human-nature relationships as known by relatives and friends. Interviews were conducted at home and sought to contextualize various experiences of nature and relationships to animals and plants, but also to objects,

inanimate things and spirits, e.g., having an animal, being vegetarian, placing credence in astrology, believing in powers of gemstones, etc. The sample consists of 17 women and 8 men, aged 24 to 67 (with an average age of 41). We tried to uncover, in our informants' own verbalization, various thematized narrative accounts that were then confronted to Descola's analytical categories to illustrate instances of naturalist as well as animist, totemic or analogic ontologies.

Findings show that informants exhibit analogic and animist infiltrations in naturalistic ontology (and to a lesser extent totemic infiltrations that we will not develop here because of space constraints).

Analogic infiltrations lead informants to link together elements that are supposed to be unrelated within naturalist reasoning. Such infiltrations result in buying, crafting or retrieving (through inheritance or donations) objects (lucky charms, dream catchers ...) for their magical effect or because they (re)present or symbolize a deceased loved one, part of whose being is (in) the object. Analogic infiltrations nurtures forms of consumption that are based on a constant exchange of universal energies in the world, regardless of distance and time. Such fluids lead people to resort to alternative medicine such as lithotherapy, magnetism, reiki, purification, etc., and also to pay particular attention to the origin and traceability of products. This explains why they also favor self-production for food and various ecofriendly household products. Circulation of energies also leads them to attach great importance to nature and to respect plants and animals on the basis that everything is interconnected and energetically linked.

Differently, animist infiltrations result in an anthropomorphization of non-humans, mainly animals but also plants and objects. In animism, non-humans are considered to be similar to humans in terms of interiority, hence leading to protect biodiversity and treating other beings with great care. Though their purchases, informants with animist infiltrations take into account how animals are reared and avoid consuming products of animal origin or containing animal products in food, clothing and cosmetics. Likewise, some do not buy pets from pet stores because animals are not things that can be monetized. Informants exhibit similar orientations towards plants. They for example refuse to use chemicals for weeding and exclude the purchase of cut flowers because this would "kill" them. Overall, animism leads to pro-environmental consumption since many informants engage in self-production of various goods (clothing, cosmetics, hygiene and cleaning products) that respect non-humans and environment. They also frequently buy and give second-hand products to which they offer a second life in order to preserve natural resources.

Findings bring to light ontological infiltrations that permeate naturalist ontology in everyday consumption practices. We show that one individual may accommodate several ontologies which are variously mobilized depending on circumstances or situations. In sum, we demonstrate that Western consumers exhibit a continuum of ontological hybridities that more or less hybridize their naturalist ontology. Our research aims to go beyond the Anthropos to fully consider the active, perceptual and practical relationships that individuals entertain with various beings of the world, what Ingold calls "an ecology of materials" (2012: 435). Our preliminary findings make it possible to consider inflections that are likely to foster a more sustainable future.

Ontology and Circulation: Towards an Eco-economy of Persons

EXTENDED ABSTRACT

The marketing discipline evinces what could properly be termed a Romantic conception of the improvability of humanity and its ability to contribute to this progressive improvement (Doherty, Clark and Brown 1998; Campbell 2018/1987). Strategic initiatives like Corporate Social Responsibility (CSR), sustainability marketing, Base of the Pyramid (BOP) marketing or FairTrade enshrine this Romantic drive to ethical progress (Belz and Peattie 2010, 14), although each inspires well-grounded critiques (Kolk and van Tulder 2010; Huang 2017; Blowfield and Dolan 2010). Set against this is the growing recognition among scientists that whatever its form market capitalism inevitably produces ever greater ecological precarity (DeSabata 1995; increasing GhG emissions, deforestation, loss of biodiversity, ocean acidification, climate change induced migration). Implicit in this recognition, is the limitation of a Romantic marketing paradigm to address these existential threats to humanity. Consequently, this paper investigates an alternative vision of resource circulation via a critique of prevailing ontology.

The paper suggests the possibility of a post-humanist, neo-animistic retooling of resource circulation and offers a glimpse of an eco-economy of persons. A neo-animist ontology helps address the challenges to sustainable human livelihoods and biotic communities imposed by the Dominant Social Paradigm (DSP) as identified in macromarketing, the enduring attitude-behavior gap identified in green consumer research, and the axiological partitioning of behaviors found in consumer practice research. But more fundamentally a neo-animist perspective critiques the social exchange paradigm which anchors the entire marketing episteme (Bagozzi 1978; Brinberg and Wood 1983; Pandya and Dholakia 1992; Safari and Albaum 2019), as well as most approaches to the circular economy (Clark and Bonato 2020; Temesgen, et al. 2019). At a minimum, this neo-animist offers an alternative to the Romantic perspective on resource circulation. It "acknowledges that it is only through an examination of what keeps society and consumption unsustainable that we can understand the ways to transition to a sustainable society" (Kemper and Ballantine 2019, 293). The paper briefly reviews some of the literature on sustainable marketing and consumption. Then, the naturalist and neo-animist ontologies are contrasted. Animism does not imagine a nature-culture dichotomy. Animism asserts that all living beings have similar "souls," or at least selves, even though radically different physical bodies house these selves. Animal and plants are "social beings, endowed with interiority and faculties of understanding similar to those of humans" (Descola 2013, 352). This recognition of an indeterminate, animating force shared among living things leads philosophers to recognize parallels between animism and Renaissance neo-Hermetic philosophy and Schilling's *Naturphilosofie* (McGrath 2019), traditions which lost out to naturalism in Western thought.

Consistent with Guattari's (1989) observation, subjectivity in animisms is destratified, meaning that unlike naturalists, animists may attribute personhood to humans or other beings. However, these attributions are contingent. Not all creatures are other-than-human persons; they, like humans, must display the capacity to "be with others, share a place with them, and responsibly engage with them" (Bird-David 2006, 43). Ascribed selfhood is both relational and situational in animist societies rather than foundational and individual (Descola 2013; Kohn 2003; Strathern 1988; Strathern and Stewart 1988). Social acts define an animate being as a person, for whom social life is emergent (Ingold 2000). What Descola calls transitive

principles of resource circulation, specifically gifting, reciprocal exchange, and predation (symbiosis) are these defining actions.

An contemporary example of the matsutake eco-economy (Tsing 2015) is then offered that provides a glimpse of neo-animist principles of exchange in operation. The paper then returns to a critique of exchange theory in marketing and examples of non-utilitarian resource circulation to illustrate the paradigmatic changes required to move to a more sustainable system of resource circulation while preserving a role for exchange in a future economy.

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Contemporary Investigations into the Relational Understanding of Branding

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Paper #1: Capitalizing on Competitor's Doppelgänger Brand Images: Insights from the Positioning Wars in the Mobile Dating Apps Market

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Paper #2: Avant-Garde Brands: Rebels Successfully Challenging the Status Quo

Delphine Dion, ESSEC Business School, France
Gregory Carpenter, Northwestern University, USA
Ashlee Humphreys, Northwestern University, USA

Paper #3: How Smart Brands Nurture Consumer-AI Entanglement

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SESSION OVERVIEW

Culturally-oriented consumer researchers contributed to contemporary branding thought with two interlinked theoretical perspectives—namely, cultural branding and brand as assemblage. While cultural branding attends to how iconic brands draw from socio-historical disruptions and emergent cultural ideologies (Beverland et al. 2020; Brunk, Giesler and Hartmann 2017; Holt 2004; Holt and Cameron 2010); brand as assemblage highlights how interactions between human (e.g., consumers, managers, experts, journalists) and non-human actors (e.g., competing brands, product design, social media discussions) constitute the socio-material amalgams that we call brands (Giesler 2012; Parmentier and Fischer 2015; Preece, Kerrigan and O'Reilly 2019; Rokka and Canniford 2016). At the core of both perspectives lies the idea of relationality: brand meanings are constructed through interrelations between networks of actors, practices, discourses, and occurrences at the intersection of macro, meso, and micro levels of analysis.

In line with the conference theme *What the World Needs Now*, we believe that the contemporary socio-material condition necessitates a relational understanding of branding more than ever. Brands increasingly attain their meanings in relation to disruptive social movements and ideological orientations (e.g., Nike and BLM); alternative experts and conflicting expert systems (e.g., debates on the safety of Pfizer/BioNTech mRNA vaccine); and functionalities of digital platforms (e.g., Tinder's swiping game) and human-AI interfaces (e.g., Alexa as family member). Accordingly, this session brings together three empirical papers focusing on how such interrelationships shape brand trajectories.

The first paper focuses on brand positioning through a conflictual relational process. It examines how denigrating messages about the market leader disseminated by a network of actors become source material for competitors' positioning strategies. Drawing on the mobile dating apps market, the authors reveal how competitors position their brands against the deficiencies of the leader by enrolling an assemblage of cultural ideologies regarding romance and gender equality, person-brands of app executives, and features of app interfaces.

The second paper focuses on brand value generation through relations with alternative experts. It investigates how rebellious brands challenge established expert systems and attain "avant-garde" status. Focusing on French wine, the authors demonstrate that winemakers embracing the disreputable Vin de France designation benefit from their relations with wine merchants, sommeliers, and consumers in creating unconventional brand assemblages with alternative material and expressive elements.

The third paper focuses on how technology brands orchestrate consumer-to-consumer and consumer-to-AI relations. Drawing from the object agency conception, the authors define smart brands as an agentic amalgam of brand, technology and AI. Focusing on Alexa and Google Home, they demonstrate how smart brands infiltrate into family social systems, disrupt existing consumption practices, and (re)skill consumers to new branded consumption constellations.

While we focus on three specific cases of how brands attain and generate meaning in relation to expert systems, technology, consumers, and competitors; our insights can be extended further by examining different actors, processes, and relations in yet other contexts. We hope that our session will spark discussions on the contours of branding and inspire researchers to account for the role of various human and non-human actors—once considered externalities—in co-steering brand trajectories.

Capitalizing on Competitor's Doppelgänger Brand Images: Insights from the Positioning Wars in the Mobile Dating Apps Market

EXTENDED ABSTRACT

When brands are assemblages co-constituted by a multitude of actors, brand images are constructed and negotiated through recursive processes over which managers have limited control (Diamond et al. 2009; Giesler 2012; Thompson, Rindfleisch and Arsel 2006). This could, on the one hand, mean that different market actors (such as consumption communities, institutionally-credited experts, media personalities) can be enrolled as brand co-authors and participate in value-generating activities (Schau, Muñiz, and Arnould 2009). However, it could also prove detrimental as these market actors can reframe brand meanings in value-diminishing ways (Holt 2002; Kozinets and Handelman 2008). Culturally-oriented consumer researchers advanced the doppelgänger brand image (DBI hereafter) conception to analyze risks of this nature and make suggestions for brand managers to identify and assuage resulting threats (Thompson et al. 2006; see also Giesler 2012; Parmentier and Fischer 2015). A DBI is defined as "a family of disparaging images and stories about a brand that are circulated in popular culture by a loosely organized network of consumers, antibrand activists, bloggers, and opinion leaders in the news and entertainment media" (Thompson et al. 2006, 50). According to this conception, a DBI operates as the evil twin of the official branding story by challenging the brand's authenticity and undermining the identity value it generates for consumers. Brand managers, nonetheless, can treat the emergence of these demeaning messages as an early warning sign of the frailties of their branding story and make necessary changes before the DBI threat gets out of hand (Giesler 2012).

This early conception provides important insights regarding the emanation and trajectory of DBIs and pertinent suggestions for

branding professionals to proactively turn DBIs to their advantage. However, it pays scant attention to cases where competitors can also turn the DBIs of their rival brand to their own advantage. According to the original definition, defamatory messages are disseminated by "consumers, antibrand activists, bloggers, and opinion leaders;" however, competitors are also likely to take an active part in brand disparagement by means of their marketing communications. While Thompson and colleagues (2006) identify that Starbucks's vilification as a greedy corporate giant helped create the opposing market niche for locally owned coffee shops, their analysis does not focus on how these local businesses utilize Starbucks' DBI strategically. To tackle this omission, we examine the ways in which the DBI of a popular brand becomes the starting point for competitors' positioning strategies. We specifically ask: How do competitors utilize the DBI of a rival brand to create a distinct market position for their own brands?

In seeking answers to this question, we focus on the positioning wars among mobile dating apps. These digital platforms (as successors of online dating sites such as match.com and eHarmony) initially emerged in the early 2010s and have gained remarkable popularity ever since. Tinder as the most popular dating app is currently used in 190 countries and has registered more than 60 billion matches to date (Tinder 2021). Besides Tinder, there are manifold other apps including Grindr, Bumble, Coffee Meets Bagel, Happn, Hinge, and the League that appeal to individuals with diverse romantic-sexual preferences. Since day one, Tinder has suffered from various DBIs that were instituted by frustrated consumers, journalists, and social media discussions and exacerbated by the marketing communications of competitors. Two most salient DBIs of Tinder have been that (1) the app brings about "the dating apocalypse" by fostering an emotionless hookup culture and (2) it is a hotbed for sexist, sexually objectifying, and misogynistic behavior towards women (Sales 2015). Two rival brands have especially been persistent in making these DBIs central elements of their marketing campaigns and presenting their apps as remedies to Tinder's shortcomings—namely, Hinge and Bumble. Focusing on the positioning wars between these three brands, we assembled an extensive qualitative dataset including ad campaigns and press releases from Tinder, Bumble and Hinge websites; news articles and interviews with app executives in popular media outlets; walkthrough analyses of app interfaces (Light, Burgess and Duguay 2017); and interviews with app users.

Findings of our hermeneutic analysis demonstrate that rival apps derive strategic value from Tinder's DBIs through aligning select cultural ideologies, professional and personal conduct of their app executives, and functionalities of the app interfaces. They first cull from widespread cultural ideologies regarding romance (e.g., traditional ideals of romantic love) and gender equality (e.g., the #MeToo movement) to construct origin myths standing up to Tinder's toxic culture. Then, they cultivate these myths through the person-brands of app CEOs and their emotional and professional styles (e.g., Justin McLeod as hopeless romantic and Whitney Wolfe as driven feminist). Lastly, they inscribe the branding story into the user interface through strategic design elements (e.g., icebreakers instead of swiping and women-send-the-first-message feature).

Based on our findings, we extend previous literature on DBIs in two primary ways. First, we elucidate the specific role of competitors in exacerbating the DBI of a rival brand. We show that on top of casting dispersions toward the targeted brand's authenticity and identity value, competitors' purpose in igniting their rival's DBI may be carving out a unique market position by presenting their brand as a remedy to the deficiencies of the targeted brand. Second, we highlight that the targeted brand itself can capitalize on its own DBIs

in ways that are not identified in previous literature. On top of using DBIs as diagnostic tools to detect and revamp the problematic aspects of their brand image, brand managers can choose to own up to their DBIs and make them part and parcel of their brand image. Our analysis provides additional insights regarding the alignment of executives' person-brands with the brand image of their company and integration of product design features in branding stories (thus linking cultural branding and brand as assemblage insights).

Avant-Garde Brands: Rebels Successfully Challenging the Status Quo

EXTENDED ABSTRACT

Entering a long-established market to challenge the status quo is a daunting venture. Yet challengers succeed. Picasso introduced cubism, Apple redefined mobile phones, (e.g., Carpenter and Nakamoto 2019), and nouvelle cuisine eclipsed classic French cuisine (Rao, Monin and Durand 2003; Bourdieu and Delsaut 1975). The work of Picasso and others inspired the term *avant-garde* (Poggioli 1981), describing artists who are novel, radical, and at least implicitly critical of the status quo. In addition to artists, music, fashion designers, films, and brands are described as avant garde. Although scholars have examined many strategies firms use for later entry, none have examined the potential effectiveness of avant-garde brands.

In this paper, we explore how firms use avant-garde brands to successfully challenge the status quo. We focus on French wine. Although wines from the most prestigious regions of France remain the world's most prized and most expensive, wines bearing the vin de France label are among the least prestigious. A group of winemakers has embraced the Vin De France designation with the audacious goal of making wines that rival or surpass the most respected wines of France. Against the odds, some of these rebels are succeeding. The Vin De France wines have succeeded by becoming avant-garde.

We examine the success of avant-garde brands using ethnographic methods. We interviewed producers, retailers, experts, and consumers (Dion and Borraz 2017). We combined interviews with participant observations in shops, and analysis of press articles (Dion and Borraz 2017, Humphreys and Carpenter 2018). Our analysis offers three new insights into late-entry strategy.

First, our analysis suggests an important, yet overlooked role for status. Existing studies of late entry strategy focus on differences among brands based on product attributes but exclude status (e.g., Carpenter and Nakamoto 1990, Zhang and Markman 1998). Status is recognized as a source of an enduring advantage (e.g., Dion and Borraz 2017, Humphreys and Carpenter 2018). The vin de France producers low status suggests that they will be disadvantaged relative to their more famous rivals. We find, however, that the Vin De France producers use innovation to create competitive advantage based on the greater status of their rivals. Incumbent producers cannot imitate these innovations without forgoing their status. Our analysis, thus, describes how low-status later entrants use strategic innovation to transform the status of their rivals into a competitive disadvantage.

Second, our analysis offers new insight into how late entrants shape consumer tastes. Analyses of late-entry strategy assume that firms compete to maximize profits based on exogenous consumer preferences (Carpenter and Nakamoto 1990). Scholars have proposed that firms' competitive strategies shape consumer tastes (e.g., Jaworski, Kohli, and Sahay 2000), but empirical evidence on how firms influence consumer tastes is limited (e.g., Humphreys and Carpenter 2018). Humphreys and Carpenter (2018) show that high-status brands can define product categories in the long-established U.S. market for wine and set benchmarks in those categories. With less

influence, lower-status firms can struggle. In contrast, the Vin De France cooperate with higher-status actors, such as wine merchants, which enables the Vin De France producers redefine the consumers' tastes for wine. Our analysis, empirically demonstrates how low-status firms can shape consumer preferences, while suggesting new avenues for late entry strategy.

Third, our analysis offers new insight into the role of brand symbolic meaning in late-entry strategy. Studies of late entry identify strategies for brands based on attribute differences (e.g., Carpenter and Nakamoto 1990, Zhang and Markman 1998). Previous analyses, however, exclude the symbolic meaning of brands, despite a long tradition of research on brands as valued symbols (e.g., Levy 1959, Rokka 2021). Our analysis suggests that, in addition to attribute differences, later entrants portray themselves as novel, radical, and implicitly critical of the status quo—or simply avant-garde—in comparison to incumbents who can be cast as old-fashioned, conventional and representing the status quo. By creating symbolic differences, even low-status later entrant can successfully challenge exceptionally formidable incumbents. We explore the implication of this finding along with our other findings for managers.

How Smart Brands Nurture Consumer-AI Entanglement

EXTENDED ABSTRACT

How does new branded technology shape consumption? The technology consumption literature in marketing has extensively documented how individual consumers, families, and groups experience and engage with new technological innovations, as well as navigate their different meanings, ideologies, and related practices (e.g., Belk 2013; Giesler 2008; Kozinets 2008; Kozinets, Patterson and Ashman 2016; Mick and Fournier 1998; Schau and Gilly 2003; Sherry 2000; Tian et al. 2014). A related stream has highlighted how brand managers and marketers can successfully create, legitimize, diffuse, and maintain new markets for technological innovations (e.g., Brown, Kozinets, and Sherry 2003; Epp, Schau and Price 2014; Giesler 2012; Giesler and Fischer 2018; Sood and Tellis 2005). In both conversations, however, marketing and consumer researchers have predominantly awarded agency to human actors, be they consumers, brand managers/marketers, or both. Recently, however, consumer research has shifted its focus away from human agency to understanding non-human agency, including technology, and its influence on consumers and markets (e.g., Epp and Price 2010; Hoffman and Novak 2018; Martin and Schouten 2014). Yet, minimal scholarly attention has been devoted to how brands themselves, in particular those for technological innovations, acquire agency to shape consumption practices, rituals, and activities.

In this paper, we therefore examine how technology brands modulate consumption practices in the home by theorizing and unpacking the concept of *smart brands*. We define *smart brands* as an agentic amalgam of brand, technology, and artificial intelligence. Both within and outside marketing and consumer research, agency is typically understood as the ability to act. A subject or market actor can undertake action through his/her decision-making to choose between available alternatives. Yet, according to Miller's (2005, 11) theory of materiality, objects also possess agency to influence consumers, since "material forms have consequences for people that are autonomous from human agency, they may be said to possess the agency that causes these effects." In the words of Borgerson (2005, 441), "Miller's theory of materiality calls the agency of subjects and objects into question, as agency appears to emerge in relation, not as a quality of either subjects or objects." Building on Miller's (2005) idea of object agency, we argue that *smart brands* have agency to think, shape-shift, interrupt, support, colonize, and overall change current social systems.

Our context of inquiry into *smart brands* is Amazon Alexa and Google Home. We draw from ethnographic participant observation and in-depth interviews along with archival and netnographic data to reveal a novel hierarchy of integrated brand uses from branded information to branded action that families acquire and adopt through *smart brands*. Specifically, we illustrate how these *smart brands* act akin to Trojan Horses by innocently moving into social systems such as homes and families only to disrupt existing consumption practices and (re)skill consumers and their families to new branded consumption constellations. We term this process of brand acculturation, E.M.P.A. (exploring, miming, programming, and adjusting) where the family adjusts to the *smart brand* and vice versa. In the first stage of playful interaction, family members ask silly questions to the newly acquired Alexa or Google Home that is typically placed in a prominent family living space, such as the living room or kitchen. In the next stage of performed interaction, different skills are programmed into the Alexa or Google Home, such as home lighting automation that requires purchasing new technology brands supported by the *smart brand*, like Philips' Hue light bulbs. This is followed by the third stage of normalized interaction, where family members accept and routinely purchase new brands for their home recommended by different Alexa or Google Home updates and functions. The final stage we have identified, naturalized interaction, the family members begin to self-reflect on how the smart brand has changed who they are as a family.

Overall, our findings highlight the agency of branded technological innovations. By demonstrating not just how consumers skill Alexa and Google Home, but also how Alexa and Google Home skill consumers and their families, our paper contributes to the literatures on branding innovations (e.g., Giesler 2012), market system dynamics (e.g., Giesler and Fischer 2016), and family consumption (e.g., Price and Epp 2015 for an overview). Family, according to technology marketers, is a decidedly romantic project in which social relationships are stable and technology operates like the proverbial campfire that nurtures unprecedented levels of community and collective problem-solving. A related narrative profiles the sole individual (young and elderly) for whom devices such as Google Home or Amazon Alexa constitute surrogate family. From a sociological experience design perspective, however, smart consumer technologies interact much more dynamically with what Epp and Price (2008, 50) refer to as identity bundles – fragile and frequently changing assemblages of social actors and smart objects, each with their own interests, agendas, preferences and skill levels. As these *smart brands* raise new questions about who controls (and can control) what, they can provoke not only social instabilities and conflicts but also feelings of imprisonment, exclusion, and loneliness. We therefore encourage future researchers to approach the *smart brand* critically, not as a harmonious unity of individuals but as an inherently unstable and evolving social system in which everything is connected but nothing adds up.

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Caregiving: Navigating Tensions of Caring for Self and Others

Co-Chairs: Rachel Hochstein, Florida State University, USA
Colleen Harmeling, Florida State University, USA
Ela Veresiu, York University, Canada
Discussant: Craig Thompson, University of Wisconsin-Madison, USA

Paper #1: The Seesaw of Loss and Hope: How Vaccine-Hesitant Parents Make Sense of and Experience their Choices to Engage in Oppositional Social Practices

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Paper #2: Taking Care of Society: Understanding the Disruption and Persistence of Social Norms During the COVID-19 Pandemic

Matt Godfrey, University of Massachusetts Amherst, USA
Elizabeth G. Miller, University of Massachusetts Amherst, USA
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Paper #3: Self-Care: How Consumers Balance Self-Centered Care Consumption with the Needs of Others

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SESSION OVERVIEW

Caregiving is an inherently intimate act where individuals, families, and service providers make decisions about how to best enhance individual and communal well-being. Parents care for children, children care for parents, teachers care for students, doctors care for patients, and individuals care for themselves. In the past, caregiving occurred primarily within the home and consisted of mainly unpaid labor. Today however, a greater volume of caregiving services are provided by the market. In fact, providing products to fulfill basic needs of life such as soap, medication, and baby formula is the basis for many consumption markets.

Standards of personal care and caregiving are generally collectively defined. However, some consumers may define self-care and caregiving differently from these collective standards and may face complicated choices about how to balance caring for themselves and for others. This may lead them to make care decisions that conflict with the needs and recommendations of influential actors such as bosses, clients, friends, doctors, and public health officials which can create tensions both within the individual and within communities.

The session includes three papers providing unique perspectives on how individuals make care decisions influenced by important others and communities. Taken together these papers shed light on how consumers navigate tensions between caring for themselves and caring for others. First, Robinson, Epp, and Tomar examine how consumers make decisions related to vaccinations for themselves and their children when decisions not to vaccinate are scrutinized by medical professionals and entire communities. Next, Godfrey, Miller, and Cao utilize the uniquely important context of the COVID-19 pandemic to examine consumer choices regarding mask-wearing as a public safety measure. Finally, Hochstein, Harmeling, and Veresiu discuss how consumers determine their self-care needs and navigate tensions that occur when consumers choose to put their own physical and mental well-being first.

This session includes timely research that is especially important considering current ongoing public health crises in which an individual's choice of how to care for themselves may be at odds with collective standards of care. The session is also important considering the increase in mental health awareness and crises. It provides insight into how consumers care for both their physical and mental well-being through the (lack of) consumption of products and services. The goal of the session then is to inspire theoretical and practical insights about caring for self and others that are useful for public policy officials, public health officials, and marketers of caregiving products and services. We expect the session will offer both conceptual and empirical discussion that will attract public policy, transformative consumer researchers, and service researchers.

The Seesaw of Loss and Hope: How Vaccine-Hesitant Parents Make Sense of and Experience their Choices to Engage in Oppositional Social Practices

EXTENDED ABSTRACT

Vaccinating one's child is not just a consumer choice in today's risk and knowledge society. It is often framed as a moral act, with implications for public health. "The moral dimension of risk is embedded in the underscoring of the child's need for support, safety and protection as a fundamental parental responsibility" (Brusdal and Frønes 2013, 160). Parents generally seek to justify their decisions as aligned with normative prescriptions of moral consumption (Pugh 2009). However, even though a strong formal public code supports the long-term benefits of childhood vaccination with substantial evidence from the medical establishment, the World Health Organization lists vaccine hesitancy among its top ten threats to world health (The Lancet 2019), directly contributing to epidemics of vaccine-preventable diseases (Feikin et al. 2000; Parker et al 2016). Our research question asks, how do vaccine-hesitant parents justify and experience their choice to delay or avoid vaccines for their children within an economy of morals?

Our study joins a broad conversation recognizing that the responsibility for many choices with implications for public well-being has shifted from institutions to individuals (Veresiu and Giesler 2018). These choices are loaded with moral imperatives and subjected to judgments from an array of stakeholders (Eckhardt and Dobscha 2019; Sharmir 2008; Soneryd and Uggla 2015). Certainly, parenting decisions are no exception. Parents often experience harsh moral judgments when departing from normative actions (Epp and Velagaleti 2014; Thomas and Epp 2019). Of particular interest, recent research recognizes the emotionality involved in responsibilization, especially in cases of resistance (Gonzalez-Arcos et al. 2021), but more work is needed to specify the emotion work involved in navigating resistance to fully capture parents' experiences of justification.

We adopt Boltanski and Thévenot's (2006) "economies of worth" as an analytic lens. It draws our attention to the ways individuals justify their choices to others by appealing to what they believe are commonly agreed-upon principles. We know, however, that principles sometimes conflict on moral grounds. In our context, potential conflicts exist between domestic polities rooted in the micro-context of familial bonds and civic polities rooted in the macro- and meso-context of public health that emphasize the common good. Thus, the grounds of moral arguments are differently configured (Hauser and

Benson 1999). Public health officials marshal statistical evidence that assumes a *deficit model* of public understanding of science (Gross 1994), but this model misses the "situated logics" of family, religious, and political beliefs that guide parents' vaccination decisions (Campeau 2019). An economy of worth lens helps us analyze the beliefs, ideologies, and value systems that parents hold and how they are shaped by and expressed through discursive interactions with the medical establishment.

To study parents' moral justifications and emotion work, we partnered with a mid-Michigan county's local health department aimed at developing a customized healthcare intervention to increase pediatric immunization completion rates. The State of Michigan requires parents to attend a one-on-one vaccine education session prior to granting non-medical vaccine waivers for their children. After approaching all parents who requested a non-medical waiver (between 5/25/16 to 9/9/17), we obtained audio recordings of 388 parent-nurse conversations to identify parents' complex vaccine stories (Czarniawska 2004; Thompson 1997). Follow-up depth interviews with a purposeful sample of these parents further develop findings around the emotion work parents undertake as they navigate economies of worth to justify their choices.

As we anticipated, our analysis revealed that vaccine-hesitant parents identify new risks and attempt to justify their choices against the institutional dictum in a relationship of vaccination (that of their child) consumption with the state, medical institutions, and the community. This is accomplished through discourses that are characterized by parents' experiences of emotional forces of loss and hope that we portray through a seesaw metaphor. Three parental discourses of justification emerged from our analysis: 1) reacting to **lived/ empathic health traumas**, 2) believing in the body's superior **native immunity**, and 3) focusing on **institutional distrust** (see Table 1). Across the themes, we observed tensions between domestic and civic polities that parents resolved through emotion work. The seesaw metaphor captures two interconnected ends that summarize parents' emotion work: protection of their child(ren) from communicable diseases (CD) versus protection of their child(ren) from potential negative outcomes they believe may result from immunizations. For example, following a health trauma, parents saw themselves thrown high up on one end of the seesaw with little agency over their children's health ("Thrown High"). They tended to interpret their prior vaccination decision as lowering one end of the seesaw by protecting their child against CD but raising the seesaw's opposite end by increasing the likelihood of experiencing a health trauma (e.g., autism). Other parents could, at first, be morally driven to avoid vaccinating their child altogether due to strong religious reasons bolstering the discourse of native immunity and act as "Bystanders," but they could later "Tiptoe" to the other end of the seesaw and vaccinate their child in a spread-out fashion to gauge the risks and appease their anxieties. In this way, the seesaw metaphor affords a dynamicity to vaccine-hesitant parents' decision-making rather than succumbing to the assumption that they are "oriented towards the static state" (Palomera and Vetta 2016) of adopting a discourse. Thus, the economies of worth framework illuminates how parents execute emotion work while gauging risks and contingencies involved.

In part, parents' feelings of anxiety and loss evidenced in the seesaw metaphor stem from the normative judgments they face when they must accept the moralized responsibility for their choices about childhood immunization (Gonzalez-Arcos et al. 2021; Veresiu and Giesler 2018). Acknowledging these tensions, there is more required than the civic world's "technology of trust" (Hüntelmann 2020) garnered through statistical evidence and scientific jargon. A deeper, "local" contextualization to understand parents' choices (Lawrence

et al. 2014) is paramount toward exploring the roots of vaccine hesitation and how they can be addressed. Ultimately, successful healthcare interventions should move beyond the deficit model of messaging about vaccine hesitancy to instead consider customized interventions based on the emotion work parents undertake to resolve tensions between domestic and civic polities.

Taking Care of Society: Understanding the Disruption and Persistence of Social Norms During the COVID-19 Pandemic

EXTENDED ABSTRACT

COVID-19 brought the importance of care to the foreground in healthcare and frontline market interactions. But the global pandemic also disrupted daily routines and rituals that normally sustain important shared meanings, identities, and relationships. We conduct a multi-method study of how consumers negotiate COVID-19-related social norm disruptions. Our research shows that these negotiations constitute an often-unconscious form of care work, through which consumers and service providers initiate and routinize socially desirable norms of behavior that create and sustain society in everyday interactions.

Despite the presence of goals, motives and ideologies, consumer behavior remains relatively disconnected from consciously articulated attitudes or values (Shove 2010). Actions are often guided intuitively by social, cultural or physiological influences (Allen 2002; Goldstein, Cialdini, and Griskevicius 2008; Williams and Andrew Poehlman 2017). Over a lifetime of practice, consumers settle into familiar, "common sense" rituals and routines that guide much of their behavior (Swidler 1986, 2001). Although not typically conceptualized as care work, the reproduction of shared norms and patterns of activity plays a key role in maintaining cohesive groups and societies.

However, when established norms and practices become disrupted, values and ideologies rise in prominence as people are forced to rely on them more explicitly to guide behavior. During these unsettled times people experiment with "new ways of organizing individual and collective life" (Swidler 2001, 99) without the aid of settled social norms. Previously mundane rituals and routines become "highly charged" (Swidler 2001, 99) symbolic acts, invested with meaning by competing ideological positions. Unsettled times create constant conflict between alternative approaches to care for society, whether through the preservation of familiar social norms or the formation of new ones. The social norm contests the play out during unsettled times remain understudied at the micro level of everyday social and market interaction.

Our research focuses on the use of face masks during the COVID-19 pandemic. Masks have become a prominent feature in consumers' everyday lives. But in the United States, the rapid adoption of masks has been accompanied by a persistent resistance. While this confusion has serious public health implications, it also presents a context for studying consumer responses to social norm disruptions and unsettled lives.

Our research utilizes qualitative and quantitative data that illuminate consumer behavior and experiences with masks at various stages of the COVID-19 pandemic. While our broader research includes data from both the United States and China, this extended abstract includes only results from the United States. These US data include 80 hours of ethnographic participant observation in a range of market places during the pandemic, recorded by researchers and student assistants in over 100 pages (55,000 words) of field notes. Qualitative data also include in-depth Zoom interviews with thirty

US consumers about their customer experiences during the COVID-19 pandemic. Two online studies conducted on MTurk (October 2, 2020; n=388) and Prolific (March 31, 2021; n=500) contained open-ended questions and quantitative measures assessing mask-relevant behaviors, experiences, and attitudes. We summarize the results of our ongoing analysis below.

We find that although COVID-19 masks present a relatively minor disruption, this unfamiliar object makes consumers more reflexively aware of their behavior and disrupts the influence of familiar social norms. In numerous small ways, masks constantly remind consumers that their activities are not normal. By forcing routinized behaviors out of the intuitive realm of common sense, consumers rely more on consciously articulated ideological beliefs to motivate particular actions in specific situations.

In our data, consumers connect mask wearing to several distinct ideological beliefs. In qualitative and quantitative responses, we find that these mask ideologies shape both mask attitudes and mask behaviors. However, our ethnographic and interview data demonstrate that this link is tempered by the presence of new and old social norms.

When consumers perceive mask ideologies as aligned with their own common sense, wearing masks in market spaces and social interactions become normalized relatively easily. In the absence of ideological conflict, new norms stabilize and mask wearing becomes an intuitive "new normal." However, when consumers perceive mask ideologies as disconnected or conflicting with common sense, the new behavior remains ideologically charged. Even when consumers wear masks publicly and regularly, we find that their ideologically conflicted behavior remains resistant to normalization. As Swidler (2001, 105) theorizes, many consumers are reluctant to "abandon established strategies of action… not because they cling to cultural ends, but because they are reluctant to discard familiar strategies for which they already have the cultural equipment."

While some consumers actively protest mask ideologies they perceive as oppressive, we find more often that consumers resist the "new normal" by subtly reasserting old norms where new mask norms remain unsettled. Many consumers keep a mask readily available, but wear it only when social cues indicate that not doing so violates norms adopted by a specific person or location. Others gradually stop wearing masks around friends or businesses who they sense will welcome the gesture. Service providers sometimes pull down their own masks to communicate a heartfelt, smiling "thank you." While unmasked social interactions risk virus contagion, many consumers and service providers implicitly sense that their actions preserve important, familiar social bonds and practices. A common sense oriented toward close, interpersonal community care contradicts with an ideology of public health and welfare.

Initiatives promoting disruptive behaviors succeed primarily among ideologically-aligned groups and communities when they do not address the importance of social norm conflict. During the COVID-19 pandemic, government and market organizations shifted much of the responsibility for containing the virus onto consumers (Aboelenien, Arsel, and Cho 2021). Our research demonstrates that individual public health behaviors always remain embedded in the social fabric of everyday life, which complicates their adoption. Mask wearing succeeds not when people believe strongly in the behavior, but when ideology recedes into the background and actions become socially reinforced as common sense. Market places and interactions provide primary sites where this social learning occurs. Caring for society should include understanding a diverse range of cultural and normative perspectives in order to establish and reinforce beneficial norms from the bottom up.

Self-Care: How Consumers Balance Self-Centered Care Consumption with the Needs of Others

EXTENDED ABSTRACT

Everyday consumers care for themselves by performing activities and consuming products that sustain and restore individual physical and mental well-being. These activities and consumption behaviors are collectively called and marketed as 'self-care.' Though self-care was already emerging as a consumer phenomenon, the prevalence of self-care rhetoric and self-care marketing increased greatly during the COVID-19 pandemic. Today, over 43 million posts on Instagram use the hashtag 'selfcare.' In this research we investigate three primary research questions: (1) how do consumers determine their own self-care needs, (2) how do they navigate tensions that arise when they prioritize themselves, and (3) how does the market interact with consumer enactments of self-care?

We use depth interviews with young adults to investigate perceptions and practices of self-care. We strategically interview both men and women as both may face unique cultural challenges related to caring for themselves (Holt and Thompson 2004; Coskuner-Balli and Thompson 2013). To complement these interviews, we use data from three widely circulated news sources (New York Times, Wall Street Journal, USA Today) to examine and track cultural attitudes towards self-care over time. Through these sources we are also able to follow the evolution of the 'self-care movement' from a medical prescription to a widely discussed consumption phenomenon.

From this initial data several themes are emerging. The data suggests that self-care does not look the same for all consumers as they have varying standards of acceptable (and achievable) physical and mental health. We find that consumers engage in self-care as a response to stress and in an effort to balance internal needs with external demands. Emerging data suggest that consumers engage in indulgent self-care to quickly restore lost internal resources, deep work to increase self-awareness, and maintenance to sustain well-being. Socio-economic factors, cultural expectations, and socialization by parents and teachers also influence how consumers define acceptable levels of self-care (Thompson and Hirschman 1995).

Indulgent self-care occurs as a response to a perceived depletion of internal resources. When engaging in indulgent self-care consumers turn to activities and consumption that quickly release tension and release the brain from external pressures. However, informants realize that indulgent self-care is only a temporary solution. Once this realization is made, informants move into a stage of deep work, often with the help of professional therapists, to not only restore internal resources but also to prevent future resource depletion. In this stage informants become more self-aware and strategically classify activities and consumption as either needs, oughts, or wants.

Tension can occur when consumers define what they need, ought, and want differently than how other important actors categorize an activity or consumption behavior. We identify several strategies consumers employ to defend, reframe, and prioritize their self-care practices. Consumers defend their self-care routines by setting boundaries which clearly delineate behaviors as non-negotiable needs. Reframing occurs when consumers attempt to change their attitude to view generally unpleasant activities as valuable for personal growth. Prioritizing self-care involves consumers engaging in self-talk to give themselves explicit permission to indulge their desires without guilt. Finally, once informants reach a personally acceptable state of wellness, they enter a phase of maintenance to sustain the growth achieved during deep work.

This cycle of indulgence, deep work, and maintenance stands in contrast to market discourse which mostly focuses on encouraging

and enabling consumer indulgence. Self-care marketing often entails messaging that implies a 'treat-yourself' mentality in which consumers are encouraged to indulge their desires and prioritize their own needs without guilt. Through this marketing, consumers are encouraged to re-categorize items as 'needs' for physical and mental well-being instead of as indulgent consumption. It may be for this reason that self-care has been criticized as a selfish excuse for indulgent behavior that comes at the expense of one's responsibilities and obligations to others. Contrary to market portrayals, however, our informants suggest self-care not only enables them to care for themselves but is essential to be able to care for others.

This research holds important implications for research on consumer well-being and how consumers navigate tensions that arise when caring for themselves and for others. Previous research on caregiving has mainly focused on how parents care for others (Thompson 1996; Epp and Velagaleti 2014). We extend this research by focusing on how individuals care for themselves. This research also adds to knowledge on how consumers' think about their physical bodies. Previous research suggests that consumers attempt to control the body by prioritizing mental strength and self-control (Thompson and Hirschman 1995), but our informants suggest that engaging in self-care helps them learn to work with and listen to their physical bodies in order to feel good. Finally, this research contributes to research on indulgent consumption (Mick and DeMoss 1990) and finds that consumers manage guilt related to self-focused consumption by reframing self-care not as selfish, but as allowing them to care well for others in the future.

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Relationship Dynamics in the Era of the Sharing Economy

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Discussant: Jie(Doreen) Shen, University of Illinois at Urbana-Champaign, USA

Paper #1: From Satisfaction of Consumers to Satisfaction with Consumers: Reverse Rating in Sharing Economy

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Paper #2: How Economic System Justification Shapes Demand for the Sharing Economy

Aylin Cakanlar, Stockholm University, Sweden

Nailya Ordabayeva, Boston College, USA

Paper #3: Signaling Status by Acquiring Ownership (vs. Access)

Yang (Jenny) Guo, University of Pittsburgh, USA

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Paper #4: You Get More Than You Bargained For: Contagion Effects in Access-Based Consumption

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SESSION OVERVIEW

The rapid growth of the sharing economy and its exciting impact on consumer behavior has attracted growing research interest. This session explores how the sharing economy may create, alter, and redefine social relationships. For instance, the sharing economy has reformed consumers' relationship with providers and turned it to be more egalitarian, which leads to the discussion of bilateral ratings in the first paper. Consumers also tend to have different expectations about providers in the sharing economy (or P2P providers) and providers in the traditional economy, which motivates a better understanding of who would be more supportive of P2P providers in the second paper. The sharing economy has also made previously unaffordable products more accessible. However, the third paper argues that there are potentially negative consequences for consumers' well-being (e.g., feeling inferior in social comparison with friends). In addition, access-based consumption in the sharing economy leads to potential contagion concerns among consumers. Yet, the fourth paper illustrates that consumers' product experience can be positively influenced by previous consumers who accessed the same products.

To be more specific, the first and the second papers look into how the sharing economy has changed consumers' perceived relationship with providers. The first paper investigates the new practice of reverse ratings (i.e., consumers being rated by providers) in the sharing economy. The paper provides two effective strategies for platforms in the sharing economy to effectively employ reverse ratings: adopting a community-focused positioning and emphasizing consumers' interaction with individual providers. The second paper proposes that different segments of consumers may have different perceptions of peer-to-peer (P2P) providers. Specifically, the authors examine how consumers' economic system justification (ESJ) beliefs influence their attitudes toward P2P providers. They find that high (vs. low) ESJ beliefs boost consumers' support for P2P providers.

Taking a slightly different perspective, the third and the fourth papers focus on how the sharing economy has created relationships among consumers as well as influenced consumers' relationships with their friends. The third paper finds that consumers tend to feel inferior in social comparison when they access a certain product

while their friend owns a similar product. This paper also provides several ways to mitigate the perceived inferiority. The fourth paper highlights an inevitable issue in access-based consumption, which is the potential contagion concern. The authors identify the distinctive impact of disclosing information of prior user(s) of a product on a subsequent user's product satisfaction and experiential satisfaction. These results highlight that it is crucial to carefully select the user profile of past users in the sharing economy.

Together, the four papers present a convergent theme of how social relationships emerge and evolve in the sharing economy. We hope this special session will be insightful for audiences who are interested in consumer behavior in the sharing economy. We believe that this special session also speaks to the conference theme ("What the world needs now") by reflecting how new forms of consumption and business models affect consumers' relationships with others in this unsettling time.

From Satisfaction of Consumers to Satisfaction with Consumers: Reverse Rating in Sharing Economy

EXTENDED ABSTRACT

Consumer satisfaction ratings are a well-established indicator of a provider's degree of success (Fournier and Mick 1999). However, as sharing economy take a more dominant position in today's economy, consumers are increasingly being rated by providers in order to assess *satisfaction with consumers*. We term this phenomenon as *reverse rating* (i.e., a practice in which consumers are evaluated by platform providers after a transaction). Recent attempts by sharing platforms indicate the important consequences of reverse ratings, such as Uber claiming it will kick off low-rated riders (Yurieff 2019). Our research questions are: (1) how do consumers perceive reverse ratings and what logic do they follow when interpreting this practice? and (2) when it comes to the implementation of reverse ratings, does the platform positioning and provider type matter?

Research on institutional logic (Kirkpatrick 2007; Koen et al. 2020) suggests there are two distinct logics for platforms: community logic and market logic. The community logic accentuates group membership and affective relations among members on the platform (Habib et al. 2016), while the market logic emphasizes the economic benefits, accessibility and standardized quality of the service (Mair and Reischauer 2017). We argue that these two logics can be manifested by (1) different positioning strategies (i.e., community positioning vs. marketplace positioning) of the platform and (2) different types of provider (i.e., individual provider vs. business provider) available on the platform. We predict that overall, the community logic is more consistent with the employment of reverse rating because this logic encourages consumers to build egalitarian relationships with providers, which should facilitate consumers' adoption of the practice of reverse rating.

Study 1 aimed to examine the effect of positioning strategies on consumers' platform evaluation and future use intention when the platform employs reverse rating. We recruited 401 participants from Prolific. The study employed a 2 (rating: reverse rating, no reverse rating) x 2 (positioning: marketplace, community) between-subjects design. We created a message about a fictitious ride-sharing app called Ridea. The stimuli can be found in Figure 1. After reading the

app introduction, participants were asked about their evaluation of the app (e.g., 1 = *unfavorable, 7 = favorable*) and their future use intention.

Results. When the platform employed reverse rating, the main effect of positioning strategy on both dependent variables were significant: participants had a more positive evaluation of the platform when the platform adopted the community positioning ($M = 5.78$) than marketplace positioning ($M = 4.94$), $p < .001$, $\eta_p^2 = .14$. Participants also had a stronger app use intention in the community condition ($M = 5.06$) than the marketplace positioning ($M = 4.71$), $p = .03$, $\eta_p^2 = .02$. Within the no reverse rating condition, the effects of positioning were not significant.

Study 2 further examined the impact of provider type. We recruited 212 undergraduate students. Participants were randomly assigned to one of two conditions: reading about an app that listed short-term stays offered by either (1) independent hotels or (2) private homeowners. Participants in both conditions were informed that the app employed the reverse rating. The stimuli can be found in Figure 2. Measures were similar to those used in Study 1 except that participants were also asked to indicate their attitudes toward being rated by either homeowners or independent hotels.

Results. We found that participants had (1) more positive attitudes toward being rated ($p = .006$, $\eta_p^2 = .04$), (2) more positive app evaluations ($p = .001$, $\eta_p^2 = 0.49$), and (3) a higher future use intention ($p = .001$, $\eta_p^2 = .05$) in the homeowner condition, as compared to the independent hotel condition.

Study 3 was conducted to understand the underlying mechanism of the findings in Study 2. We recruited 242 undergraduate students. The experimental design and stimuli were the same as those in Study 2. App evaluation and future use intention were included as two dependent measures. Two mediator measures were added after the dependent measures: (1) powerless perception (e.g., "As a consumer, I feel powerless if I am rated by the provider.") and (2) customer entitlement belief (e.g., "If I am paying for the service, I should not be rated or evaluated by the provider.")

Results. The main effect of provider type was successfully replicated. Parallel mediation analyses showed that customer entitlement mediated the main effect of provider type on platform evaluation (CI95%: [.04, .26]) and future use intention (CI95%: [.02, .23]), while powerless perception was not a significant mediator. Being rated by independent hotels triggered a higher level of customer entitlement belief, which led to a more negative app evaluation and a lower future use intention.

Study 4 further examined the differences between providers in practicing reverse rating on platforms using actual bilateral Airbnb reviews. 2,078 guest reviews and 1,605 corresponding host reviews were collected. The number of listings owned by the host served as the proxy for provider type. Hosts who only owned one listing were categorized as private homeowners, whereas hosts who owned more than 100 listings were categorized as rental business.

Results. First, as compared to private homeowners, rental business providers were less likely to leave reviews for guests who left reviews for the listings, $P_{homeowner} = 88\%$, $P_{business} = 66\%$, $\chi^2(1) = 137.42$, $p < .001$, Cramer's V = .26. Second, rental business providers were also more likely to leave identical reviews than private homeowners, which was captured by the comparison of average cosine similarity scores (i.e., a metric that measures how similar two documents are irrespective of their sizes; Ye 2011), $p < .001$, $\eta_p^2 = .29$. The results suggested that it was probably less necessary to allow rental business providers to practice reverse rating than private homeowners.

To conclude, by examining the roles of platform positioning and provider type guided by institutional logics, this paper sheds

lights on our understanding of the reverse rating and how to facilitate consumers' adoption of this practice. The overall results suggest a community-focused positioning and emphasis on the interaction with individual providers are two effective strategies for platforms in sharing economy that employ reverse ratings.

How Economic System Justification Shapes Demand for the Sharing Economy

EXTENDED ABSTRACT

Peer-to-peer (P2P) exchanges which allow consumers to procure products and services from peers (Sundararajan 2017) are increasingly prevalent. The sharing economy has expanded opportunities for individuals and consumers (Nguyen et al. 2020). However, it also has challenges, such as low regulation and entry barriers (Eckhardt et al. 2019), which create uncertainty about the quality of products and services offered by peers (Luo et al. 2021). Hence, demand for P2P exchanges may vary significantly among consumers, highlighting the need to identify consumer segments and characteristics that drive P2P demand.

Emerging research suggests that relational factors such as empathy (Costello and Reczek 2020) and individual traits such as intelligence (Aspara and Wittkowski 2019) influence individuals' support for P2P providers. However, research has not considered the role of consumers' ideological beliefs in the sharing economy. Yet, due to growing public debate about inequality and polarization, ideological views about the fairness of the economic system and outcomes—economic system justification beliefs (ESJ)—are increasingly salient in the marketplace (Jost 2017).

The present research examines how ESJ beliefs influence consumers' support for P2P providers. We propose that high (vs. low) ESJ may boost consumers' support for P2P providers because it may strengthen attribution of entrepreneurial spirit to these providers. Specifically, P2P providers rely on own skills and resources to create, market, and procure products and services. This reliance on self to start and manage an economic operation of P2P providers may be particularly appealing to high- (vs. low-) ESJ consumers who are more likely to believe that economic outcomes are driven by personal factors such as effort and hard work (*Jost and Thompson 2000*). We therefore predict that high- (vs. low-) ESJ consumers may attribute a stronger intrinsic ability and motivation to identify economic opportunities and create something from scratch — i.e., entrepreneurial spirit (Huang et al., 2021) – to P2P providers. Importantly, we expect this effect to attenuate for traditional providers (companies) whose intrinsic qualities are less salient and external infrastructures are more salient. Moreover, the impact of ESJ may attenuate for two types of P2P providers: (1) those who rely on external support; and (2) those who highlight their economic disadvantage (e.g., humble background) which may increase low-ESJ consumers', and lower high-ESJ consumers', P2P support. Six studies and several follow-ups tested the predictions.

Study 1 (N=423) examined how ESJ shapes support for P2P vs. traditional providers. After completing a scale of ESJ (*Jost and Thompson 2000)*, participants read that they were traveling to a different city and considering an accommodation offered by a hotel (traditional) or a resident (P2P). The results showed that ESJ boosted consumer support for the P2P ($p<.001$) but not the traditional provider ($p=1$; ESJ x provider interaction: $p = .013$). A follow-up study showed that the effect of ESJ on support for a P2P provider emerges regardless of the specific online platform (Airbnb vs. Amazon Explore) on which the P2P provider is listed.

Study 2 (N=383) tested the causal effect of ESJ. Participants in the high- (vs. low-) ESJ condition read an article describing the economic system as fueled by hard work and effort (vs. luck and connections). A pre-test confirmed that this manipulation boosted ESJ, but did not move political ideology or power distance beliefs. Participants then read a description of an online course offered by a P2P or a traditional provider (between-subjects). High (vs. low) ESJ boosted interest in the P2P course provider (p=.004), but not the traditional provider (p=.264; ESJ x provider type interaction p=.005). A follow-up study further distinguished ESJ from political ideology and power distance by showing that measured ESJ, but not these two alternatives, predict P2P demand.

Study 3 (N=159) tested the process. After completing the ESJ scale, participants indicated which book about effective leadership they would prefer to receive if they won a lottery: one authored by a self-taught business coach (P2P) vs. one by a business institute (traditional). Participants also indicated which provider possessed stronger entrepreneurial spirit. The results revealed a positive effect of ESJ on preference for a P2P (vs. traditional) provider (p<.001). Perceptions of provider entrepreneurial spirit mediated this effect [.0031, .1194]).

Studies 4A and 4B tested boundary conditions.

Study 4A (N=334) manipulated the P2P provider's reliance on self vs. other people (users) for product design. After completing the ESJ scale, participants saw the description of a book by a P2P author who relied on own ideas vs. collected other people's suggestions to generate ideas for the book (between-subjects). The effect of ESJ on support for the P2P provider was positive and strong when the provider was self-reliant (p<.001), but it was attenuated when the P2P provider relied on user ideas (p=.016; ESJ x provider type interaction p=.037). A follow-up study similarly showed a significant attenuation of the ESJ effect for a traditional provider (company) that relied on user design.

Study 4B (N=301) manipulated the P2P provider's economic disadvantage. After completing the ESJ scale, participants saw a description of a virtual park tour by a P2P provider. In the economic disadvantage condition, the provider description stated that the provider started organizing tours after being forced to quit their day job. In the control condition, this disadvantage information was not provided. The effect of ESJ on P2P provider support was significant and positive in the control condition (p=.043), but it was attenuated and directionally reversed in the economic disadvantage condition (p=.164; ESJ x provider type interaction p=.016).

In Study 5, we obtained and analyzed data on online traffic shares of the most popular P2P (Airbnb, VRBO) vs. traditional (Booking, Hotels.com, Marriott) accommodation platforms across more than 100 countries with different levels of ESJ. We obtained the country-level ESJ scores from the World Values Survey (2008-2020). The results revealed a positive effect of ESJ on the online traffic share of P2P (vs. traditional) accommodation platforms (p<.001). This also held after controlling for country characteristics including political ideology and power distance. A follow-up study documented a positive impact of country ESJ on click-through rates to a Facebook ad of a P2P online course provider.

Signaling Status by Acquiring Ownership (vs. Access)

EXTENDED ABSTRACT

To avoid the pain of low social standing, people may use goods to signal that they are equal or superior to others (e.g., White and Argo 2011; Rucker and Galinsky 2008; Anderson, Hildreth, and Howland 2015). While past work suggests that such signaling pri-marily happens via product ownership, the growing access-based economy allows consumers to temporarily display goods they could not otherwise afford (Bardhi and Eckhardt 2017, 2012). Access-based consumption allows people to use (and display) products by paying a usage fee, normally cheaper than ownership acquisition costs (Lamberton and Rose 2012; Lamberton and Goldsmith 2020). But will accessing goods equalize social status effectively?

We propose that there are reasons to doubt the status-equalizing effect of participation in the access-based economy. Rather, we propose that even when the good in question is identical, acquisition mode (owning vs. accessing) operates as a status signal. Drawing on costly signaling theory (Nelissen and Meijers 2011; Bagwell and Bernheim 1996), we argue that because ownership is perceived to be more costly than access, owners will be perceived to have higher status than those who access similar products. Therefore, those who access may persistently feel socially inferior to those who own. Additionally, we posit that this effect can be mitigated by the payment immediacy of ownership. In cases where the perceived cost difference between owning and accessing similar goods is minimized (e.g., people acquire ownership by paying-over-time or renting-to-own), the difference in status between owners and renters will be mitigated.

We examine the status-signaling effect of acquisition mode by asking participants to imagine themselves in consumption dyads, in which two individuals' acquisition modes are manipulated to be matched (both owned/accessed) or mismatched (one owned, another accessed).

In experiment 1A, 198 females imagined meeting friends for coffee, and were randomly assigned to one of three dyads: participant owned ("I owned while my friend accessed similar Gucci bags"), participant accessed ("I accessed while my friend owned similar Gucci bags"), both owned (i.e., control) and then completed a four-item nine-point subjective social rank scale (Allan and Gilbert 1995), anchored by inferior/superior, incompetent/competent, untalented/more talented, unattractive/more attractive (α = .80). As expected, participants had a higher subjective social rank when they owned but their friend accessed similar bags (M = 5.50, SD = .13) than when acquisition modes were reversed (M = 4.59, SD = .13; p < .001).

Experiment 1B (N = 167 undergrads) included a matched condition in which both participants and their friend accessed similar BWM sedans to use at a social event. No difference was observed between matched and control (i.e., both owned) conditions (p > .99), suggesting it was the mismatched acquisition modes rather than accessing itself that impacted subjective social rank. Experiment 2 (N = 442 Prolific participants; pre-registered) replicated prior findings across brand levels (BMW and Ford).

Experiment 3 tested the moderation role of payment immediacy operationalized as extended payments. Prolific participants (N = 302; pre-registered) imagined getting a new book ($100 to own) for an online reading club. They were randomly assigned to one of four dyads: participant owned ("I bought while my friend rented same books"), participant accessed ("I rented while my friend bought same books"), both owned, participant accessed but friend's ownership is made by extended payments ("I rented while my friend bought same books via 12-month installments"). We also explored a downward consequence: likelihood to share group responsibility. Social compensation theory (Williams and Karau 1991) suggests that decreased social rank will lead individuals to expect their peer to be more capable than themselves, and in turn, that their higher-ranked friend would take more group responsibility. Therefore, before the social rank measure, participants indicated the number of chapters (out of

17) they and their friend were able to lead for the group discussion, respectively.

As expected, participants thought they would lead more chapters when they owned but their friend accessed the book (M = 8.95, SD = 1.28) than when acquisition modes were reversed (M = 7.71, SD = 2.03, *p* = .003), but a similar number of chapters when they owned but friend accessed and when they accessed but friend owned the book via extended payments (M = 8.40, SD = 1.82, *p* = .74). Similarly, participants had a higher subjective social rank when they owned but their friend accessed the book (M = 5.64, SD = 1.05), compared to when they accessed but their friend owned the book (M = 5.15, SD = .92; *p* =.03). However, the effect disappeared when extended payments were applied to own (M = 5.50, SD = .88; *p* >.99; see *Figure* 2). Mediation analyses supported our prediction (participant owned vs. accessed: indirect effect = -.33, 95% CI = [-.66, -.09]; participant owned vs. extended payments: indirect effect = -.10, 95% CI = [-.37, .13]).

Experiment 4 tested the moderating role of payment immediacy, operationalized in a rent-to-own option. Prolific participants (N = 302; pre-registered) were randomly assigned to one of three dyads in a drive-in movie theater scenario: participant owned, participant accessed, participant accessed with the rent-to-own option ("I rented but could own this BMW sedan if I wanted while my friend owned a similar one). Participants' subjective social rank increased when they accessed the vehicle with the rent-to-own option (rent-to-own: M = 5.13, SD = 1.01) compared to without this option (participants accessed: M = 4.74, SD = 1.12; *p* = .042). Though the rent-to-own option enhanced social rank compared to access alone, it did *not* raise social rank to the point that it equaled that conferred by ownership (participants owned: M = 5.79, SD = 1.06; *ps* < .001).

Taken together, this research highlights acquisition mode as a robust status signal, significant in its effect on individuals' subjective social status across brand levels, competitive and neutral contexts, age, gender, and income. Future research will further explore the weight of ownership as a status signal, to see if as the access-based economy grows, this weight may shift – allowing greater, and more accessible, felt equality in the marketplace.

You Get More Than You Bargained For: Contagion Effects in Access-Based Consumption

EXTENDED ABSTRACT

People use products which they do not own to enable or enhance an experience (Bardhi and Eckhardt 2012; Habibi, Kim and LaRoche 2016). Whether consumers are borrowing a tool from a local tool library, or renting an outfit for a wedding, consumers have access to different products they need and choose to access for a specific reason through the process of access-based consumption (Abbey et al. 2015; Benoit et al. 2017).

When consumers choose access-based consumption, the products, more likely than not, have been used by others (Botsman and Rogers 2010; Eckhardt and Bardhi 2016). The potential influence of these prior users, through contagion, is important in these situations. When a product has been touched, the laws of sympathetic magic (i.e. Frazer 1890/1922; Mauss 1902/1972) suggests that some of the essence, or traits, of the toucher passes onto the product itself. Importantly, these essences can transfer from the one person to the next (Kim and Kim 2011; Newman and Dhar 2014). From this we hypothesize that the experience that consumers have with access-based products will be influenced by knowledge of the prior users.

Indeed, access-based consumption firms go to extraordinary lengths to ensure that the products which consumers use are thoroughly cleaned both physically (Argo, Dahl and Morales 2006) and metaphysically of the essence (West and Zhong 2015) of the prior users. Knowing that someone else has used a product leads to a more negative evaluation of said product (Argo, Dahl and Morales 2006; Huang et al. 2017). However, there are specific situations when having knowledge of the prior user may enhance the experience, such as when using a golf club previously used by a professional golfer (Lee et al. 2011). From this, we hypothesize that if the traits of the previous user of an item in an access-based consumption situation are both known and positive, the current user will take those positive traits on themselves and will have a more positive experience overall. However, consistent with prior literature, regardless of the valence, having information about the prior user will decrease satisfaction with the product itself.

2020 led to a rise in public concern for contagion. Consumers are now more aware than ever of the contaminating essence transfer of previous touchers. We hypothesize that any positive experiential satisfaction that existed previously will now be completely overtaken by negative contagion. In other words, because consumers are hyperaware of the negative effects of contagion, any information about prior users will be viewed negatively and lead to a decrease in experiential satisfaction.

We explore these Hypothesis in 4 studies. In study 1 conducted in 2018 (n = 87 students, 100% female) participants were given a purse to use for a week with one factor manipulated between subjects (knowledge of positive traits of the prior user: absent vs. present) in a pseudo-field experiment. A one-way ANOVA revealed that participants with information about the prior user were significantly less satisfied with the purse than participants without information about the prior user ($M_{knowledge\ present}$ = 5.64 vs. $M_{knowledge\ absent}$ = 6.17, F(1,85) = 4.67, p < 0.05). However, because the traits that were given to the participants were positive we expected participants would be more likely to rate themselves higher on those positive traits and have more positive experiential satisfaction. A one-way ANOVA revealed this to be the case ($M_{knowledge\ present}$ = 3.73 vs. $M_{knowledge\ absent}$ = 2.95, F(1,85) = 6.92, p < 0.02). Further, a series of ANOVAs revealed that those who had information on the traits of the prior user rated themselves significantly higher on those traits (all p's < 0.05).

Study 2 (n = 193, 100% female) used the same context as study 1, however all participants received information about the prior user in a 2 (valence of the traits: positive vs. negative) X 2 (connection: association vs. contagion) between-participants design. An ANOVA revealed only a main effect of the connection factor, those in the contagion condition reported significantly lower satisfaction with the purse than those in the association condition ($M_{contagion}$ = 3.97 versus $M_{association}$ = 4.65, F(1,189) = 6.15, p < 0.01). For experiential satisfaction, an ANOVA revealed the predicted interaction between the independent factors (F(1,189) = 12.281, p < 0.01). Participants in the contagion-based condition who received positive information about the prior user reported higher experiential satisfaction than did those who received negative information ($M_{positive\ contagion}$ = 4.61 vs. $M_{negative\ contagion}$ = 3.52, F(1,189) = 38.63, p < 0.01). A moderated mediation analysis revealed that for participants in the contagion condition, trait transfer significantly mediated the relationship between contagion and experiential satisfaction positively when the traits were positive (estimated indirect effect = 0.16; 95% confidence interval [CI], 0.08 to 0.41).

In study 3 (n = 545, 48% female) participants were randomly assigned to use a pen for various tasks in a 3 (valence: positive vs. neutral vs. negative) X 2 (connection: association vs. contagion) study design. A 3X2 ANOVA with experiential satisfaction as the dependent variable revealed the predicted interaction between the vari-

ables (F(2,543) = 3.181, p < 0.05). Planned contrasts revealed that those who had positive information about the prior user of the pen were more satisfied with the experience than those who had neutral information ($M_{positive\ contagion}$ = 3.96 vs. $M_{neutral\ contagion}$ = 3.53, F(1,544) = 4.63, p < 0.04).

In study 4 (n = 122, 100% female), run in the fall of 2020, we replicated the set up of study 2. Participants in the contagion condition reported significantly lower satisfaction with the purse than those in the association condition ($M_{contagion}$ = 3.21 versus $M_{association}$ = 5.05, p < 0.01). This time, however, there was no interaction for experiential satisfaction. Only a main effect of connection was revealed, participants in the association condition were significantly more satisfied with the experience than those in the contagion condition ($M_{contagion}$ = 3.42 versus $M_{association}$ = 4.95, p < 0.01).

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Influencers and the Shaping of Markets: Actors, Processes, and Sociotechnical Configurations

Chairs: Maria Carolina Zanette, NEOMA Business School, France
Zeynep Arsel, Concordia University, Canada
Discussant: Daiane Scaraboto, University of Melbourne, Australia

Paper #1: Influencers, Content Markets, and Institutional Work
Zeynep Arsel, Concordia University, Canada
Maria Carolina Zanette, NEOMA Business School, France
Sarah Herchet, Concordia University, Canada
Carolina da Rocha Melo, ALDO Group, Canada

Paper #2: Becoming Famous: Influencer Marketing and the Cross-platform Acquisition of Celebrity Capital
Gillian Brooks, King's College London, UK
Jenna Drenten, Loyola University Chicago, USA

Paper #3: Family Influencers as Digital Family Entrepreneurship: Monetizing a Collective Human Brand
Ghalia Shamayleh, Concordia University, Canada

Paper #4: Threading through a Field: Makeup Practice in the Age of Influencers
Gulay Taltekin-Guzel, York University, Canada
Eileen Fischer, York University, Canada

SESSION OVERVIEW

Influencers and influencer marketing have been a pervasive area of academic and practitioner interest in the past decade. Past research has uncovered different aspects of influencers, such as how they emerge through capitalizing on taste displays (McQuarrie et al., 2013), which influencer-campaign characteristics are more effective with consumers (Hughes et al., 2019), what the effects of disclosing advertising intent in influencer based campaigns are (Eisend, 2020), and how their appearance and nascent professional activity (Abidin, 2016) disrupted and reshaped fields such as broadening the availability of products (Scaraboto & Fischer, 2013). These processes allowed the emergence of new actors and dispersion of institutional work to ordinary consumers (Dolbec & Fischer, 2015), opening space to activism and embodied resistance towards fashion systems (Veresiu & Parmentier, 2021).

While influencers, albeit sometimes through different, unconventional and disdained forms (Abidin, 2016; Drenten et al., 2020; Smith and Fischer, 2021), generate value for themselves through assuming intermediary roles in marketing communication—social media manager, endorser, and connector of brands and audiences (Campbell & Farrell, 2020)—, new intermediaries and actors have also emerged (Stoldt et al., 2019) as well as a plethora of platforms with different affordances (Kozinets et al., 2021)

We continue this conversation with a special session that looks at this market system which is perpetually evolving. Our goal is not to discuss one particular dyad in the influencer marketing chain, such as influencer-consumers or influencers-brands. Instead, we focus on the emergence of new actors, processes and socio-technical configurations, and practices.

The first paper brings a market system perspective to the discussion on influencers. The authors investigate how influencers disrupted the field of advertising. Through interviews with influencers and influencer agents, the researchers show how new and emergent actors perform boundary work to stake claims to the profession of content creation.

The second paper looks at cross-platform celebrification and how this leverages audience portability through building celebrity capital. By showing how celebrification allows influencers to generate distributed content and how this content is created and evaluated through platform geographies, the authors underline the agility, fragility, and worth of platform content.

The third paper investigates family influencers as a form of digital family entrepreneurship. Highlighting how family influencers build brand biographies and relational narratives, this paper distinguishes family influencers from individuals and discusses the particular ways entrepreneur families build their brands and audience on platforms.

The final paper further elaborates on market work by showing how influencers affect market practices by introducing new materials, competences, and meanings through interaction among influencers themselves (and between influencers and brands), shaping both consumer and practitioner practices.

Taken together, these papers show how influencers' work is not just solely about creating and capitalizing a market but disrupting and shaping systems, including socio-technical systems in which content is created, affecting their audience, consumers, other actors, and practices. Using data from consumers, practitioners, platforms themselves, and mass media, the papers also show that influencer work, while shaping consumers, is a multi-actor market system.

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Influencers, Content Markets, and Institutional Work

EXTENDED ABSTRACT

Content is king, as once declared by Bill Gates. Influencers as person brands (Fournier & Eckhardt, 2019) have become essential assets for companies for content creation (Influencer Marketing Hub, 2020; Hollebeek & Macky, 2019; Müller & Christandl, 2019). Their expertise and visibility have disrupted different fields of consumption (Dolbec & Fischer, 2015; Scaraboto & Fischer, 2013), generating a market that operates through monetizing, brokering, and optimizing content for consumer engagement and brand promotion.

In this paper, we theorize the emergence of influencers and discuss how the industry has shifted to operate around one important sociological object: content. We posit that this event has triggered different field-configuration processes of institutional boundary work (Langley et al., 2019; Zietsma & Lawrence, 2010) in content creation, distribution, and monetization.

Our empirical work is built on a database triangulating data from different sources: 10 interviews with influencers, 10 interviews with intermediary agencies, 39 podcasts with professionals in the influencer industry (agents, brokers, and influencers themselves), and 2,104 articles in the specialized press (AdWeek and PR Week). We analyzed the data qualitatively and quantitatively to identify actors, processes, and market devices with careful attention to the tensions and dynamics between different market actors.

Our findings describe the disruption of logics in the field by the emergence of a new actor: the influencer. Influencers themselves struggle to legitimate their work and to manage the tensions of building their own brands versus promoting those of their clients' (also see Parmentier & Fischer, 2021) in creating content. On the side of brands and agencies who hire content creators, many uncertainties remain, such as costs, control of content, alignment with the brand's expectations, and desired outcomes, all of which create contractual problems (Childers et al., 2019). We show that these issues are addressed by different types of boundary work that simultaneously protect the interests of old actors while also reconfiguring the field and opening up spaces for new actors. We discuss the boundary work of both actors that existed before influencers (celebrities, models, opinion leaders, brands, agencies), as well as actors that emerged after the disruption (influencer agents, content farms, influencer platforms).

Competitive boundary work happens when actors engage in actions to protect the function of content creation that they have historically performed (Abbott, 2014) or negotiate their authority inside a field (Gieryn, 1983). As influencers claim the function of creating content for brands, and as different institutions (such as specialized media) recognize them as such, influencers, agencies, and actors previously tasked to create content claim stakes to the jurisdiction of content creation.

Collaborative boundary work consists of the alignment of actors to collaborate inside field boundaries (Cartel et al., 2019; Langley et al., 2019). The actors participating in collaborative boundary work are influencers themselves, agencies, and other intermediaries (Stoldt et al., 2019) that act as brokers between influencers and clients. These actors work together for different ends, which include convincing clients that content work is relevant and that it can bring a return of investment to the brand, assuring influencers that their work is recognizable and compensated, mediating affective labor in talent management, managing content that aligns with clients' interests, and, finally, making sure that the client achieves desirable metrics. Intermediaries act by translating the interests of brands (visibility or engagement) and of influencers themselves (creative and expressive freedom). In that sense, influencer agencies take the role of boundary actors, translating different logics and practices between the two worlds of clients and influencers who enter an exchange relationship around content.

Finally, the third type of boundary work, configurational boundary work, includes new actors (such as influencers and influencer agencies) that reconfigure field boundaries (Langley et al., 2019) to claim space in content work. Our data shows that these configurations emerge from boundary objects that allow new and old actors to work together. Media kits are an example of these objects allowing influencers to display and publicize their services for clients in a language that the clients are accustomed to. Other objects include metrics, which allow quantifying the results of content work for the clients and can be negotiated a priori a campaign. Through these configurations the functions of actors are negotiated, established and realigned.

In conclusion, our work contributes to the previously discussed disruption of fields (Dolbec & Fischer, 2015) and influencer work (Abidin, 2016). We take a market systems approach to look at the actors and dynamics that operate around a valuable object: content. We show that disruption and the emergence of a new actor have cascading effects in a field and result in the emergence of even more actors and continuous and complex boundary work. As the market logic shifts toward selling, brokering and monetizing content, the market also reorients itself around this object.

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Becoming Famous: Influencer Marketing and the Cross-platform Acquisition of Celebrity Capital

EXTENDED ABSTRACT

Increasing attention has been given to executing influencer marketing (Campbell & Farrell, 2020), with a focus on understanding disclosure practices (e.g., Evans et al., 2018) and the impact of authenticity (e.g., Audrezet et al., 2020). Influencer marketing arose to prominence when the industry was dominated by only a few platforms, such as YouTube and Facebook. Yet, the modern social media landscape is saturated with both established and emerging platforms—Twitch, Clubhouse, and more—giving rise to new opportunities for social media influencers (SMIs) to seek visibility and attention. Meanwhile, some platforms (e.g., Vine, Musical.ly) have ceased to exist in their original forms. Influencers and marketing professionals must navigate influencer marketing across social media platforms in a complex digital landscape where social media platforms are both abundant and precarious. A starting point is understanding how influencers acquire celebrity capital in an evolving social media landscape. The purpose of this study is to explore how SMIs acquire celebrity capital in the modern social media landscape and the role of marketing professionals in this process. Specifically, we ask: how is celebrity capital acquired among social media influencers, and what role do marketing professionals play in the process? More broadly, how has an increasingly interconnected social media landscape shaped this process and does it matter?

Celebrity capital has been identified as a currency for fame (Driessens, 2013); it is "understood as accumulated media visibility through recurrent media representations (Driessens, 2013, p. 17) and exchanged within the field (Bourdieu, 1986) of marketing promotions. For example, celebrities exchange celebrity capital for endorsement deals (i.e. economic capital) and/or introductions to high-profile individuals (i.e. social capital; Carillat & Ilicic, 2019). Most SMIs exist in a stage of liminality: no longer a 'regular' non-commodified person; not yet a full-fledged celebrity. Similarly, the acquisition stage of the celebrity capital life cycle "refers to a celebrity's limited yet growing media visibility and recognizability" (p. 64). In celebrity and media studies, the acquisition of celebrity capital is known as celebrification (Driessens, 2013). Jerslev and Mortensen (2016) draw upon the 'celebrification process' defined by Rojek (2001) to suggest "celebrification encompasses the mediated interplays and negotiations between celebrities/ their management and various media platforms, media institutions and fans/followers (p. 251). Given influencers' unique position in the celebrity life cycle, Carrillat and Ilicic (2019) call on marketing scholars "to investigate the effectiveness of influencers as endorsers, identify potential stars to leverage, and examine the role of agents in managing and developing celebrity capital" (p. 64). Our study sits squarely in this domain seeking to better understand the influencer celebrification process in a saturated media landscape.

Based on close to 60 hours of in-depth interviews with 40 influencer marketing professionals (e.g., influencers, agents, brand executives), our findings point to the importance of cross-platform celebrification in acquiring celebrity capital among SMIs. We define cross-platform celebrification as the process by which social media influencers acquire celebrity capital within an interconnected social media ecosystem. We identify three types of practices in the cross-platform celebrification process: generative cross-platform celebrification practices; collaborative cross-platform celebrification practices; and evaluative cross-platform celebrification practices.

First, generative cross-platform celebrification practices authentically grow an influencer's celebrity capital across platforms. This represents the first stage in acquiring celebrity capital for SMIs. Influencers work tirelessly to build their following (i.e., fame labor) and develop niche content which can extend beyond a single platform (i.e., platform agnosticism). That is, influencers work to gain a following through content creation beyond a single platform. Influencers and marketing professionals recognize the precarity of social media platforms and thus stay agile, adapting as the social media landscape transforms. Our findings suggest influencers are not churned out of a system of stardom seeking their 'big break' from gatekeepers in the field; rather, they create their own fame through hard work and dedicated content creation. Marketing professionals act as talent scouts in this stage, seeking the 'next big thing' but recognizing that the acquisition of celebrity capital begins with the influencer.

Second, collaborative cross-platform celebrification practices synergistically expand an influencer's celebrity capital across platforms. This second stage in acquiring celebrity capital serves to deepen connections between influencers, fans, and marketing industry professionals. Influencers enrich relationships with their fans across multiple platforms (i.e., audience portability) and collectively conceive of new creative opportunities with marketing industry professionals and clients (i.e.., creative ideation). That is, influencers can transport their audience across platforms (e.g., podcast, television, social media) and across unique brand partnerships (e.g., collaborative and co-branded product lines). Marketing professionals

act as creative concierges in this stage, leveraging unexpected opportunities for the influencer to connect with fans and brands.

Third, evaluative cross-platform celebrification practices assess the value of an influencer's celebrity capital across platforms. This third stage in acquiring celebrity capital places valuation on the worth and potential of an influencer to deliver meaningful promotional value for a brand. Influencers are appraised based on their ability to gain online community buy-in for a brand partner (i.e., community-centric KPIs) and evaluated by the reach of their content across porous social media borders (i.e., content traversal). Traditional social media marketing metrics (e.g., views, engagement rates) focus on quantifying success in terms of individual platforms and individual tactics (e.g., click-throughs on an Instagram story). In contrast, our findings highlight the value of influencer audiences who propel their content through social media spaces. Marketing professionals act as impact analysts in this stage, assessing an influencers' relevance and potential for success, captured by less traditional (i.e., qualitative) measures of marketing effectiveness.

Within an ever-changing new media landscape, influencers and marketers must learn how to stay relevant and adapt across media platforms. The study contributes to the marketing literature by understanding how influencers, marketing professionals, and audiences (fandoms) coalesce to produce celebrity capital through cross-platform celebrification. We also demonstrate a holistic view of influencer marketing--beyond a single platform, and highlight how influencers' celebrity capital is inherently tied to the communities that follow them.

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Family Influencers as Digital Family Entrepreneurship: Monetizing a Collective Human Brand

EXTENDED ABSTRACT

A family goes to Costco; once they're there, one parent films the other as she explains why she chose the products which shape their family's consumption habits. Interestingly, this video, composed by the parents, is not solely meant for the eyes of family and friends; the parents are planning on posting the video on their family's public so-

cial media account. These parents created a social media account for themselves and their children to create collective content to be posted on this public account. This online content showcases the family members individually and collectively in their natural routine, special occasions, displaying talents, or making comedic scenarios. This is the life that family influencers lead via their online presence and curated content on social media.

This phenomenon has been discussed and coined by Abidin (2017), who explains that a family influencer exists via a social media account that represents an entire family rather than one individual. Family influencers are a new genre of microcelebrity "following in the celebrity trajectory of mommy bloggers, global micro-microcelebrities, and reality TV families" (ibid, p.1). Through this performance of microcelebrity, family influencers monetize their accounts in the same way that individual influencers do, through brand sponsorship as media entrepreneurs. Through qualitative findings, this study will recognize family influencers as a branded form of digital family entrepreneurship.

The topic of family entrepreneurship has been thoroughly explored by scholars (Beckhard & Dyer, 1983; Faccio & Lang, 2002; Feltham et al., 2005; Holderness, 2009; Kelly et al., 2000; Shanker and Astrachan, 1996). Researchers find that family businesses are built upon a family's engagement in entrepreneurial efforts (Chua et al., 2004). By capitalizing on today's digital realm, entrepreneurship has also taken place in online sites, namely, social media, to accrue social capital through interactions with others (Fischer & Reuber, 2014). This is particularly true for media entrepreneurs, who leverage social media to attract the attention of niche markets, a primary source of profit for businesses investing in mass media (Khajeheian, 2013). A social media influencer is a form of media entrepreneur who capitalizes on social media by transforming their account into an entrepreneurial venture (Abidin, 2018). Influencers monetize their digital presence by providing the service of brand ambassadorship or sponsorship. While individual influencers have been heavily explored by media and marketing scholars (Himelboim and Golan, 2019; Hughes et al., 2019; Martínez-López et al., 2020; Stoldt et al., 2019), the phenomenon of family influencers, a collective influencer, has not been investigated by marketing or entrepreneurship scholars.

This study addresses the gap in the literature by exploring (1) how influencer families establish and brand themselves as a family business via their social media accounts, (2) and how their branded collective identity mobilizes their content's monetization in the form of sponsorship engagements. By collectively employing various lenses that are novel to the field of family business, be it media, marketing, or branding literature, this study extends the extant literature on family entrepreneurial efforts by recognizing a new form of venture which takes place entirely online.

This study's method combines netnography (Kozinets, 2010), journaling, and interviews. The research focuses on couples who live together with their children, 10-18 years old, and manage a family-based social media account. The research focuses on accounts with 1 thousand to 1 million followers. Therefore, the sample will only consist of micro and macro-influencers, categorized as those with followers between 1k and 100k and 100k and 1m, respectively (Ismail, 2018). By doing so, the study disregards nano and mega-influencers, as the former target their brand sponsorship at their tight-knit communities making them an underdeveloped entrepreneurship venture, and the latter is identified as a type of influencer that usually stems from already established mainstream celebrity status (i.e., Beyonce), rather than through social media amplification (ibid).

The netnography and interviews shed light on how influencer families operate and brand themselves as a family business via so-

cial media accounts. They do so through the content they produce and share and the branded identity formed via their account to monetize through sponsorship engagements. This data is abductively analyzed through a branding literature lens that positions the family influencer account as a branded family business. Individual influencers are known to create an online identity in the form of a publicizable personality through self-commodification (Marwick, 2013). This self-commodification can be viewed as a strategy to construct a human brand (Thomson, 2006). Thomson (2006) defines a human brand as a specific operationalization of the brand concept, namely, a "well-known persona who is the subject of marketing communications efforts" (p. 1). This study acknowledges the concept of human brand and extends the literature by investigating the family influencer phenomenon as a form of collective human brand, namely, one which relies on a number of branded individuals as opposed to one. The research studies family influencer's human branding efforts by paying attention to how their brand is demonstrated as distinctive and visible through the depiction of brand biography and family members' market-relevant cues (Parmentier, 2011). The data on the agency, management, stakeholders, and business relationships of the family influencer account will guide the abductive analysis grounded in family business literature (Astrachan et al., 2002; Astrachan & Shanker, 2003) to parallel the family influencer to a family business. As a result, the study will find evidence to the claim that these online accounts are indeed a form of online family business operated via family business management and self-branding techniques that emerge through their content.

This research contributes to the literature on human brands, technologically mediated consumption habits, family entrepreneurship and gives new insights into how these three intersect. My research will also contribute managerially to existing and prospective family influencers, as well as companies that recruit them, by shedding light on what defines a strong family business and brand through social media account management tactics.

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Threading through a Field: Makeup Practice in the Age of Influencers

EXTENDED ABSTRACT

"Do you know Amanda Steele? She has **a social media following bigger than the population of Uruguay**. She is also too young to sit at a bar—or vote in the next election. **Sixteen-year-old Steele (a.k.a. MakeupbyMandy24)** is just one of a generation of beauty influencers who are documenting every topknot on Instagram and **dominating the lists of most-searched videos on YouTube** with their makeup tutorials. These new beauty gurus aren't just offering contouring tips. **They're changing the way we shop for, experiment with, and consume beauty…**" (Allure 2015, emphasis added)

Although applying makeup is an age-old practice, social media influencers only entered the market in the last two decades. Over that time, influencers have become ubiquitous in both the cosmetics arena and in other markets like food, travel and fashion: global spending on influencer marketing increased from $2 billion in 2017 to $8 billion in 2019 (Gerdeman, 2019) and may reach $15 billion by 2022 (Schomer, 2019). Scholars from multiple fields have begun to investigate characteristics of influencers as well as some of their impacts (e.g., Dolbec & Fischer 2015; Evans et al. 2017; Hughes et al., 2019; Kozinets et al., 2010; McQuarrie et al., 2013). Consumer researchers, for example, have addressed such questions as how influencers attract followers (McQuarrie et al., 2013), incite desires (Kozinets et al., 2017) and redistribute the institutional work performed in a field (Dolbec & Fischer, 2015). Marketing scholars have investigated the tactics influencers may use to maximize consumer attention and admiration for brands (e.g., Backaler 2018; Brown & Fiorella 2013; Brown & Hayes 2008; Evans et al. 2017; Hughes et al. 2019; Kapitan & Silvera, 2016; Levin, 2020). These studies collectively suggest that the influencers' impact on markets are many and varied. As yet, however, there is no comprehensive understanding of how influencers may collectively be impacting consumption practices in the contexts they frequent. This study aims to fill this gap by asking the question: **how does the influx of influencers into a field affect consumer practices therein?**

The paper employs a practice theory lens (e.g., Shove et al., 2012; Warde, 2005) to conceptualize the emergence, persistence and disappearance of practices in a field. This lens posits that practices consist of three elements: materials, competences and meanings. Building on early work of Bourdieu (1990), practice theorists initially focused on ordinary experiences and the significance of materiality in practices in everyday life (e.g. Schatzki, 2002; Warde, 2005). This body of research collectively explained mechanisms of routinization and stability as well as change (e.g., Reckwitz , 2002; Shove & Pantzar, 2005; Shove et al. 2012). Consumer theorists followed this trend and employed practice theory to study such topics as choice (Allen, 2002), value creation (Schau et al., 2009), and the meanings of materials and their transformation (Türe & Ger, 2016). Consumer researchers also fruitfully studied the stabilization of misaligned or disrupted practice routines (Canniford & Shankar, 2013; Cardoso et al., 2020; Epp et al., 2014; Phipps & Ozanne, 2017; Seregina & Weijo, 2017; Thomas & Epp, 2016; Woerman & Rokka, 2015). Thus, practice theory studies have already shed considerable light on the routinization and disruption of practices, and it's a lens is well-suited to studying field-level changes (see Hui et al., 2018) of the type of interest here.

In the last decade, the cosmetics market has seen growing demand in North America; it is expected to expand even more in the near future as millennials and generation Z consumers attempt to master the latest makeup trends (Euromonitor International 2019a, 2019b). The number of influencers and followers has grown exponentially in the last decade in the cosmetics industry. Estimates suggest that by 2018 there had been over 349B total views of beauty content created by influencers on YouTube, with no signs of growth slowing in the near future (Pixability, 2018). Indeed, commentators suggest that the cosmetics industry has embraced influencer marketing more eagerly than any other (Gilliand, 2018). For instance, in 2015, Bethany Mota was the top beauty content creator on YouTube with 8.2M followers (Pixability, 2015); as of May 2020 she has 10M followers. The current top name in cosmetics on YouTube is Jeffree Star with 18.2M followers, while Huda Kattan leads cosmetics influencers on Instagram with 43.9M followers (May 2020). Taking all these contextual characteristics into account, it would appear that

the cosmetics market is an ideal one in which to examine how influencers may impact field level practices and individual consumers' performances.

To understand this context, we initially collected extensive archival data to understand the historical rise of influencers in the industry. The archival data was downloaded using Factiva to access US and Canadian newspapers, magazines and online blogs with the key words of "makeup" and "influencer". The dataset is a total 479 pages long (single spaced) without pictures. To gain more familiarity with the context, we also engaged in observational netnography by following 25 beauty influencers from North America on YouTube since March 2020. Lastly, the first author conducted 30 interviews in, 15 with consumers and 15 with professionals in the industry including: influencers; brand owners and managers; marketing, talent and influencer agency professionals; makeup artists; and a beauty magazine editor.

Our preliminary findings regarding practice level changes suggest that influencers affect market level practices by introducing new materials, competences, meanings to existing practices; these introductions, collectively, make practices more complex. The infusion of these new elements into practices is abetted by the networked circuits of interaction among influencers, and between influencers and brands. At the practitioner performance level, we find three patterns among consumers: non-reflexive adaptation; reflexive selection; and rejection of new elements of cosmetics practices. Overall, this research sheds new light on market systems dynamics by theorizing the role of influencers of practices, while extending the practice theoretic lens in more institutional directions.

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(IL)Legitimacy and Market Dynamics

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Discussant: Ashlee Humphreys, Northwestern University, USA

Paper #1: Markets' Survival Between Legitimacy and Delegitimacy

Aya Aboenien, HEC Montreal, Canada
Jack Sadek, McGill University, Canada

Paper #2: Tensions and Dynamics in the (De)Legitimation of the American Consumer Firearms Market

Aimee Dinnin Huff, Oregon State University, USA
Michelle Barnhart, Oregon State University, USA
Brett Burkhardt, Oregon State University, USA

Paper #3: The Impossible Profession of Being an Influencer

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Maria Carolina Zanette, NEOMA Business School, France
Sarah Herchet, Concordia University, Canada
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SESSION OVERVIEW

Legitimation is a cultural process that affects consumer identities (Arsel & Thompson, 2011; Coskuner-Balli & Thompson, 2013; Veresiu & Giesler, 2018), products (Coskuner-Balli & Ertimur, 2017; Giesler, 2012; Irwin, 2001; Kates, 2004), and markets (Huff et al., 2021; Humphreys, 2010b, 2010a; Press & Arnould, 2011). Researchers unveiled the role of the media (Humphreys, 2010a), governments (Giesler & Veresiu, 2014), activists (Kozinets & Handelman, 2004), and consumers (Dolbec & Fischer, 2015; Scaraboto & Fischer, 2012) in legitimation processes.

This session aims to shed light on a burgeoning field of research on market legitimacy. The session is comprised of three papers. The first paper explores the role of myriad marketplace actors in the continuous legitimation and de-legitimacy of markets. The second zooms into one of these actors, the marketers, to explore the role of advertisements in the tensions and dynamics of legitimacy. The final paper unpacks institutional work done by influencers and the cultural processes affecting their professionalization.

The first paper provides a multi-actor process theorization of legitimation through the study of three markets. These markets are meat, cryptocurrency, and vaping. These cases were selected for being at various stages of legitimation. Actors ranging from health to financial institutions to trade associations to governments to brand managers to consumers simultaneously anchor and challenge markets' legitimacy. Through this entangled web of motives and actions, the legitimacy of a market remains perpetually volatile with an ongoing need for reaffirmation.

The second paper studies the gun market in the United States to explore the reasons behind its slow cognitive and normative legitimacy despite legalization. The authors unveil the role of not just the materiality but also the practices displayed in advertisements in legitimacy processes. Analyzing the content of the routines and practices displayed in gun advertising, the authors show that tensions regarding the types of practices displayed generate ongoing market tensions. Despite marketers' intentions to legitimate their product, their communication strategies displaying culturally illegitimate practices contributes to the object's delegitimation.

The final paper takes the emerging field of influencers to explore the historical tensions regarding its professionalization. Through looking at media representations addressed to different stakeholders (general public, practitioners, and academics), the authors unpack a process of legitimation and delegitimation of influencer work. Their findings show that due to the fragile cultural expectations regarding the authenticity of influencer work, professionalization efforts have backfired, putting the category in suspended delegitimation.

These three papers show that legitimacy is an ongoing process that is never complete, and sometimes, impossible. The session will contribute to the conference by showcasing research relevant to multiple stakeholders: consumers themselves, practitioners, and the society at large. Building on contexts that are part of the everyday lives, well-being, and concerns of consumers (vaping, cryptocurrency, meat, guns, influencers), the session aims to both contribute to the academic discussions on legitimacy and generate conversation on these substantive areas, including ethical, political, legal and consumer-well-being concerns. It also will likely elicit discussions on how the pandemic has reshaped the legitimacy of masks, social gatherings, and teleworking.

Markets' Survival Between Legitimacy and Delegitimacy

EXTENDED ABSTRACT

Institutions' survival is contingent on their legitimacy. Legitimacy is "a generalized perception or assumption that the actions of an entity are desirable, proper or appropriate within some socially constructed system of norms, values, beliefs, and definitions"(Suchman, 1995, p. 574). It has three main pillars regulative, normative, and cognitive (Humphreys, 2010a; Scott, 1995). Regulative legitimacy is involved with governmental rules and regulations, cognitive legitimacy is the association between a market and the existing cognitive schemas of individuals and finally, normative legitimacy is associated with the social acceptance of a market (Scott, 1995).

Most of the work on institutionalization investigated the process of gaining legitimacy (Humphreys, 2010a, 2010b; Humphreys & Latour, 2013; Kates, 2004; Press & Arnould, 2011). Through a historical analysis, authors identified the narratives that legitimated multiple markets. For example, the market for casino gambling (Humphreys, 2010a), and community-supported agriculture (Press & Arnould, 2011). Consumers, media, and governments mobilize their actions to shape various pillars of legitimacy (see Dolbec & Fischer, 2015; Humphreys, 2010b, 2010a; Humphreys & Thompson, 2014; Scaraboto & Fischer, 2012). Few researchers investigated the interplay between these legitimacy pillars in the market. For example, how cognitive and normative legitimacy is intertwined (Humphreys and Latour 2013) and the role of physical objects in influencing the legitimacy of consumption (Huff et al., 2021). However, most of the literature tackled the process of obtaining legitimacy and investigated the influence of actors in isolation. Little is known about the spillover effect of the work of marketplace actors and how they influence market delegitimacy. Thus, we ask how does the recursive process of legitimacy and delegitimacy unfold?

We analyzed newspaper articles, industry reports, documentaries, and Twitter hashtags associated with three markets. The media includes both mainstream and specialist counting for 16,580 articles and it covers the narratives around these markets, the political forces into action shaping them. Twitter analysis included the most mentioned hashtags within each market counting for 72,432 comments.

The meat market was chosen as it exists as far as humans were around (Zaraska, 2016) and managed to survive multiple battles of delegitimation across its history. The cryptocurrency market was selected as a new emerging market shaking the legitimacy of the hard currency as the sole form of exchange and aiming to flee its tainted black-market history. For example, cryptocurrencies such as Bitcoin were originally used on sites such as Silk Road where individuals bought and sold illicit drugs and weapons. Finally, the vaping market was selected as a market-facing de-legitimacy, however rather than disappearing, it is constantly shifting to absorb the shocks of delegitimation.

Through our analysis, we identify several overlooked marketplace actors that influence market legitimacy. These actors are scientific and financial communities, scientific and financial institutions, specialized media, industry associations, religious institutions, anti-consumers (e.g, parental groups against vaping), and entrepreneurs. These actors tackle different legitimacy pillars guided by their position in the market. For example, parental groups that exist on social media stand in opposition to vaping as a legitimate practice among teenagers. Their role touches on all three legitimacy pillars in various ways. As parents, they influence the normative delegitimacy of vaping through emotional messages of concern towards their kids. Such influence rests on cognitive legitimacy provided through scientific groups who equip them with scientific proofs. In addition, parents lobby governmental and policymakers to de-legitimate the regulative legitimacy of vaping through tightening the regulations.

Actors contest the existing legitimacy of a market, whether it is legitimate or delegitimate, using four different approaches: problematization, demarcation, validation, and affirmation. By problematization, we are referring to actors' efforts in questioning the current legitimacy status of the market. This strategy is implemented by providing information that contradicts the norm. An example of such problematization is attacking the production practices of meat by claiming their unhealthiness and unsustainability. Problematization targets the cognitive pillar of legitimacy.

Actors are also involved in demarcation by drawing boundaries between acceptable and unacceptable practices in the market. Such a process reshapes the norms and aims to establish new realities markets. Demarcation targets cognitive and normative pillars. For instance, within the cryptocurrency markets, the original cryptocurrency supporters of Bitcoin are quick to denounce any new form of cryptocurrency that doesn't follow the same principles set by Bitcoin. Whereas Bitcoin's supply is dictated by the Proof of Work protocol in which the supply is controlled by the mining process whereby new Bitcoin is added to the market when transactions are approved (Nakamoto, 2008), other cryptocurrencies have pre-mined their supply which is denounced by the Bitcoin community.

Third, is validation when actors provide concrete support for their motives. Validation requires regulative support either through scientific and financial institutions and federal agencies. Cryptocurrency proponents aim to gain regulative legitimacy from the United States government through pushing for clear regulations for this new asset class. Vegans are validating the unsustainability of meat production practices through scientific research (e.g., The China Study Campbell & Campbell, 2016).

Finally, actors are involved in affirmation by rallying support and building networks to achieve their desired legitimacy. Affirmation rests on the acquisition of normative legitimacy within the market. Actors, both pro and against the current state of legitimacy, practice affirmation. An example of affirmation in the formation of trade associations within the meat industry to protect meat producers and the formation of animal activists' groups that stand in opposition of the market.

We argue, in our paper, that markets are neither fully legitimate nor fully delegitimate but rather are inherently contested and volatile. Our paper contributes to the literature on institutional theory by providing a theory of market (de)legitimacy. We do that by highlighting the connection between the myriad marketplace actors and their role in influencing the different legitimacy pillars. Finally, we put forward managerial recommendations for brands and companies to ensure their survival along the legitimation process.

Tensions and Dynamics in the (De)Legitimation of the American Consumer Firearms Market

EXTENDED ABSTRACT

We apply an institutional theory perspective to examine shifts in the three "pillars," or types of legitimacy that sustain an acceptable social institution – regulative, normative, and cultural-cognitive legitimacy (Scott 2008; Thornton et al. 2012) – in the American market for consumer firearms from 2000 through 2020.

In many consumer markets, the pillars of legitimacy are relatively interdependent. Consumers, producers, mainstream media, or policy-makers can establish the foundational elements for one pillar, which can provide scaffolding for other pillars to emerge, and for all three to strengthen in a legitimation process that renders the market acceptable (Humphreys, 2010; Suchman, 1995). For example, the markets for casino gambling (Humphreys, 2010) and recreational cannabis (Huff, Humphreys, & Wilner, 2021) experienced legitimation as iterative emergence of and dependencies between the three pillars. Conversely, in other consumer markets, as one pillar begins to collapse, other pillars follow (e.g., cigarettes; Inness, Barling, Rogers, & Turner, 2008) The interdependent nature of the pillars enables the public to understand a particular market as largely acceptable, unacceptable, or in transition (Rosa, Porac, Runser-Spanjol, & Saxon, 1999; Weijo, Martin, & Arnould, 2018).

Using data related to national public policy, public opinion, retail sales, and advertising, we examine a market characterized by tensions between and dynamics among the pillars that have not enabled the market to attain a status of legitimate or illegitimate. Public policy data, including two US Supreme Court decisions related to rights to firearm ownership and armed self-defense (2008, 2010), and the expiration of a ten-year assault weapons ban (in 2004), show that regulative legitimacy has strengthened in the past two decades (Cook & Goss, 2014; Light, 2017). Laws upholding gun rights have expanded at the national level and across the states, and this expansion of consumers' rights to purchase, own, carry, and use guns in civilian life has coincided with a dramatic increase in year-over-year firearm sales (Law Center to Prevent Gun Violence, 2021; NRA-ILA, 2020; National Shooting Sports Federation, 2020).

Puzzling, then, are the continued lack of normative and cultural-cognitive legitimacy in this market. Throughout our study period, consumer firearms lacked widespread alignment with social values and morals, shared logics of action, and cultural support (Cook & Goss, 2014; Haag, 2016; Melzer, 2019). In spite of a constitutional right to consume firearms, public support for more strict gun regulations has remained between 55-60%, and gun ownership remains steady at 30-40% of American households (Gallup, 2020). Further, some key social institutions have enacted regulations that de-legitimize firearms, including bans on advertisements on social media platforms and mainstream television networks, and bans on carrying firearms in sports stadia, airports, etc. (Claflin, 2021).

Prior research has examined the social movements and institutions seeking to legitimize or de-legitimize guns (Huff, Barnhart, McAlexander, & McAlexander, 2017; Lacombe, 2021; Melzer, 2019). Other research has revealed how guns are an identity resource, a material marker of community, a practical tool, and an essential possession for everyday life (Lacombe 2021, Shapira 2018, etc.). We focus on the work of marketers, and examine firearm advertising by manufacturers. Print magazines remain the dominant medium for gun advertising owing to restrictions imposed by other media. Our research question is, how does gun advertising contribute to the tensions and dynamics of legitimacy in the gun market?

We obtained hard copies of monthly issues of *Guns & Ammo* from 2000-2020, the firearms-focused magazine with the largest circulation that is not published by the National Rifle Association. We catalogued ads ¼ page or larger; classified them as for handguns (ie, pistols, revolvers), traditional rifles, modern sporting rifles (ie, 'AR-15 style'), and/or shotguns; and coded them on 22 different attributes, including the activities depicted in the ad.

We found that the volume and nature of gun ads changed in relation to regulatory expansions over the period of study. After the assault weapons ban expired, ads for 'AR-15 style' modern sporting rifles increased in number, and after US Supreme Court decisions were issued, ads for handguns increased.

Further, over time, the ads made more explicit linkages between types of guns and types of routines or activities that are appropriate. Traditional rifles and shotguns were linked, in text and imagery, to specific activities: exerting deadly force on animals or inanimate targets in the course of hunting, rural life, and target-shooting.

Handguns and modern sporting rifles were linked, in text and imagery, to different activities: the practice of and the potential to exert deadly force against another human in the course of self-defense, including of family and/or property; and of self-assertion, including dominance over perceived (and often abstract) forces of evil or oppression. At times, the distinction between self-defense and self-assertion activities was blurred with use of military (i.e., combat, tactical) themes.

Overall, we find that market legitimacy is a function of the legitimacy of the activities performed with the product, and these activities are portrayed in advertising. The activities related to hunting and sport shooting, and the guns themselves, have long been and continue to be regarded as legitimate by Americans (Littlefield & Ozanne, 2011). In contrast, the activities related to self-defense and self-assertion, and the guns portrayed as appropriate for those activities, are not generally accepted as legitimate. The resulting discrepancies in legitimacy of activities contribute to the friction and unusual dynamics in the legitimation of the firearms market.

These findings point to the importance of (1) understanding the legitimacy of the consumer practice in addition to the product itself (Zanette & Scaraboto, 2019); (2) the interplay between the pillars of legitimacy; consumers may not necessarily regard a product that is legal as normative or aligned with cultural beliefs (Luedicke, Thompson, & Giesler, 2010; Wilner & Huff, 2017); (3) and the irony in marketers' success in encouraging illegitimate practices. One consequence of an 'assault style rifle' being used in a mass shooting – an activity indirectly suggested in some advertising – is that the subcategory of firearm becomes less legitimate for many Americans, and more legitimate for others (Browder, 2019). The net result is a lack of generally-agreed-upon direction of (de)legitimation for the firearms market.

The Impossible Profession of Being an Influencer

EXTENDED ABSTRACT

Influencers have become strategic resources for brands, both as creators of content (Nascimento et al., 2020) and as communicators with an avid and engaged audience (McQuarrie et al., 2013). However, despite the increased literature and practice around them, evidence suggests that their role in companies' strategies is still secondary (Influencer Marketing Hub, 2020), that influencer work is still considered frivolous and that compensation for influencer work is not standardized (Abidin, 2016a). In this paper, we explore the historical and emergent tensions surrounding influencer work in the context of their growing importance in marketing communication.

We draw on the literature domains of both the sociology of professions and legitimacy. The first is based on the premise that expert labor can only be considered professionalized when there is a clear definition of a group's work and their exclusive jurisdiction over others for this work (Abbott, 1988). Such exclusivity comes from the institutionalization of professional work. This process entails several changes in a field (Suddaby & Viale, 2011) and is facilitated through institutional work strategies that result in legitimate expertise, autonomy and authority for members of this profession (Noordegraf, 2020). The second informs us on what 'legitimate' for a profession means. Any entity—including a profession—to be legitimate must comply with different criteria of legitimacy (Deephouse et al., 2017; Humphreys, 2010; Huff et al., 2021). Pragmatic legitimacy demonstrates that a specific professional category manages to solve a real and important problem. Regulative legitimacy refers to if, and how, regulatory bodies recognize members of a professional category's expertise, autonomy and authority. Normative legitimacy indicates that the professional activity does not clash with social norms and rules. Cultural-cognitive legitimacy entails that the general public understands that the professionals' expertise, autonomy and authority are paramount for getting a specific work task done.

Previous literature has offered some insights into the dynamics of the professionalization and legitimation of influencers. First, influencers are considered authentic actors that are experts in creating sincere and emotional connections with their audiences (Kozinets et al., 2010; Ashman et al., 2021). Second, they are authorities of taste (McQuarrie et al., 2013), whose activities have redefined consumption fields (Dolbec & Fischer, 2015; Scaraboto & Fischer, 2013). Finally, influencers calibrate their work for the best type of content to thrive in the attention economy (Smith & Fischer, 2021).

Yet, the legitimacy of influencer work is contested on several grounds: for some they are not 'serious' enough (Abidin, 2016b), due to their reliance on aestheticized and conspicuous lifestyle displays (Abidin, 2016a); for others they are not successful enough, since only 'the lucky few' de facto become successful (Ashman et al., 2018); and yet others claim influencers are also non-authentic, once they might 'sell-out' and change their content when engaging with brands (Kozinets et al., 2010; Kozinets et al., 2017). These challenges seem to intersect with more structural ones, such as a lack of explicit rules provided by digital platforms and a still incomprehensive and incomplete set of rules and standards anchored in corresponding regulations and laws that would define how influencer work needs to be conducted and remunerated lawfully and legitimately.

Our empirical work builds on a database of mass and specialty media, as well as academic articles on influencers that includes 2,104 articles in the specialized press, 14,038 articles in the general press, and 111 academic articles. This data is analyzed qualitatively and quantitatively (through custom dictionaries on LIWC to understand

how professional identities of influencers are framed when addressing various types of audiences (consumers and general public, practitioners, academics). We contextualize this content analysis through historical events that mark the ascension (and fall) of influencers as a professional category (such as the Fyre Festival) with changes in the public opinion.

Our findings indicate that the (il)legitimation process of influencers unfolds in three phases.

In phase 1, influencing work is discussed as productive leisure and unpaid, volunteer, status-oriented—but still authentic—work. Corresponding to the academic discussions on the megaphone effect (McQuarrie et al., 2013), this period marks influencers as ordinary celebrities who work to build and leverage cultural capital through trustworthy opinion leadership.

The second phase aligns with the upsurge of various platforms and the rapid marketization and professionalization of influencer work. This period brings about the introduction of metrics as well as the engagement, conversion, and categorization of influencers including for example the micro-influencer or the pet influencer. In this phase, cultural narratives around influencers start to converge around paid work but without exclusive jurisdiction. Formal means of compensation also bring regulative interference to the field (such as mandatory ad disclosures) and clarify the category of work, while distinguishing it from uncompensated voluntary and ostensibly more authentic word-of-mouth.

The third phase is laden with discourses of delegitimation and contestations on the nature of the work and jurisdiction. Being paid for what was expected to be authentic endorsement breaks cultural legitimacy. Normative legitimacy is also disrupted through scandals such as the Fyre Festival, a fraudulent festival promoted by some of the most popular influencers in the world. On the other hand, the attempts to professionalize and clearly define their work and its jurisdiction through the creation of the Influencers Council in 2019, paradoxically hurts the perceptions of authenticity.

Our work shows that a cultural category that relies on authentically connecting and engaging with an audience might fail at professionalization attempts. What allows influencer work to be considered professional also renders it cognitively and normatively illegitimate. When one's job is to endorse products in exchange for financial arrangements, and attention and affect are gained through heavily aestheticized and conspicuous sponsored performances, the authenticity of the content is questioned by the general public and the practitioners.

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Changing Views on Inequality: Consumer Perceptions, Preferences, and Willingness to Redistribute

Chair: Katherine L. Christensen, Indiana University, USA
Discussant: Amit Bhattacharjee, INSEAD, France

Paper #1: The Perceived and Ideal Inequality of U.S. College Endowments

Martin V. Day, Memorial University of Newfoundland, USA
Michael I. Norton, Harvard Business School, USA

Paper #2: Whether Income and Income Inequality Shape Prosocial Behavior Around the World: A Multiverse Approach

Ashley Whillans, Harvard Business School, USA
Lucia Macchia, Harvard Kennedy School, USA

Paper #3: People are More Tolerant of Inequality When it is Expressed in Terms of Individuals Rather Than Groups at the Top

Jesse Walker, Fisher College of Business, Ohio State University, USA
Stephanie Tepper, Cornell University, USA
Thomas Gilovich, Cornell University, USA

Paper #4: Predicting Support for Redistributive Policy with Disadvantaged Babies and Lazy Adults: Framing Inequality to Promote Redistribution

Katherine L. Christensen, Indiana University, USA
David Dolifka, UCLA Anderson School of Management, USA
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SESSION OVERVIEW

The richest 1% of the world's population owns 44% of the world's financial assets. Last year, for the first time in decades, the global middle class shrunk (Pew 2021). This unequal access to economic resources matters. Financial inequality can reduce economic efficiency, increase vulnerability to financial crises, lower educational attainment and health outcomes for the poor, reduce economic efficiency, and lead to lower levels of well-being (Hertel and Samber 2019; UNDESA 2020).

The goal of this session is to gain a greater understanding of the effects of inequality on consumer judgments and choice by asking two key questions: 1) how does high inequality affect consumer attributions of fairness and charitable giving decisions and 2) by reframing inequality can we increase consumers' preference for redistribution? We explore these questions in a series of four papers.

In the first paper, Day and Norton investigate inequality in an educational context. The authors document current educational inequality across universities and assess estimated and ideal levels of inequality. The researchers show that learning about the current level of endowment inequality increases the perceived unfairness of the distribution of university wealth.

Next, Whillans and Macchia ask: are high-earning individuals more or less generous when income inequality is high? To answer this question, the researchers conduct a multiverse analysis with a globally representative sample (N=948,837). Across models, in countries with higher (vs. lower) income inequality, the authors find that wealthier individuals were more likely to donate and volunteer their time.

The last two papers explore the effect of framing on consumers' attitudes about inequality. Walker, Tepper, and Gilovich examine consumer beliefs about the fairness of inequality and find that economic inequality is seen as less fair when a group, rather than an individual, is presented at the top of the distribution. These results suggest that support for inequality, and policies to reduce it, may depend on how the top of the economic distribution is framed. Finally, Christensen, Dolifka, and Shaddy provide evidence that people indicate higher support for resolving financial inequality across generations when the authors present those disparities as a baby's opportunities, rather than an adult's outcomes. Furthermore, individualistic and structural attributions fully mediate the effect of framing inequality on participants' preference for reducing financial inequality.

Together, these four papers point the way to a deeper understanding of the role of inequality in consumer decision-making. The first paper tackles inequity in the education market, the second paper examines the effect of inequality on charitable giving, and the session's final two papers examine how inequality frames affect consumer fairness judgments and consumer support for redistributive policies. The diverse approaches taken by each paper in this session, and the varying aspects of inequality investigated will attract ACR members from diverse backgrounds including researchers interested in inequality, fairness, social justice, public policy, and ethical issues in marketing.

The Perceived and Ideal Inequality of U.S. College Endowments

EXTENDED ABSTRACT

Equal opportunity is a commonly shared value. In practice, people believe that a main vehicle of opportunity is a university education (Bullock and Limbert, 2003). Indeed, university graduates fair better than high school graduates across several indicators, including higher earnings (Hout 2012). Higher quality university education also appears to relate to better post-university outcomes (Eide et al. 2016; Zhang 2005). Across society, how large is the gap among university education experiences, and how unequal should it be?

We focus on one consequential and well-recognized form: inequality in university and college endowment wealth. University endowments are funded from donations, gifts, and investment earnings, and can be a significant source of funding (Sherlock et al. 2015). Universities with relatively higher endowments per student can also provide more funding for a variety of university operations (e.g., more scholarships, professorships, work, and travel opportunities). In other words, they can offer higher quality education and more educational opportunities than universities with smaller endowments per student. This issue is concerning as elite, wealthy universities are overrepresented by children of wealthy parents, while racialized and lower-class students largely attend less wealthy universities (Chetty et al. 2017). Moreover, as the costs of going to university have risen widely, students from typically non-wealthy families are faced with record-setting student debt, which has doubled in the last decade alone (Tanzi 2018).

To investigate these pressing issues further, we first assess the actual level of university endowment inequality in the United States. We then examine people's perceptions, desired levels, and tolerance of endowment inequality. Providing insight into these judgments is critical, given research suggesting that perceptions of inequality–in domains such as wealth and income–serve as independent predictors

of people's attitudes and behaviors beyond objective inequality in their societies (Gimpelson and Treisman 2018; Hauser and Norton 2017).

First, we identified student enrollments for each of the near 800 universities for the 2015/2016 year and ranked them from those with the largest endowment per student to those with the smallest endowment per student. We then arranged these universities into equal-student quintiles (i.e., top 20%, 2nd 20%, middle 20%, 4th 20%, bottom 20%). Our goal was to provide approximate objective data for comparison purposes rather than directly for policy. Our analysis indicates that the distribution of university wealth is extremely unequal. The top 20% of universities have approximately 80% of the total endowment wealth, whereas the bottom 20% of universities have only 0.6% – a tiny fraction of the total wealth. For the top 20%, this means that the average endowment per student is around $209,000. Meanwhile, universities in the bottom 20% have a mere $1,500 average endowment per student.

Three studies demonstrate people's tendency to both underestimate university endowment inequality and to desire more equal distributions. We assessed beliefs about the degree of university endowment inequality by adapting prior measures of inequality beliefs (Norton and Ariely 2011). Participants were informed that the top 800 (or 100) universities were arranged from largest to smallest endowment per student and placed into quintiles (top 20%, 2nd 20%, 3rd 20%, 4th 20%, bottom 20%). Using sliders participants estimated the percentage of the total university endowment wealth owned by each quintile, which was represented by a labeled column (e.g., top 20%) ranging from 0-100%. Totals were required to equal 100%. As explained to participants, restrictions were programmed to prevent logically impossible estimates (e.g., the top 20% could not be greater than the 2nd 20%).

For the top 800 universities (i.e., the full distribution) participants estimated that the top 20% of universities own 47.14% (CI: 45.30, 48.98) of the endowment wealth but ideally would own 24.39% (CI: 23.07, 25.71). Both judgments are far less than the 80.49% owned by the top 20% (t's > 35.726, p's < .001). Participants also estimated that the bottom 20% of universities own 5.98% (CI: 5.44, 6.52) and ideally would own 17.25% (CI: 16.20, 18.31), which is much more than the 0.60% actually owned (t's > 19.562, p's < .001). Within t-test analyses revealed that ideals for the top 20% were significantly lower than estimates, and ideals for the bottom 20% were significantly higher than estimates (t's > 19.116, p's < .001). In other words, the wealth of the top 20% was underestimated, the wealth of the bottom 20% overestimated, and ideals were much more equal than reality and estimates. These estimates and ideals are not well explained by participants' background characteristics (including income and political affiliation). Finally, a fourth study reveals that learning about the current level of endowment inequality increases the perceived unfairness of the distribution of university wealth.

We discuss the implications of increasing public awareness of educational inequality for both citizen's behaviors (e.g., donations to universities) and educational policies (e.g., taxation, redistribution).

Whether Income and Income Inequality Shape Prosocial Behavior Around the World: A Multiverse Approach

EXTENDED ABSTRACT

Are high-income individuals more or less generous? Due to their greater capacity to help, high-income individuals might be more likely to engage in prosocial behavior than their lower-income counterparts. One phenomenon that makes the prosocial behavior of high-income individuals particularly compelling is income inequality—as it creates a hierarchy in which some people have more resources than others. Income inequality has been increasing around the world (Solt, 2016) and is linked to important downstream welfare and behavioral consequences including health and social problems (Pickett and Wilkinson 2015), lower happiness and life satisfaction (Buttrick and Oishi 2017), and greater cooperation (Hauser et al. 2019).

The effect of income on prosocial behavior and whether income inequality moderates this effect have been previously explored. Yet, published studies have used convenience samples from restricted regions, such as the United States and Europe, and varied measures of prosocial behavior, and income (see Côté and Willer 2020; Schmukle and Egloff 2020 for reviews). Here, we use a large and globally representative data set with 948,837 respondents and 133 countries and consistent measures of prosocial behavior, income, and income inequality. We conduct a multiverse analysis with 30 statistical specifications that contain five income measures (absolute income, log of income, income quintiles, income deciles, and income percentiles), three statistical models (random effects multi-level logit models, fixed effects logit models without covariates, and fixed-effects models with covariates), and two dependent variables (whether people donated money to charity and whether people volunteered time to an organization). First, we explore whether high-income individuals are more likely to engage in prosocial behavior than lower-income individuals. Second, we explore whether high-income are more likely to engage in prosocial behavior under high (vs. low) income inequality.

Multiverse Analysis. When examining a research question, researchers have degrees of freedom to choose the data transformation techniques and statistical models that they find appropriate. However, the answer to the same research question may vary based on the statistical choices that researchers make (Silberzahn et al. 2018). One way to overcome this limitation is to perform a multiverse analysis, which involves systematically conducting analyses that differ in data transformation techniques and statistical methods (Steegen et al. 2016). The goal of this approach is to increase transparency by reporting findings across different statistical scenarios. A multiverse analysis clarifies the robustness of reported results and allows for the observation of whether findings change due to various statistical choices available to a researcher. In our multiverse analysis, we examine whether income shapes the likelihood of engaging in prosocial behavior and whether income inequality moderates this effect by employing 30 different analyses including five income measures and three statistical models.

Data Set. In the present research, we use a large, diverse, and globally representative data set—the Gallup World Poll (GWP). This data set includes nationally representative data from 133 countries, ten survey years (2009-2018), and 948,837 respondents. Given the low correlation between likelihood of donating money to charity and likelihood of volunteering time to an organization of 0.27, we treated these measures as separate dependent variables.

Inequality Measure. To account for the level of income inequality in each country and year, we used the Gini Index in our analyses. Scores closer to one denote higher levels of income inequality. This measure has key advantages for cross-country comparisons: the calculations of the Gini Index are independent of the size of the economy and the population of a country.

Results. Across each of our 30 model specifications, higher-income people were more likely to donate money to charity and volunteer their time to an organization than lower-income individuals. In the 15 models that used whether people donated money to charity as the dependent variable, the odds of having donated money to charity

were, on average, 1.472 times greater than the odds for low-income people. In the 15 models that used whether people volunteered time to an organization as the dependent variable, the odds of having volunteered time to an organization among higher-income individuals were, on average, 1.186 times greater than the odds for low-income people. All findings held controlling for demographic factors (i.e., age, gender, education, employment status, marital status, number of children in the household) and macroeconomic indicators (i.e., log of GDP per capita, unemployment, and inflation rates).

Critically, in 12 out of 15 models, high-income individuals were more likely to donate money to charity under higher (vs. lower) income inequality. For high-income people, the odds of having donated money to charity under higher income inequality was, on average, 1.006 times greater than the odds of donating under lower income inequality. Across all 15 statistical models, higher-income individuals were more likely to volunteer time to an organization under higher (vs. lower) income inequality. In these analyses, the odds of having volunteered under higher income inequality were, on average, 1.005 times greater than the odds of having volunteered time to an organization under lower income inequality. These findings held for covariates.

Discussion. In an era where governments are deprioritizing redistribution and anti-poverty programs, the role of prosocial behavior in shaping societal well-being has never been more relevant. Furthering the debate among academics and policymakers, our study contributes to the prosociality-inequality puzzle of whether income inequality shapes prosocial behavior among the affluent by showing a positive effect of income on prosocial behavior—which is even more positive under greater income inequality. The results of our multiverse analysis complement prior research and set the groundwork for future research: suggesting that we should move from examining if income inequality moderates the effect of income on prosocial behavior to exploring when and why.

People are More Tolerant of Inequality When it is Expressed in Terms of Individuals Rather Than Groups at the Top

EXTENDED ABSTRACT

Despite the ever-growing economic gap between the very wealthy and the rest of the population, support for redistributive policies tends to be low. We propose that the visible wealth of successful individuals may reduce support for redistribution, as people are more likely to believe that the wealth of individuals (rather than groups) at the top is well earned. Prior work suggests that people want to see individual dominance continue more than group dominance (Walker and Gilovich 2021), and that people tend to attribute the behavior and outcomes of individuals more to their dispositions than they do to the behavior and outcomes of groups (Critcher and Dunning 2014). We, therefore, propose that inequality may be seen as more fair when it is framed as an individual at the top of the economic ladder rather than a group because individual success is more likely to be attributed to that person's hard work, talent, and ingenuity. This belief that an individual's economic success is more fairly earned than a group's economic success may in turn diminish people's appetite for policies that narrow the economic gap.

Study 1

Participants in all studies were randomly assigned to either the group or individual condition. In Study1, those in the group condition read that the salaries of the CEOs of the largest companies in America had grown to 372 times that of the average worker. Those

in the individual condition read that the salary of an individual company's CEO had grown to 372 times that of the average worker at his company. Participants indicated how many times greater the CEOs' (CEO's) salary should be compared to that of the average worker. Those in the individual condition thought the salary should be significantly higher (M = 122.8) than those in the group condition (M = 92.7), *p* = .04.

Study 2

In a within-subjects test, participants read first about either a Korean conglomerate or an individual Korean businessman who had accumulated greater wealth than any of its/his competitors. Participants then read about a competition to land a large government contract, which had been won by the conglomerate/businessman. They then rated how fair they thought the outcome of the competition was and how fair they thought the resource distribution was between the conglomerate/businessman and the other competitors. Participants thought it was more fair for the businessman to win the competition (M = 4.98) than the conglomerate (M = 4.54), *p* < .001. They also thought that the resource distribution between the individual businessman and his competitors were more fair (M = 4.79) than the resource distribution between the conglomerate and its competitors (M = 4.20), p < .001.

Study 3

Participants in the group condition saw Oxfam's published estimate that the richest 26 people in the world have as much wealth as the poorest 3.5 billion people. Participants in the individual condition read that the richest person in the world has as much wealth as the poorest 500 million people. Participants then rated how fair they thought this distribution of resources is, and also rated the degree to which they thought the success of the person/persons at the top was due to dispositional factors or situational factors. Finally, participants indicated their support for an inheritance tax to close the gap between the wealthy and the poor.

Participants thought that global wealth inequality was more fair when it was expressed as an individual at the top (M = 4.84) rather than as a group at the top (M = 4.14), *p* = .004.

Participants also thought that the richest person's success was due more to personal characteristics (M = 4.73) than was the success of the richest 26 people (M = 4.10), *p* = .008.

Similarly, participants who read about a group at the top were more in favor of an inheritance tax (M = 6.15) than those who read about an individual at the top (M = 5.34), *p* = .009. A structural equation analysis indicated that the indirect path from condition to fairness to attribution to support for the luxury tax was significant, *p* < .01.

Study 4

Some of the most potent symbols of wealth in the United States are the portraits of people who grace the covers of magazines such as Forbes, Fortune, and Money. We examined whether people who are exposed to a single successful individual on such a cover would be more accepting of inequality than those exposed to a group of successful individuals. Half of the participants saw a Forbes magazine cover that featured 7 billionaires on the cover. The other half of the participants saw a cover of Forbes picturing one of these seven billionaires from the group cover, with the cover randomly selected across participants. They then answered the same questions from Study 3.

Participants thought that the wealth attained by the billionaire(s) depicted on the cover was more fair in the individual condition (M

= 5.62) than in the group condition (M = 4.62), p < .001. They also attributed the success of the individual billionaires pictured on seven individual covers more to dispositional characteristics (M = 6.03) than they did when the seven billionaires were pictured together (M = 5.22), p < .001. Participants who saw the group of billionaires were also more in favor of an inheritance tax (M = 5.73) than those who saw only one billionaire M = 5.10), p = .01. A structural equation analysis indicated that the indirect path from condition to fairness to attribution to support for the luxury tax was significant, *p* < .001.

Gaps between the wealthy and the poor appear to be more tolerable when the gap is between an individual at the top and those at the bottom than when it involves a class of people at the top because an individual is seen as more personally responsible for his or her wealth. This view of individuals as more deserving of their success reduces support for policies aimed at redistribution.

Predicting Support for Redistributive Policy with Disadvantaged Babies and Lazy Adults: Framing Inequality to Promote Redistribution

EXTENDED ABSTRACT

Economic inequality in the United States continues to rise (Horowitz, Igielnik, and Kochhar 2020). While addressing the gap between the "haves" and the "have-nots" is an important societal goal that aligns with the core mission of transformative consumer research (Mick 2006), there is only lackluster consumer support for policies to reduce inequality and redistribute wealth (Horowitz et al. 2020). In this project, we develop and test a framing intervention to increase support for financial equality and redistributive policy.

Opportunities early in life can pave the way to positive outcomes later on, while a lack of opportunity can thwart future potential. Where you start in life as a baby overwhelmingly predicts where you finish as an adult (Clark and Cummins 2014). Despite the direct link between inequality of opportunity and inequality of outcome, we suspect people may find it harder to tolerate unequal opportunity. Our prediction builds upon prior findings suggesting inequality is tolerated when it can be attributed to the individual (e.g., "he lacks skill", "she is lazy") (Bullock 1999; Furnham 1982, 1983; Kluegel and Smith 1986; Piff et al. 2020). We expect unequal opportunities will be harder to rationalize, and we design our intervention around the purest manifestation of opportunity: babies. One baby begins life wealthy and the other baby begins life in poverty. Across four experiments, we show people are more motivated to resolve financial inequalities when those disparities are presented as a baby's opportunities, rather than an adult's outcomes.

In experiment 1 (N = 808), participants were randomly assigned to view eight photographs of either babies or adults. Half of the photographs purportedly showed people with a "family income in the bottom 10%", and the other half showed people with a "family income in the top 10%" (all photos were randomized). Subsequently, participants indicated their agreement with the statement "I would support a policy to make these two groups of people more financially equal" (1 = "Strongly disagree", 7 = "Strongly agree"). We find a stronger preference for equality when the financial disparity is presented with photos of babies (M = 5.15, SD = 1.86) compared to adults (M = 4.83, SD = 1.90; t(806) = 2.41, *p* = .016). To address possible concerns about the use of affectively rich photographs experiments 2-4 use text-based manipulations.

In experiment 2 (N = 806), we present inequality through descriptions of two people.

Participants were randomly assigned to read about two 5-month-old boys or two 35-year-old men. For clarity, we named these people "Michael" and "Robert" (names counterbalanced). In both conditions, these two people were unequal on the dimensions of education, income, and location. To create parallel education and income disparities between the two conditions, we equated the outcomes of the adult ("his income is in the top 10%") to the outcomes of the baby's parents ("the family's household income is in the top 10%"). Therefore, the same degree of inequality was described between the baby and adult conditions.

Replicating our prior results, we find a greater preference for equality when we present disparities between babies (M = 4.92, SD = 1.80), rather than adults (M = 4.41, SD = 1.87; t(804) = 3.94, *p* < .001). After reminding participants that redistributive policies could increase taxes—we observed greater policy support in the baby condition (M = 4.92, SD = 1.86), compared to the adult condition (M = 4.61, SD = 1.86; t(804) = 2.37, *p* = .018). These results are encouraging because consumers' tax and redistributive beliefs are notoriously challenging to move (Srna, Zauberman, and Schrift 2019; Sussman and Olivola 2011) .

In experiment 3 (N = 201), we explore process using a design similar to experiment 2.

We set out to determine if attributions of inequality mediate our framing effect. Because babies do not have a personal history of actions to rationalize their poverty (or affluence), we suspect people should prefer to make structural attributions—rather than individualistic attributions—for a baby's opportunities. Using items from Bullock, Williams, and Limbert (2003) we measure the individualistic (α = .76) and structural attributions (α = .81) for the inequality between Michael and Robert. These two attributions simultaneously mediate the effect of framing on preference for financial inequality. Bootstrapping the confidence intervals (Preacher and Hayes 2004), we find a significant indirect effect through individualistic attributions (ab = .448, CI 95% = [.204, .693]) and structural attributions (ab = .646, CI 95% = [.318, .974]) and no direct effect of condition (β = .198, se = .218, t(197) = .900, *p* = .363) in a model with a significant total effect (β = 1.29, se = .277, t(199) = 4.64, *p* < .001) indicating indirect-only mediation (Zhao, Lynch, and Chen 2010) .

In experiment 4 (N = 1,001), we examined the role of political ideology. Prior work suggests ideological conservatives are more likely to make individualistic attributions to tolerate and rationalize unequal outcomes (Bullock et al. 2003; Chow and Galak 2012). Framing inequality in terms of opportunities should limit the extent to which conservatives can rationalize economic disparities. To test this, we surveyed an equal number of self-reported liberals and conservatives on Prolific Academic and presented them with the same stimuli from experiment 2. Though we do not detect a significant interaction between political alignment (binary) and condition, we observe the simple effect of condition on the preference for equality is only significant for conservatives (β = .360, se = .171, t(2.11), *p* = .035), but not for liberals (β = .195, se = .120, t(499) = 1.63, *p* = .104).

The goal of transformative consumer research is to address real-world problems that affect the lives and welfare of real people. Economic inequality is a pressing, far-reaching problem that most consumers acknowledge but few are willing to act upon. In this project, we propose a simple framing intervention that challenges people to confront the structural reasons for economic inequality.

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How Firm Decisions Shape Consumer Sharing

Chairs: Joseph Reiff, University of California, Los Angeles, Anderson School of Management, USA
Ike Silver, University of Pennsylvania, The Wharton School, USA
Discussants: Joseph Reiff, UCLA Anderson School of Management, USA
Ike Silver, University of Pennsylvania, The Wharton School, USA

Paper #1: Put Your Mouth Where Your Money Is: A Field Experiment Nudging Consumers to Publicize Donations to Charity

Ike Silver, University of Pennsylvania, USA
Deborah Small, University of Pennsylvania, USA

Paper #2: Do Agency Appeals Motivate Consumer Feedback? Evidence from Across the World

Joseph Reiff, University of California, Los Angeles, USA
Hengchen Dai, University of California, Los Angeles, USA
Jana Gallus, University of California, Los Angeles, USA
Anita McClough, InMoment, USA
Steve Eitniear, InMoment, USA
Charlotte Blank, Maritz, USA

Paper #3: When is Censorship Permissible? Intent Sensitivity in Digital Censorship

Tami Kim, University of Virginia, USA

Paper #4: Paper #4: How Listening vs. Reading Shapes the Retelling of News

Shiri Melumad, University of Pennsylvania, USA
Robert Meyer, University of Pennsylvania, USA

SESSION OVERVIEW

What consumers choose to communicate can have a variety of important effects. Providing product feedback or publishing online reviews can help firms learn what customers think of their offerings and influence whether others choose to buy. Posting on social media about recent purchases can help consumers manage their public image and cultivate desirable impressions. And transmitting articles, facts, or opinions about important social issues can sway public opinion and coalesce movements. Such processes of consumer sharing are integral to consumers' daily lives. To date, one common approach to studying sharing has been to focus on *what* consumers share (e.g., Berger & Milkman 2012; Melumad, Meyer, & Kim, 2021). Less is known, however, about how firms can proactively influence sharing. In this session, we present emerging research illuminating how firm decisions impact what, when, and how consumers share.

The first two papers examine how firms can effectively solicit consumers to share. Paper 1 investigates consumers' reluctance to talk about donations to charity specifically. Silver and Small argue that when deciding whether share about charitable giving, donors often worry about the effect sharing might have on their reputation, but they overlook how sharing can help the cause. In a large, pre-registered field experiment, the authors find that nudging donors to consider the fact that sharing might inspire others to give too can increase word-of-mouth. Paper 2 asks why some strategies to increase sharing may not work as intended. In a large field experiment with a technology company in seven countries, Reiff and colleagues find that messages that appeal to consumers' sense of agency (e.g., "Your voice is important") surprisingly *decrease* consumers' willingness to share feedback, particularly in countries with lower trust in business. The authors show that low-trust consumers typically perceive these appeals as inauthentic.

Although firms typically want to encourage consumer sharing, they sometimes need to monitor or even remove certain kinds of us-

er-generated content. Paper 3 explores how consumers react to firms' censorship decisions. Kim argues that, rather than deciding what to censor based on content alone, consumers think firms should consider the sharer's *intent*. Indeed, six experiments reveal that consumers adhere to norms of conversation when reacting to firm's censorship decisions: They expect firms to take the perspective of the sharer when determining whether potentially offensive content should be censored.

Finally, paper 4 investigates how presenting consumers with information in different formats impacts what they encode and share. Melumad and Meyer posit that when listening to content, as compared to reading it, consumers process information more superficially, which leads them to pick up on the gist of the story while overlooking potentially important details. As a result, when the same information is presented via audio (vs. text), consumers glean the more salient elements of the story, which leads them to share biased, and often more negative, versions of the story.

Taken together, these four projects outline important advances in our understanding of how firm decisions shape consumer sharing. We believe this session will interest researchers studying a range of substantive topics including word-of-mouth, persuasion, information processing, censorship, and prosocial behavior.

Put Your Mouth Where Your Money Is: A Field Experiment Nudging Consumers to Publicize Donations to Charity

EXTENDED ABSTRACT

Donations to charity could go farther if donors were willing to tell others about their generosity. Indeed, sharing about charity on social media or via personal communication can raise awareness about worthy causes and campaigns, and it can serve as social proof that people are giving to them (Agerström et al. 2016). Moreover, talking about charity often entails implicitly or explicitly asking others to give, which can encourage generosity directly and broaden the reach of fundraising efforts (Andreoni and Rao 2011). Recognizing that consumer sharing drives revenue, many firms, both for-profit and non-profit, ask customers to 'refer their friends' or 'spread the word' in order to reap the benefits of word-of-mouth (WOM). In the domain of charity in particular, such benefits accrue both for the firm and for society more broadly.

Despite the good that can come from talking about their donations, consumers often treat charity as a private matter. In fact, many cultures prescribe modesty with respect to charity, and often treat *anonymous* good deeds as especially praiseworthy (De Freitas et al. 2019). Furthermore, consumers who broadcast their donations or post online about their volunteering are sometimes thought to be doing good for the wrong reasons – to *look* good rather than to *be* good – and judged negatively as a result (Berman et al. 2015). Thus, although publicizing one's good deeds can help to advance the cause, talking about charity also entails reputational risk.

In this work, we predict and show that when deciding whether to talk about their charitable giving, consumers attend more closely to the possible consequences for their reputation than to the possible consequences for the charity. That is, donors are hesitant to talk about

their generosity because of what sharing might say about them, and often fail to think about the good that can come from raising awareness and encouraging others to get involved. Moreover, we demonstrate that a simple nudge reorienting donors to the benefits of sharing for the cause increases WOM and aids fundraising in the field. We report three experiments, all pre-registered at AsPredicted.Org.

In Experiment 1, we sought to show that consumers feel relatively more discomfort at the prospect of talking about donations to charity (vs. about other ordinary expenditures). 198 participants were recruited from MTurk and asked to consider 21 different ordinary purchases. For each purchase, participants rated how comfortable/uncomfortable they would be talking about it with others (1 "extremely comfortable" to 7 "extremely uncomfortable"). Purchases spanned a variety of categories, price-points, and frequencies, and they ranged from purchasing a new house, to buying a dozen eggs, to signing up for a new gym membership. Compared to a variety of ordinary expenditures, talking about a donation to charity was rated as most uncomfortable ($M = 3.85$), on par with talking about an investment in the stock market ($M = 3.79$), and significantly more uncomfortable than all 19 other purchases tested (all $ps < .01$).

Narrowing in on the context of charity specifically, Experiment 2 investigated what people ordinarily think about when deciding whether to share. We recruited 377 behavioral lab participants and asked each to describe a charitable cause they cared about and to imagine donating to it. Participants reported how willing they would be to post about their donation to charity on social media on a 7-point scale (1 "Extremely unwilling" to 7 "Extremely willing"). But before indicating willingness-to-share, participants were randomly assigned to one of three writing tasks. In the consider-reputation condition, participants wrote about how posting about their donation might impact their reputation (i.e., what others would think of them). In the consider-cause condition, participants wrote about how posting might impact the charity. In a third baseline condition, participants wrote about "whatever came to mind" when considering whether to post. Results indicated that participants were more willing to share after considering impact for the cause ($M=3.85$) vs. reputation ($M=3.24$, $p=.012$, $d=.32$) and vs. baseline ($M=3.20$, $p=.004$, $d=.37$). Meanwhile, the consider-reputation and baseline conditions were virtually identical. Moreover, coding participants' written entries in the baseline condition specifically revealed that more participants spontaneously mentioned thinking about reputation (65%) than the cause (35%). These results suggest that people think more about their reputation at baseline, but that prompting them to consider impact for the cause may increase sharing.

Experiment 3 put this account to the test with real sharing decisions. We partnered with DonorsChoose.Org, a major education non-profit, and conducted a field experiment with 80,279 donors. Specifically, over the course of four months, all donors to our field partner's online platform were randomly assigned to one of two sharing solicitation messages at check-out (after donating). The control condition utilized the organization's standard sharing solicitation ("Please share about this project with family and friends"). The treatment condition was designed to re-orient donors to the possibility of helping the cause by sharing ("Your donation can start a chain reaction, but only if you tell others about the cause. Multiply your impact by sharing about this project with family and friends"). To measure sharing, we collected a combined click-through rate on icons included in the sharing solicitation (i.e., to facebook, email, etc.), and we also measured whether each donor in our experiment brought in any downstream donations through unique shareable links provided after click-through. Logistic regressions revealed that donors receiving the cause-focused treatment message were 5% more likely to

click-through (14.9% vs. 14.2%; $p=.006$) and 12% more likely to recruit a downstream donation (2.1% vs. 1.9%; $p=.005$). In practical terms, the average donor in the treatment condition brought in 16% more in downstream donations via WOM ($1.40 vs. $1.61 recruited per participant).

Taken together, our data suggest that consumers hesitate to talk about donations to charity in part because they are concerned about how doing so might impact their reputation. Consequently, when organizations ask donors to share, many donors fail to consider how sharing might help the cause. In line with this psychology, we demonstrate that a brief and free nudge to consider the cause can increase WOM and aid fundraising in the field.

Do Agency Appeals Motivate Consumer Feedback? Evidence from Across the World

EXTENDED ABSTRACT

Agentic beliefs influence consumers' motivation to engage in voluntary behaviors (Bandura, 2006). For instance, when people believe that their actions will have an impact (i.e., have high "self-efficacy"), they tend to donate more to charity (Sharma & Morwitz 2016) and participate more in democratic elections (Abramson & Aldrich 1982). When firms want to increase customer engagement, they often deliberately design marketing messages to increase agentic beliefs (Shah 2020). In the current research, we examine whether this widely used strategy of appealing to agency by attempting to persuade consumers that their behavior is consequential–a persuasion tactic that we call an "agency appeal"–is indeed effective at increasing customer engagement. We study one common form of customer engagement–providing voluntary feedback about products and services–which is a key aspect of marketing strategy (Lemon & Verhoef 2016).

We began our investigation with a large-scale pre-registered field experiment with a Fortune 500 technology company (N=430,666). For two months, consumers who recently received customer service help were sent an email inviting them to complete a voluntary survey about their customer service experience. People were randomly assigned to receive one of five subject lines: a simple survey invitation (control), a survey invitation with time indication (time), and three seminal types of agency appeals (voice, prosocial, and status):

1. Control: "[Company] customer experience survey invitation"
2. Time: "[Company] customer experience survey invitation (only takes 2 minutes)"
3. Voice (agency): "Your voice is important: Shape the [Company] customer experience"
4. Prosocial (agency): "Your help is needed; Shape the [Company] customer experience"
5. Status (agency): "Your expert advice is appreciated: Shape the [Company] experience"

As pre-registered, we focus on the combined effect of the three agency appeals.

The experiment ran in seven countries: Brazil, Canada, China, France, Germany, Japan, and the US. The subject lines were professionally translated into the respective native language, and they were pre-tested on Prolific with bi-lingual speakers (N=1,337) who were fluent in English and one of the six languages. These tests confirmed that, across all languages, participants rated that the agency appeals more strongly conveyed that the customer feedback would have an impact, compared to the control subject line (p-values<.01).

In line with previous research in other domains, we hypothesized that agency appeals would increase the likelihood that consumers share feedback. To assess whether marketing experts also expected agency appeals to increase feedback, we ran a pre-registered prediction study with members of the UCLA Anderson Marketing Association (N=69). More marketing experts predicted that one of the agency appeals would result in the highest survey completion rate (41% predicted voice, 19% prosocial, 6% status) compared to only 1% of experts who picked the control subject line (p=.003, p=.01, p=.22).

In contrast to our pre-registered predictions and the predictions of marketing experts, the agency appeals significantly reduced the likelihood of survey completion, by 4.1% compared to the control condition (from 21.2 percentage points to 20.4 percentage points; $p<.001$). The negative main effect masks considerable heterogeneity across countries. Compared to the control, agency appeals reduced survey completion in Japan (-10.6% change; p<.001), France (-8.8%; p=.002), Brazil (-8.2%; p=.001), and the US (-6.6%; p<.001); they had no statistically significant effects in Canada (-3.4%) and Germany (+1%); but the appeals significantly *increased* completion in China (+11.2%; p<.001). The time condition did not significantly impact completion rates (vs. control), and this effect did not vary across countries. So why did agency appeals on average decrease consumer feedback? And what might explain the cross-country heterogeneity?

We theorize that when receiving requests from a firm to take an action, consumers draw inferences about the firm's persuasive intent (Friestad & Wright 1994). Specifically, when delivering an agency appeal, the firm communicates an implicit promise that the consumer's actions will be consequential (Kim et al. 2019). If consumers generally do not trust business, they may feel that the firm's promise is not genuine and that its agency appeal is an inauthentic persuasion tactic; this should reduce their willingness to comply with the firm's request (Campbell, 1995; Silver, Newman, & Small 2020). However, consumers who trust business may not perceive the agency appeal as inauthentic, and would thus be effectively motivated by the agency appeal, as we initially theorized.

Our cross-country field experiment allowed us to test this account by examining whether a country's average level of trust in business (Edelman Trust Barometer 2021) moderated the treatment effects of the agency subject lines. Consistent with our theory, the effect of the agency appeals on survey completion was significantly moderated by trust in business (p<.001), such that agency appeals had more negative effects in countries with lower trust in business (e.g., Japan) and more positive effects in countries with greater trust in business (e.g., China).

As further field evidence that low-trust consumers responded negatively to the agency appeals, consumers in the agency conditions were significantly more likely to unsubscribe from future emails than consumers in the control condition (p=.024), and this effect was stronger in countries with lower trust in business (p=.003).

To test the mechanisms stipulated by our theory, we ran a pre-registered lab experiment where 1506 MTurkers were randomly assigned to read either the control subject line or an agency appeal from our field study. Specifically, we used the voice subject line because it is the cleanest appeal to agency among the three appeals tested in our field study. As predicted, the effect of the agency appeal (vs. control subject line) on perceived inauthenticity and completion intention depended on *individual-level* trust in business (p=.007 and .03, respectively) whereby the agency appeal increased perceived inauthenticity and decreased completion intention to a greater extent for people with lower trust in business.

Taken together, our results caution against using agency appeals without first understanding how they are perceived by consumers. More generally, understanding "fit" between communications and cultural values (like trust in business) will improve firms' abilities to predict where marketing strategies will work best.

When is Censorship Permissible? Intent Sensitivity in Digital Censorship

EXTENDED ABSTRACT

A mother posting a photo of her breastfeeding on social media. A photojournalist posting a video from a war zone. If these user-generated posts include the mother's nipple and dead bodies, respectively, do people believe they should be censored? With the increase in the number of online platforms that allow people to create and share content with family, coworkers, and strangers around the world, online platforms have a daunting task of censoring user-generated content. Here, I investigate the psychology of digital censorship by examining people's beliefs regarding how censorship decisions of user-generated content should be made.

Drawing on the notion that people treat social media platforms as a space to have conversations with others (e.g., Martin & MacDonald, 2020), I suggest that conversation norms—particularly the importance of considering the communicator's intent—may play a significant role in shaping people's beliefs about how censorship decisions should be made on social media. Linguistics and philosophy scholars have long recognized the importance of understanding the communicator's intent in facilitating successful conversations (Anscombe, 2000). Rather than simply unpacking the literal meaning of the communicator's message, the listener is expected to consider the communicator's intention underlying the message even in ambiguous situations (Grice, 1969; Stiles, 1987). Here, I posit that people believe the creator's intent should be considered when censoring user-generated content (i.e., an intent sensitivity hypothesis) and that this is driven by people's belief that conversation norms should guide censorship decisions regarding user-generated content.

Studies 1a–1b investigated whether people are less accepting of censorship decisions when the creator's intent is not considered. Study 1a (*N*=601) was a 2 (censorship decision: allow, ban; between-subjects)x2 (intent: no intent, positive intent; between-subjects)x3 (scenario type: explicit language, bodies, breastfeeding; within-subjects) mixed design. Participants read about a social media platform's decision to allow or ban three different user-generated posts with inappropriate content. For each user-generated post they viewed, participants were given either no information about the creator's intent (e.g., "Pictures including blood and dead bodies") or information that enabled them to infer the creator's positive intent ("Pictures from a war zone, posted by a photojournalist. The pictures include blood and dead bodies"). Supporting the intent sensitivity hypothesis, amongst those in the "no intent" condition, decision acceptance was significantly higher when participants learned that the platform had decided to ban (versus allow) the user-generated posts (M_{ban}=5.71 versus M_{allow}=3.37; *p*<.001). In contrast, amongst those in the "positive intent" condition, decision acceptance was significantly lower when participants learned that the platform had decided to ban (versus allow) the user-generated posts (M_{ban}=4.23 versus M_{allow}=5.26, *p*<.001).

Study 1b (*N*=200) employed a 2 (reasoning: intent, content; within-subjects)x2 (scenario type: dead bodies, explicit language; between-subjects) mixed design. Participants read a user-generated post that contains inappropriate content and was created

with negative intent (e.g., "A user posts a note including explicit language to bully a colleague). Participants indicated their acceptance levels of the decisions of two employees—one who recommends that the post be banned due to the post's content and another who bases their ban recommendation on the creator's intent. Across both scenarios, participants thought that the employee whose censorship decision was based on the creator's intent made a more appropriate decision (M=6.11) than that whose censorship decision was based on the post's content (M=5.17, p<.001). Perceived justification also followed the same pattern (p<.001).

Are people sensitive to intent even when negative consequences may arise? Study 2 (N=400) varied whether the user-generated post that is being censored had a negative (versus positive) intent, and whether it was likely to generate negative (versus positive) consequences. Decision acceptance ratings were significantly lower when the post that was banned had positive intent (M=4.86) rather than negative intent (M=5.89, p<.001) regardless of the post's likelihood of generating negative consequences.

If people believe that platforms should consider the content creator's intent, their acceptance of censorship decisions should be linked to their belief that the company is attempting to perspective-take the creator. In Study 3a (N=687), participants in the baseline condition read about a social media platform that sometimes decides whether or not to ban certain types of content posted by a user. Those in the content condition, in addition, read that the platform solely considers whether or not the post includes adult content; those in the content+intent condition read that the platform considers whether or not the post includes adult content and the intention of the creator. Compared to those in the content condition (M=4.02), acceptance ratings in the baseline condition (M=4.30, p=.039) and the content+intent condition (M=4.49; p=.001) were significantly higher. The latter two conditions did not significantly differ (p=.183). Perspective-taking followed the same pattern, and mediated the relationship between condition (using the content condition as the comparison baseline) and decision acceptance. Study 3b (N=201) was a follow-up study, in which I ruled out perceptions of morality as an alternative mechanism.

As a natural extension, the intent sensitivity hypothesis should not hold in contexts where expectations of perspective-taking are not present—for instance, when the decision-maker is a computer algorithm (versus a human employee). Study 4 (N=200) was a 2 (intent: no intent, positive intent; between-subjects)x2 (decision agent: human, algorithm; within-subjects)x3 (scenario type: explicit language, bodies, breastfeeding; within-subjects) mixed-design. Following Study 1a, participants read about three different user-generated posts that contained either no information about the creator's intent or information that enabled them to infer the creator's positive intent. For each post, participants indicated the extent to which they thought (1) the platform's computer algorithm and (2) an employee at the platform will ban the focal post. Participants in the "no intent" condition thought that the platform's employees (M=5.75) and the platform's computer algorithm (M=5.67; p=.452) would similarly ban the post. However, participants in the positive intent condition thought that the computer algorithm (M=5.10) would be more likely to censor the user-generated posts they viewed than the employees would (M=4.33; p<.001).

These findings further our understanding of the psychology of digital censorship, and contribute to research on fairness, freedom of speech, digital norms, and conversation norms.

How Listening vs. Reading Shapes the Retelling of News

EXTENDED ABSTRACT

In recent years two significant phenomena in news consumption have arisen. First, to garner more clicks and maintain their competitive edge, news outlets have been publishing content that is increasingly negative and sensationalized in tone (e.g., Lengauer et al. 2012; Sacerdote et al. 2021). At the same time, consumers have been increasingly relying on audio programming (e.g., podcasts) for the consumption of such news content (Adgate 2019). For example, in 2020 alone Apple podcasts were downloaded over one billion times worldwide (Binder 2020), and news websites now commonly offer the option to listen to rather than read posted content (Adgate 2019). Perhaps the most compelling explanation for the resurgence in popularity of audio programming is its convenience: information that was once restricted to reading can now be consumed anytime, anywhere—while shopping, exercising, commuting, or working.

As consumers increasingly listen to news rather than just reading it, how might this alter what they comprehend from a story, and, in turn, the interpretations they share with others? Prior research has shown that, while information encoded through listening and reading is cognitively processed in a similar manner (e.g., Deniz et al. 2019), spoken communication is more vulnerable to miscomprehension due to two features: its relative ephemerality, and greater potential for processing interference (e.g., Daniel and Woody 2010). Although podcasts render spoken language less ephemeral than in conversation (since users can rewind and re-listen to sections), doing so requires more effort than simply re-reading a word/sentence in writing; as a result, listening to a story often requires more sustained attention to achieve the same level of comprehension as reading it. Likewise, in the natural settings wherein people listen to streaming content—e.g., driving or walking—listening is more prone to interference from other modalities such as competing sights and sounds (e.g., Chaiken and Eagly 1976; Munz and Morwitz 2019). As such, while listening to a story might seem simpler than reading it, doing so may leave retellers with an impoverished—and possibly biased—understanding of its content that is then relayed to others.

We hypothesize that when listening to (vs. reading) a story, the greater difficulty of processing auditory information causes consumers to selectively encode the more salient features of the story—privileging, for example, gist statements over qualifying details, or negative information over positive (e.g., Baumeister et al. 2001). Thus, if a story contains a mix of positive and negative information, for example, we predict that a listener would walk away with a more negative interpretation than someone who read it. Naturally, this difference will result in substantively different retellings of the same content depending on whether one listened to or read the story.

We tested these ideas across three large-scale (N=2,025) experiments. In Experiment 1, 882 Prolific Academic participants were randomly assigned to either listen to or read the same news story (716 words; 4:35 listening time) about a researcher accused of fabricating data (the protagonist). After reading or listening to the story, participants were asked to write a summary of it as if they were retelling it to a friend. They then answered a series of questions about their experience while consuming the story (e.g., how immersed they felt), their main takeaways from the story, and a set of questions that tested their memory accuracy for the content. To mimic the negativity that often marks real-world news, the headline and gist statements in the story focused on the accusations against the protagonist, while the more nuanced details qualified this negativity (e.g., detailing that the protagonist's accuser was likely deceitful).

The results confirmed that participants assigned to listen reported being less immersed (M_{listen}=5.24 vs. M_{read}=5.48; $F(1,881)$=7.11, p=.008) and less visually focused on the task (M_{listen}=4.91 vs. M_{read}=6.18; $F(1,881)$=149.74, p<.001); they also recalled a lower percentage of facts accurately (M_{listen}=84%% vs. M_{read}=91%; χ^2=126.94, p<.001). More importantly, listeners were more likely to believe the protagonist was guilty of fabricating data (M_{listen}=4.66 vs. M_{read}=4.39; $F(1,881)$= 7.07, p=.008), and were more likely to falsely recall details congruent with his guilt (M_{listen}=20% vs. M_{read}=16%; χ^2=19.02, p<.001).

To further probe this bias, an independent sample of 773 MTurk judges (blind to condition and hypothesis) read 3 randomly chosen summaries, and rated the extent to which they believed the protagonist was guilty based on each summary (1-4 scale). An additional 775 MTurk judges were recruited to rate how likeable the protagonist seemed based on each summary (1-4 scale). As expected, judges were more likely to believe that the protagonist was guilty based on summaries written by listeners (M_{listen}=2.78 vs. M_{read}=2.63; $F(1,2319)$= 20.15, p<.001), and perceived the protagonist as more dislikable (M_{listen}=3.83 vs. M_{read}=3.73; $F(1,2527)$= 5.08, p=.024).

In Experiment 2, 778 Prolific Academic participants were randomly assigned to either read or listen to an article that included a balance of positive and negative information on the risks and benefits of a shampoo ingredient, and then wrote a summary of it as if for a friend. Because negative information tends to be more salient than positive (e.g., Baumeister et al. 2000), we predicted that listeners would privilege information about risks more than benefits, resulting in more pessimism towards the ingredient.

Conceptually replicating the prior results, listeners reported being less willing to use shampoos containing the ingredient than readers (M_{listen}=3.35 vs. M_{read}=3.68; $F(1,777)$= 7.48, p=.006), and their summaries contained proportionately more mentions of the risks than those of readers (M_{listen}=8.6% vs. M_{read}=6.4%; $\chi^2(777)$= 9.10, p=.002). Likewise, listeners recalled the chance of experiencing negative side effects (10%) as higher than it was (M_{listen}=21.3% vs. M_{read}=16.9%; $F(1,777)$=14.16, p<.001). Finally, Experiment 3 demonstrated that when the gist provided in a story is *positive* but its qualifying details are negative, listeners retold the story as more positive than readers.

Taken together, the findings suggest that listeners tend to process news more superficially than readers, resulting in the proliferation of word of mouth that is more distorted or biased. We conclude by discussing implications for how new modalities affect word of mouth.

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The Babel of Collective Consumption: Tensions and Heterogeneity in Communities and Subcultures

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Paper #1: Community through Competition

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Paper #2: More Gamer, Less Girl: The Cultural Production of Masculine Dominance

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Paper #3: Brand Community Logics

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SESSION OVERVIEW

The recent tumults have revealed the fissures that divide us with the pandemic's alienating effects piquing a renewed interest in community-building. What the world needs now is to find ways to reconnect and forge communities that can redress our collective differences. Evoking Dewey (1954), the Babel of our times "is not one of tongues but of the signs and symbols without which shared experience is impossible." Where can we find sites for shared experiences? This session suggests that consumer research on collective consumption can offer pragmatic insights for the same.

Consumer research has conceptualized different modalities of social connectedness. Communities are collective consumption sites around shared signs (Muniz and O'Guinn 2001) and subcultures are focal points of social cohesion (Schouten and McAlexander 1995). However, studies also have propounded heterogeneity in communities (Chalmers Thomas, Price and Schau 2013), tensions in collectives (Tumbat and Belk 2011). In order to forge pathways to connect, it is crucial to also be mindful of the frictions that can arise in collective experiences. This session illuminates schisms that can hinder communal experiences in communities and subcultures via the exploration of boundary work and multiple logics.

The first paper executes the boundary work of how communities can be facilitated/hindered via the practice of competition. The authors explore the presumed antithetical relationship between 'community' and 'competition'. They posit that competition need not be an antagonistic conquest but can lead to an agonistic contest that generates community. In the context of competitive storytelling, the authors uncover how 'community' is not necessarily a teleological project but that a conducive alignment (misalignment) of the competitive practice's elements can facilitate (hamper) the emergence of communal experiences.

Moving on to exploring the boundary work of how tensions hindering social cohesion in subcultures can be combated as well as reproduced, the second paper explores how female video gamers' response enactments create, heighten, and maintain gendered boundaries in the gaming subculture. The authors show how tokenism drives the social construction of gendered boundaries by which collective identity of gamer girls is weaponized to exemplify pseudo-gender equality, subsequently controlling their social mobility in the male-dominated gaming subculture.

The third paper illuminates the heterogeneity of brand meanings in a community. The authors extend institutional perspectives into the domain of branding and analyse the Star Wars fandom community to posit how different socio-temporal periods socialize consumers differently, resulting in multiple brand logics. While sensemaking of new brand material is a collective phenomenon, consumers utilize distinct legitimation mechanisms to align or reject new ideas with their existing beliefs based on their respective brand logic. Thus, they show how heterogeneity emerges among the brand community members.

The session will conclude with commentary from the discussant—an expert in collective consumer practices. In sum, the session will illuminate the possible tensions, boundary work, and heterogeneity in logics integral to collective consumption contexts of communities and subcultures. Understanding how we can unite and the mechanics of how we can be divided has clear societal implications in terms of what the world needs now.

Community through Competition

EXTENDED ABSTRACT

The social sciences' corpus has generally posited the concepts of community and competition antithetically, namely, Gemeinschaft (community) versus Gesellschaft (society) (Tönnies 1887), mechanical versus organic solidarity (Durkheim 1893/2014), antistructure versus structure (Turner 1969), and communitization versus socialization (Weber 1978). These historical dichotomies have contemporarily manifested in studies of communal (Kozinets 2002; Tumbat and Belk 2011) and ludic consumption experiences (Canniford and Shankar 2013; O'Sullivan and Shankar 2019; Seregina and Weijo 2017) wherein anti-structural, communal experiences are destabilized by structural, competitive forces. However, we do witness and participate in the empirical coexistence of community and competition, e.g., in neighbourhood competitions and sports. This begets the question – how does the principle of individuation, integral to competition, interact with the principle of socialization, integral to communal experiences? Why are the concepts of 'community' and 'competition' sometimes mutually constitutive rather than oppositional?

Our paper attempts to answer these questions. Firstly, we suggest that competition can be conceptualized as a structured form of play (Caillois 2001) that leads to agonistic contest rather than antagonistic conquest. Thus, we direct focus on how individual competitors can possibly end up sharing a social symbolic space. Secondly, we suggest going beyond ontological presumptions of "consciousness of kind" as an "element of community" (Muniz and O'Guinn 2001) to analyse the "combination of processes necessary" (O'Sullivan et al. 2011) for the emergence of communal experience and subsequent enactment of community. Thus, we illuminate how the bundling of

various elements in the practice of competition can possibly lead to the binding effect of "communitas" (Turner 1969) and condition a sense of community. We insist that investigating the process of generation of community is crucial as it helps us to also identify the conditions that can hamper its generation. We make these arguments in the empirical context of 'story slams' which are competitive storytelling events wherein storytellers compete by telling stories in front of an audience. In-depth interviews with competitive storytellers and participant observation in story slams resulted in data and fieldnotes which were qualitatively analysed. We employed practice theory (Reckwitz 2002; Schatzki 2002) as an analytical lens to examine how "community *happens*" (Buber 2003) as well as how it can be hindered in the mise-en-scène of the competitive storytelling practice.

Our analysis reveals that story slams are constituted of the following practice elements: 1) Rules and format, 2) Competence, 3) Teleoaffectivities, and 4) Practicescape. Rules and format create an "echo of complicity" (Caillois 2001) which binds all the practitioners while also conditioning interdependencies that stimulate communitas. Competence in the form of skills and practical understandings results in the active participation of all and also facilitates collaborative learning and skill sharing. Teleoaffectivities are the affective pursuits recruiting competitors. Registering as motivational ends to compete, teleoaffectivities of self-transformation, diversity representation, and self-exhibition demonstrate how 'community' isn't necessarily a teleological project but is conditioned by different proclivities of pursuits embedded in the competitive practice. Practicescape is an amalgam of cultural context, event space, and material elements. The cultural context of a politically liberal environment facilitates a sense of openness encouraging participation of all. The event space is instrumental in conditioning a visceral sense of gathering, and material elements of the competitive practice, like the conspicuous scoreboard on the stage, serve as cynosures for the active participation of all to facilitate a sense of communion. In sum, the competitive format is constituted by an architectural grid of rules and format through which run various teleoaffective orientations and practical understandings that are embedded in a conducive practicescape. We posit that a conducive alignment of these practice elements is crucial to the emergence of communitas. The favourable alignment of these elements integral to the story slam competitive practice establishes interdependencies amongst the competitors that leads to a sense of competing *together*. This helps us question the autonomous dichotomies that attribute separate spheres to 'community' and 'competition' by showcasing how a supposedly centrifugal force of competition can indeed facilitate the emergence of a centripetal force of community. Rather than separate ontological antithetical spheres, this study demonstrates an evolutionary affinity between the two. However, we do add further nuance to our thesis. Our findings also illuminate how misalignments in the configuration of a competitive practice's elements can hamper the emergence of communitas. We show how certain configurations in rules can hinder the seamlessness of the flow of communitas and how differences in levels of competence can thwart the democratization of participation. Thus, our analysis demonstrates how communal experiences and the sense of community need not be volitional teleological projects. They can, instead, be conditioned (hampered) by the favourable (unfavourable) configuration of the elements of a competitive practice.

Our study contributes to the communal consumption and ludic experiences literature by: 1) advancing an agonistic relationship between the concepts of community and competition against the pervasively documented antagonistic relationship, and 2) contesting the assumption of communal experiences as teleological projects by

demonstrating how the sense of community can, instead, be conditioned or hampered by the way a competitive practice's elements are configured. Further, understanding the competitive dynamics of community-building by examining the mechanics that can facilitate/hinder the sense of community entails crucial societal implications.

More Gamer, Less Girl: The Cultural Production of Masculine Dominance

EXTENDED ABSTRACT

In March of 2019, Chiquita Evans became the first woman ever drafted into the NBA 2K League, the premier esports video gaming league co-organized by the National Basketball Association. The NBA 2K League represents the greatest sports video gamers in the world. Despite her status as an elite gamer, Evans experiences harassment from others in the league. "I've had sexual remarks put towards me," Evans said. "I get told I should be back in the kitchen. '2K is not for women,' I've had that. There's no question about that." Not all gamers criticize Evans' gender-barrier-breaking achievement, but compliments come with a qualifier. "She has (high) basketball IQ for a girl," said a fellow professional NBA 2K gamer. "Most people would be like, 'I'm playing with a girl. She's not going to know what to do.' She knows what she's doing. You can tell." (Associated Press 2019)

In the masculine consumption subculture of gaming, it is not Evans' skillset or knowledge that makes her unique among her fellow male players; it is her gendered-position of being a female gamer. Women in the gaming subculture have reached near parity in statistical representation, relative to men (i.e., 41% of gamers; ESA 2020). However, a culture of male dominance persists. Previous work establishes that gendered boundaries exist in consumption subcultures (Martin, Schouten, and McAlexander 2006; Sherry et al., 2004); however, research to date undertheorizes how such boundaries are formed, traversed, and perpetuated despite zealous efforts to eradicate them (Manne 2017; Ridgeway and Correll 2000). The purpose of this paper is to examine how gender inequalities emerge from status competition and how consumers navigate these inequalities, specifically in the consumption context of video gaming.

Prior research examines attributes of a field that attract women to a hyper-masculine subculture and the role of women in such fields. Sherry et al. (2004) highlight the subordinate role of women used as props in masculine consumption spaces (e.g., sport bars), where gender roles and status competition are more rigid. Similarly, in exploring the hyper-masculine Harley-Davidson subculture, Martin, Schouten, and McAlexander (2006) find women riders co-opt masculine behaviors to redefine personal femininities. Women's apparent empowerment is predicated on their subordinate position in the field (e.g., riding against boys, riding for boys), wherein motorcycling is conceptualized as a symbolic transgression of gendered boundaries. These previous works are insightful in demonstrating that gendered boundaries exist in these domains—but less so in articulating how masculine dominance is culturally produced. Questions concerning how gendered boundaries emerge and evolve remain unanswered. Advancing consumer research on gender inequalities lies less in micro-level conceptualizations of how women perform femininity or masculinity in masculine fields and more in meso-level conceptualizations of how the construction of gendered boundaries intersects with consumers' efforts to navigate such boundaries. Specific to the context of video gaming, how are gendered boundaries socially constructed, and why is gaming persistently considered a man's domain, despite increased engagement, representation, and progress among female gamers in the field? To explore such ques-

tions, we turn to tokenism as a novel conceptual lens for delineating the cultural embeddedness of gender inequality.

Tokenism, in this context, is a pattern of activity generated by social systems in which a dominant group is pressured to share resources (e.g., privilege, power, commodities) with a marginalized group (Laws 1975). Tokenism functions to assert negative consequences on subordinate group members and further interacts with context appropriateness within a given subculture (Yoder 1991), mirroring previous work on understanding consumption contexts within contexts (Askegaard and Linnet 2011). Previous research examines limitations to women entering gaming and why they might leave, but few studies address their lived experiences in the interim (Bergstrom 2018). In this study, we employ tokenism as a conceptual lens to explore the cultural production of masculine dominance: how gendered boundaries are socially constructed in a consumption subculture; how marginalized consumers (e.g., women) navigate gendered boundaries; and how gender inequalities persist within a field despite efforts to jettison such biases.

Data collection and analysis for this study follows a phenomenological approach focusing on lived experiences derived from the contextual environment (Pollio 1982). Twenty-three female gamers (ages 19-29) were interviewed to better understand their lived experiences within the context of video gaming. "Female gamer" is defined as a consumer who self-identifies as a 'woman' and as an avid as opposed to a casual gamer.

Extending previous boundary theoretic work and consumption-based gender inequalities, our analysis articulates the process by which masculine dominance is culturally produced in the consumption subculture of video gaming. Our findings demonstrate the process by which tokenism drives the social construction of gendered boundaries through boundary creation, boundary heightening, and boundary maintenance, which function collectively to retain masculine dominance in the field. Within the gaming subculture, boundary creation works to weaponize a collective identity of gamer girls, boundary heightening works to exemplify pseudo-gender equality, and boundary maintenance works to control women's opportunities for social mobility within the masculine field. To navigate socially constructed gendered boundaries, findings suggest women employ five response enactments: self-policing, reprimanding, grandstanding, withdrawing, and acquiescing.

Utilizing tokenism provides novel insight into the social processes related to boundary creation, heightening, and maintenance, and lends explanatory power to the nature of the response enactments that women utilize when navigating the gendered field. To our knowledge, we are the first to define a process, maladaptive enculturation, that connects individual response enactments at the micro-social level, to the boundary work that occurs at the meso-social level that inadvertently maintains the masculine dominance in the field. Maladaptive enculturation offers a theoretical explanation of how response enactments, utilized by women to navigate socially constructed gendered boundaries, produce unintended and/or counterproductive consequences for collective identity work aimed at gender equality.

Brand Community Logics

EXTENDED ABSTRACT

Traditionally, brands have been evaluated as strong when they have a narrowly and consistently defined meaning that is shared among consumers and fortified through marketing activity (Aaker 1996; Keller 1993; Ries and Ries 2002). This view of branding is grounded in associated-network memory models that link a brand's image to certain attributes in peoples' minds (Keller 1993). This perspective assumes that maintaining the "cognitive fit" among brand elements when introducing new brand material over time will result in similar evaluations among loyal consumers (Keller 1993; Parmentier and Fischer 2015; Ries and Ries 2002) This work, however, does not account for the heterogeneities in meaning that emerge among connected consumers, even though consistent brand components have been used by an organization. For example, when Porsche introduced an SUV into their product mix they used consistent brand elements but were met with conflicting responses from their loyal consumers (Avery 2012); likewise fans of J.R.R. Tolkien's literary works debate specific details about the use of narrative details of Peter Jackson's Hobbit trilogy (Crown 2012); and loyal fans of Americas Next Top Model judged new components as inappropriate to the brand and fuel the dissipation of audience members (Parmentier and Fischer 2015). While a recent growth in branding research that has looked at the sociocultural dimensions of brands, has demonstrated the complexity of brand meaning (Diamond et al. 2009; Ertimur and Coskuner-Balli 2015; Giesler 2008; Parmentier and Fischer 2015) movies, software, and the written word, we still do not fully understand how heterogeneous beliefs and interpretations of brand material can emerge among brand community members.

To address this research gap, we adopt an institutional lens to view brands as institutions and the differences in brand meaning as manifestations of different brand logics that emerge among a consumer community. Research that has utilized institutional perspectives in marketing contexts have yielded important insight into the dynamic interactions between individual and collective actors and institutions, (Dolbec and Fischer 2015; Giesler 2012; Humphreys 2010b, 2010a) such as marketplace evolution (Humphreys 2010b, 2010a), doppelgänger brand images (Giesler 2012), and the coexistence of multiple logics in institutional fields (Dolbec and Fischer 2015; Ertimur and Coskuner-Balli 2015; Scaraboto and Fischer 2013). Research has shown that logics can operate at different levels of society and can coexist and compete within different fields (Ertimur and Coskuner-Balli 2015; Ocasio, Thornton and Lounsbury 2017; Scott 2004). By extending institutional perspective into the domain of brands and branding, we can look deeper into if and how a multiplicity of logics among a brand can coexist within a consumer collective and the active roles that consumers play within a collective, utilizing their heterogeneous logics.

In our work, brand logics are conceptualized as a brand specific schema that consumers use to understand, interpret, and categorise the substance and meaning of a brand (Dolbec and Fischer 2015; Ocasio et al. 2017; Parmentier and Fischer 2015; Scott 2004). To explore the plurality of brand logics among a community of consumers a multimethod analysis of the Star Wars brand community and its components was conducted to better understand how new meanings are interpreted and fit into existing meanings. In order to capture dynamics at the group level, a netnographic analysis of the consumer forum, the Star Wars *Subreddit* was conducted, which includes a large number of active fans with varying views, many of whom are active in multiple Star Wars subgroups (Belk, Fischer and Kozinets 2013). To better understand individual perspectives on the brand, brand components, and behavior in fan communities, interviews were conducted with members of the Star Wars community (McCracken 1988). In addition to the netnography and interviews, participant observation was also conducted to observe fan behaviour and discourse *in vivo* at the opening night premier of the *Rise of Skywalker* film (the most recent Star Wars movie) (Myers 2019).

Our analysis reveals several important insights into the emergence of brand heterogeneity within a community. First, we docu-

ment the existence of multiple brand logics among community members which influences how they interpret, make sense of, and engage with the brand. Notably, these logics are historically developed beginning with fans' first engagement with a brand, and they are maintained over time through consumption practices. These logics also correspond to different 'eras' of fans. In other words, for a narrative brand with a long history, like Star Wars, each 'era' of the brand corresponds to a different brand logic such that over time, multiple brand logics emerge and are layered on top of each other. Second, we show that consumers engage in active sensemaking when new brand material is introduced. This is an ongoing phenomenon that occurs as consumers harness existing brand logics to make sense of new material. Consumers make sense of brand material collectively and retrospectively, often relying on others to bring in different views or explanations to aid in individual sensemaking. Third, consumers are active in their sensemaking, and utilize different sensemaking mechanisms, to align or reject new ideas with their existing beliefs based on their brand logic. These mechanisms are aimed at maintaining an individual's narrative continuity, or their own unique beliefs and views about the brand. Here, it's important to note that although marketers treat the narrative brand as one overarching story in the form of a meta-narrative, consumers are active in their engagement with these narratives and actively reject, adapt, accept, and rework the meta-narrative using resources beyond the brand to establish an individual level micro narrative that may differ from the official brand narrative. This highlights that many, often heterogeneous, beliefs about a brand narrative exist at the individual level in what consumers call their "head canon."

Overall, our findings contribute to consumer research by using the concept of brand logics to conceptualize how different views of a brand can emerge and coexist in a community. The emergent brand logics correspond to different 'eras' in fan socialization, which influences their sensemaking. The focus of sensemaking then becomes maintaining their individual micro-narratives—or a "head canon"—through which the brand gets interpreted, rather than the marketer controlled meta-narrative.

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What Makes Things Beautiful? Using Empirical Aesthethics to Create Effective Marketing Stimuli

Chairs/Discussants: Anika Stuppy, Tilburg University, Netherlands
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Paper #1: Post-Click Visual Salience Effects on Confidence and Decision Follow-Through

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Claudia Townsend, University of Miami, USA
Carter Morgan, University of South Florida, USA

Paper #2: Hidden in Creativity: Negative Space Logos Boost Brand Evaluations

Ngoc (Rita) To, University of Houston, USA
Vanessa M. Patrick, University of Houston, USA

Paper #3: Paper #3: What Looks Better in Slow Motion?

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Jan R. Landwehr, Goethe University Frankfurt, Germany
A. Peter McGraw, University of Colorado Boulder, USA

Paper #4: Paper #4: When "Burger and Fries" Seem More Appealing Than "Fries and Burger": The Influence of Linguistic Conventions on Aesthetic Preference

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SESSION OVERVIEW

Aesthetics play a pivotal role in marketing practice. Beautiful products achieve higher sales, attractive salespeople are more persuasive, and aesthetically pleasing logos boost brand liking (Patrick 2015). This session curates emerging aesthetics research to provide actionable insights for marketers in domains that have—despite their relevance—received limited attention thus far. In particular, the papers cover, on the one hand, the role of aesthetics in videos, language, and web-interface designs, and, on the other hand, they examine novel downstream consequences beyond liking (e.g., visual engagement, post-decision confidence). Accordingly, these papers jointly broaden the field's view of empirical aesthetics and fill important blind spots pertaining to the antecedents and consequences of aesthetics in diverse marketing stimuli.

Borenstein, Townsend and Morgan investigate how visual aesthetics can inform the design of buttons on web interfaces. The authors manipulate the *post-click* visual salience of buttons. Thus, whether selected options are more (vs. less) visually highlighted. Three experiments demonstrate that increasing the visual salience of selected options leads consumers to experience greater decision certainty. Importantly, this effect is stronger for difficult (vs. easy) decisions.

To and Patrick study the use of negative space in brand logo designs. Negative space logos contain "hidden" elements often not readily seen by consumers (e.g., the hidden arrow in the FedEx logo). The authors show that negative space logos boost visual engagement and increase click-through-rates in a real-world ad campaign. Negative space logos work especially well for ordinary (vs. innovative) products and when consumers discover hidden elements in the logo on their own (vs. are prompted to notice them).

Stuppy, Landwehr and McGraw demonstrate that slow motion increases the appeal of moving content (e.g., videos, GIFs). The effect occurs because slowing the stream of visual information makes the content easier to watch (i.e., more fluent). Analyzing the real-world behavior of users on a GIF sharing platform, the authors find

that slow motion is beneficial for videos displaying complex movement. Videos of simple movements, however, become boring in slow motion. This limitation can be overcome by zooming in on the "action" to increase complexity.

Zhang and Schwarz use fluency theory to decode what drives aesthetic preferences for linguistic expressions. By convention, many phrases follow a particular order. English speakers, for instance, typically say "burger and fries" rather than "fries and burger." Due to being more frequently exposed to the former ordering as compared to the latter, the expression "burger and fries" is more fluent and thus more aesthetically pleasing. This effect replicates among non-native English speakers but becomes stronger the longer people live in English-speaking countries.

Together, these papers provide a nuanced understanding of how empirical aesthetics can inform marketing practice by adopting new perspectives and by covering evidence gathered in the lab, field, and using secondary datasets. We expect this session to generate interest among researchers from a broad range of fields, including consumer preference, experiential consumption, taste, design, and aesthetics. Given the presentations' relevance to fundamental assumptions about "what makes things beautiful", we hope to stimulate a fruitful discussion.

Post-Click Visual Salience Effects on Confidence and Decision Follow-Through

EXTENDED ABSTRACT

Everyday consumers click on buttons while performing various online activities (e.g., shopping or saving for retirement). The visual aesthetics of these buttons – both before and after they are clicked – vary across online platforms (Busch 1997; Kramer 1997). Some retailers use buttons that light up when clicked, while others use buttons that fade in color. The effects of *pre-click* visual aesthetics of a set of choice buttons have been shown to affect online product evaluations (Thomas and Kyung 2019). We examine the psychological consequences of varying the *post-click* visual salience of a single button and its effect on subsequent decision-making.

Consumers often seek feedback to compensate for feelings of doubt and indecision (Timmers, Braber-Van Den Broek, and Van Den Berg 2013). Meanwhile, computer-mediated feedback offers intimate, immediate, and perceivably objective information (Karabenick and Knapp 1988; Kluger and Adler 1993) and is typically expressed visually (Azevedo and Bernard 1995). For instance, a plus sign or the color green post-decision can enhance decision accuracy perceptions (Liu and Gehring 2009; Pfabigan, Sailer, and Lamm 2015). When a button is clicked, a computer produces a visual cue signifying that selection (Busch 1997; Kramer 1997). We propose that this visual cue not only designates selection, but can also provide feedback to consumers about their selection.

Visual salience is an important aspect of aesthetic perceptions influenced by varying perceptual properties, such as color, size, or brightness (Fiske and Taylor, 1991; Howard and Holcombe 2010). We suggest that increasing visual selection salience should enhance positive feedback perceptions, thus increasing decision confidence – feeling certain in the appropriateness or optimality for one's decision (Kruglanski 1989). As confidence increases, behavioral intentions

also increase (Wood and Lynch 2002). A confident consumer feels they possess sufficient knowledge to make a final decision (Chaiken, Liberman, and Eagly 1989). However, this perception of subjective knowledge is unstable and can be enhanced or abated through seemingly extraneous information (Petty, Brinol, and DeMarree 2007). We therefore propose that higher post-click selection salience increases consumers' decision follow-through with a selected alternative (H1) and that this effect is mediated by consumers' decision confidence (H2).

Additionally, when a task is hard, feedback is actively sought out to increase perceptions of knowledge and gain decision confidence (Chaiken et al. 1989). However, when a task is easy, feedback may be ignored, since perceptions of knowledge are already high. We therefore propose that, when a task is difficult, higher selection salience increases consumers' decision follow-through; but this effect is attenuated when the task is easy (H3).

Three studies offer support for these Hypothesis. Across studies, we manipulated selection salience for the focal choice(s) by adjusting the visual shading of clicked buttons. All buttons looked identical *pre-click*, but look visually different *post-click*. In study 1, the selected square button either became 2X darker (i.e., low selection salience) versus 9X darker (i.e., high selection salience). In studies 2-3, the selected radio buttons were either no different than normal (i.e., control condition) versus heavily shaded and grew in size by 2.75X (i.e., high selection salience).

Study 1 tests H1 in a financial investment context. Participants (n = 97; MTurk) selected one of three mutual funds (choice response salience varied d high versus low) and then indicated their likelihood to invest money into their selected fund. Supporting H1, high selection salience increased participants' likelihood to invest (M_{High} = 4.70 vs. M_{Low} = 4.04; $F(1, 95)$ = 10.47, p = .044). Importantly, there was no difference in initial fund preferences across selection salience conditions ($X^2(2)$ = 4.62, p = .10).

Study 2 uses a 2 (response salience: high versus control) X 2 (hard versus easy) design in a job recruitment context. Respondents (n = 261; undergraduate) participated in a 'Healthy Option Identification Quiz' to potentially become an ambassador for a new health brand. Participants either took an easier or harder version of the quiz (identifying the healthier option in each of five pairs) and either received a high or normal response salience on their choices (both randomly assigned). Then participants indicated their confidence in their selections. An ANOVA revealed only an interaction effect on confidence ($F(1, 258)$ = 5.57, p = .019). Supporting H2 and H3, in response to hard questions, participants felt more confident in their responses when selection salience was high vs. control (M_{High} = 5.65 vs. $M_{Control}$ = 4.92; $F(1, 258)$ = 5.68, p = .018). In response to easy questions, confidence did not differ (M_{High} = 7.86 vs. $M_{Control}$ = 8.15; $F(1, 258)$ = .90, p = .34).

Study 3 offers support for all Hypothesis in another financial investment context (2 (response salience: high versus control) X 2 (hard versus easy) design). Participants (n = 500; undergraduate) completed a five-question quiz (hard vs. easy) on financial knowledge with varying salience, indicated their selection confidence, and their desire to apply as a financial tutor. As predicted, only selection salience by task difficulty interaction effects emerged on confidence ($F(1, 496)$ = 6.23, p = .013) and the likelihood to apply as a tutor $F(1, 497)$ = 4.49, p = .035), respectively. In response to hard questions, high (vs. control) selection salience increased participants' confidence (M_{High} = 6.48 vs. $M_{Control}$ = 5.80; $F(1, 497)$ = 5.41, p = .020), and likelihood to apply (M_{High} = 4.11 vs. $M_{Control}$ = 3.38; $F(1, 497)$ = 4.39, p = .037). Neither confidence (M_{High} = 5.86 vs. $M_{Control}$ = 6.21; p = .23) nor application likelihood (M_{High} = 3.68 vs. $M_{Control}$ = 3.99;

p = .39) differed in response to easy questions. A significant moderated mediation model emerged (overall index: b = .40, SE = .17, 5000 BS, 95% CI [.0826, .7553]; PROCESS Model 7; Hayes 2013). In response to hard questions, high (vs. control) salience increased confidence, thereby increasing participants' likelihood to apply (b = .26, 95% CI [.0421, .5137]). This effect attenuated in response to easy questions (95% CI [-.3653, .0783]).

Hidden in Creativity: Negative Space Logos Boost Brand Evaluations

EXTENDED ABSTRACT

A negative space logo design is created when the space around (or in between) a focal visual subject/positive space (e.g., a brand name) is creatively utilized to convey a brand-relevant visual message. Most logo designs utilize positive space (i.e., positive space logos), some logos (e.g., Fed Ex with the hidden arrow embedded within the letters e and x) include a hidden visual design element creatively embedded within the logo (i.e., negative space logos).

Our central hypothesis is that negative space (vs. positive space) logos boost brand evaluations via enhanced engagement because they allow viewers to discover the visual brand message concealed in the logo design (Lidwell, Holden, and Butler 2010). We define engagement as the extent to which consumers feel interested in and maintain attention to a specific visual stimulus (Pieters and Wedel 2007).

Drawing on the visual processing literature on subjective contours, we posit that compared to real contours (positive space logos), subjective contours will attract more attention and be more engaging (negative space logos; Pritchard and Warm 1983). When viewing negative space logos, the "hidden" element of the visual design is often not readily seen by consumers. As such, consumers are able to participate in deciphering the negative space design and thus experience greater engagement. Anecdotal evidence supports this hypothesis. Lindon Leader, the designer of the FedEx logo, proposed that what makes the logo particularly captivating to viewers is that the hidden arrow creates that 'aha moment' for people when they discover it (Airey 2014). If FedEx's PR firm had executed their initial idea to make the arrow more obvious by filling it in with another color (i.e., a positive space arrow like that of the Hillary Clinton campaign), consumers would not experience the 'aha' that makes the logo visually engaging.

Visually engaging logos play an important role in shaping brand evaluations. For instance, Wang (2006) found that when consumers are engaged, the effectiveness of message processing and evaluations towards the advertisement are enhanced. Similarly, Kilger and Romer (2007) showed that engagement is positively correlated with product purchase intentions. Aesthetics research has also examined how specific design features can enhance engagement and brand evaluations. The study of branded mobile app design found that apps with more user-centered design style were more likely to enhance engagement and thus improve consumer connections to brands (Bellman et al. 2011) and visually engaging content increases purchase intent on Instagram (Valentini et al. 2018). In the context of logo design, prior research has demonstrated how more dynamic imagery can increase visual engagement, which can lead to more favorable brand evaluations (Cian et al. 2014) as well as more responsive behavioral change (Cian et al. 2015). Drawing on findings from previous research that demonstrates the role that engagement plays to bolster brand evaluations, we propose that negative space logos can boost brand evaluations by enhancing visual engagement.

Eight multi-method studies test our Hypothesis. Study 1 examines the effect of negative space logos on consumer response in a real-world Facebook ad campaign. Results revealed that consumers were more likely to click on a Facebook ad that featured a negative space logo and were also more likely to sign up to volunteer for a campaign. In studies 2a and 2b, we replicate the effect of negative space logos on visual engagement and brand evaluations in a more controlled lab environment. To establish theory specificity, we compare the effects of negative space logos with active white space logos (Study 2a) and high visual contrast positive space logos (Study 2b) on visual engagement, brand evaluation, as well as consequential downstream variables such as website visits (Study 2a) and willingness to pay (Study 2b).

Study 3a manipulated how consumers come to discover the hidden imagery in negative space logos – via explicit presentation by the brand versus via self-discovery. The results showed that the visual engagement elicited by negative space logos hinges on consumers discovering the hidden visual imagery for themselves. If the hidden imagery is explicitly revealed, the effect of negative space logos on engagement and brand evaluations is attenuated. Participants' mouse movements when viewing a website that featured the brand logo served as an additional measure by which to assess visual engagement. Study 3b replicated the effects observed in Study 3a using eye-tracking measures of engagement. Results showed that consumers paid more attention and fixated longer at negative space logos.

Study 4 demonstrated that engaging nature of negative space logos will spill over to enhance product evaluations, particularly for ordinary/uncool products (vs. innovative/cool products). Our Hypothesis are grounded in prior work which demonstrated that visual design that is composed of both typical/ordinary and complex elements may evoke the most liking. For example, Landwehr, Labroo, and Hermann (2011) found that car sales are highest for typical or ordinary car designs but with some element of visual complexity that makes the car more engaging and interesting. Results showed that that ordinary product designs are evaluated more favorably when presented with negative space logos which generate more visual engagement. In other words, negative space logos work harder for ordinary products compared to those that are cool or innovative.

In Studies 5a and 5b, we examined the moderating role of processing style (holistic vs. piecemeal) on the effect of logo design (positive space vs. negative space) on engagement and brand evaluations. Because the perception of negative space design is rooted in how people perceive visual information as a whole rather than its parts (Köhler 1970), we propose that the effect of negative space (vs. positive space) logos on engagement and brand evaluations will be enhanced when consumers utilize a holistic (vs. piecemeal) processing style. Studies 5a and 5b demonstrated that for consumers with holistic processing style, negative space (vs. positive space) logos generated more favorable brand evaluations. In contrast, for consumers with piecemeal processing style, the effect of negative space (vs. positive space) logos on brand evaluations was attenuated.

In sum, this research investigates how negative space logo design can be effectively used to boost brand evaluations via enhanced engagement.

What Looks Better in Slow Motion?

EXTENDED ABSTRACT

Video content is typically shown at the speed a movement was captured at during production. Sometimes, however, creators slow the presentation of visual movement. Films such as *Reservoir Dogs* (1992) contain iconic slow-motion scenes, the slow motion "hair flip" is an ever-present element in shampoo commercials, and, thanks to slomo functions on smartphones, millions of social media posts are tagged with "#slowmotion". We ask whether Dave Chappelle was right when he quipped, "Everything looks better in slow motion."

Research on slow motion effects is scarce because marketing typically studies the consequences of speeding content up. Accelerating radio spots or podcasts, for instance, can produce various benefits (Chattopadhyay et al. 2003; Moore et al. 1986; Pronin and Wegner 2006). Yet, little is known about how slowing content affects the viewing experience. One noteworthy exception is initial evidence suggesting that slow motion can make the onscreen action seem more deliberate because it creates the impression that people had more time to premeditate before acting (Caruso et al. 2016). Rather than examining judgements of intent, we focus on a more immediate marketing outcome by exploring the value of slow motion for aesthetic experiences.

We hypothesize that slow motion improves the aesthetic appeal of movement because slowing the stream of visual information facilitates processing. Essentially, slow motion lowers the amount of visual information that needs to be processed per unit of time which enables viewers to perceive visual information that would be unavailable at regular speed. Research suggests that processing ease is an inherently hedonic experience accompanied by mild positive affect that people attribute to the object being processed (Winkielman and Cacioppo 2001; Winkielman et al. 2003). As such, dynamic content should be more aesthetically pleasing in slow motion (vs. regular speed), when slowing down facilitates processing.

We test our predictions in five studies, using more than 600 videos, and provide process evidence through moderation and mediation. Study 1 manipulated playback speed within-subjects. For each of 14 videos, participants ($n = 199$) were randomly assigned to the slow-motion or regular-speed version. Next, they indicated video liking (1 = not at all; 7 = very much) and subjective processing fluency (Studying this video clip is 1 = difficult; 7 = easy; Graf et al. 2018). Videos were liked significantly more in slow motion (vs. regular speed; $t = 3.081$, $p = .002$). Fluency fully mediated this effect (a*b = .14, 95% CI [.06, .25]).

Study 2a and 2b provide process evidence by examining movement complexity as a moderator of the effect of speed on liking. We predicted that complex movements would be easier to process, and thus liked more, in slow motion (vs. regular speed). Simple movements, however, should be easy to process regardless of speed. To operationalize the complexity of movement objectively, we developed an algorithm that computes the average deviation of pixels in a dynamic scene over time. We then used this algorithm to measure the dynamic complexity of 100 videos.

For the main study (study 2a), we selected the ten least, ten moderate, and the ten most complex videos. Participants ($n = 212$) watched a random subset of 15 videos out of the 30 available stimuli. We again randomly assigned participants to either the slow-motion or regular-speed version of each video. Video liking was measured with the scale from study 1. The results revealed an interaction between speed (slow vs. regular) and complexity (algorithm score) on liking ($b = .936$, $p < .001$). Complex videos were liked more in slow motion (vs. regular speed). Simple videos, in contrast, were liked less in slow motion (vs. regular speed). To provide field evidence for the above findings, we analyzed online ratings of users on a GIF sharing platform (study 2b). Replicating our experimental results, we find that slow motion boosts the appeal (views and likes) of complex GIFs but not simple GIFs.

We suspected that finding a way to make simple movements more complex would improve the effectiveness of slow motion. Our inquiry identified one strategy: zooming in on a simple scene with a close-up of the "action" (study 3). To manipulate zooming, we cropped away the static background surrounding the dynamic part of a video and then enlarged the cropped videos to the size of the original version. Study 3 manipulated complexity (simple vs. complex) between-subjects and speed (slow vs. regular) within-subjects. In response to each video, participants ($n = 296$) indicated liking and subjective fluency with the previously used scales. The model revealed an interaction between complexity and speed ($b = .074$, $p < .01$). For "zoomed-in" (i.e., complex) videos, slow motion was liked more than regular speed ($p < .001$). When videos were "zoomed-out" (i.e., simple), however, this effect was attenuated ($p = .086$). Our moderation pattern was fully mediated by fluency.

Our final experiment (study 4) examined the moderating role of content valence. Recent findings suggest that fluency unfolds hedonic effects on judgments, thus shifting evaluations in a positive direction, *and* amplifying effects on judgements, thus polarizing evaluations (Landwehr and Eckmann 2020). Study 4 thus manipulated content valence (positive vs. negative) between-subjects and manipulated speed (slow vs. regular) within-subjects. The participants ($n = 401$) indicated liking in response to each video. We detect an interaction between valence and speed on liking; $F(1, 399) = 215.545$, $p < .001$. When participants watched pleasant videos, slow motion was liked more than regular speed; $F(1, 399) = 197.769$, $p < .001$. For unpleasant videos, this effect reversed. Aversive videos were liked less in slow motion as compared to regular speed; $F(1, 399) = 45.009$, $p < .001$.

Our findings suggest that slow motion can increase the visual appeal of dynamic content. By using fluency theory as a theoretical lens, we develop moderators and boundary conditions that help marketers and everyday people to use slow motion more effectively. Importantly, the positive effect of slow motion on aesthetic appeal is contingent on the type of underlying content (e.g., simple versus complex, negative vs. positive) and on the application of stylistic tools (e.g., close-ups vs. wide shots).

When "Burger and Fries" Seem More Appealing Than "Fries and Burger": The Influence of Linguistic Conventions on Aesthetic Preference

EXTENDED ABSTRACT

Background. In everyday language, many phrases follow a particular order. For example, English speakers say "burger and fries" instead of "fries and burger", "salt and pepper" instead of "pepper and salt", and "mom and dad" instead of "dad and mom". Linguistic research indicates that such expressions are processed faster when they follow the dominant ordering than when they do not, consistent with the common observation that frequent exposure facilitates processing. For example, Hutchinson and Louwerse (2013) observed that sequential collocation frequency predicted how fast people were able to tell whether words in a pair were related or not. When word pairs were presented in the order of high collocation frequency (e.g., "parent and child"; "doctor and patient"), participants responded faster than when the order was reversed (e.g., "child and parent"; "patient and doctor"). Since ease of processing has been shown to increase liking and aesthetic pleasure (for reviews, see Reber, Schwarz, & Winkielman, 2004; Schwarz, Jalbert, Noah, & Zhang, 2021), visual materials that are consistent with the linguistic convention (which are processed more easily) should be more aesthetically pleasing than materials that are not.

Method. Three pre-registered experiments tested whether this is the case: Does the frequency with which ordered semantic concepts are encountered in natural language influence the aesthetic pleasure derived from visual materials? Pairs of words that appear more frequently in one order than the other were selected based on their frequencies in the *Corpus of Contemporary American English* (COCA). For example, "pots and pans" appeared 167.8 times more frequently than "pans and pots" in COCA; "salt and pepper" appeared 64 times more frequently than "pepper and salt"; and "burger and fries" appeared 21 times more frequently than "fries and burger".

We arranged visual stimuli side by side (e.g., a picture of a "burger" and a picture of "fries") in an order that did (burger-fries) vs. did not (fries-burger) follow the dominant ordering in English, and asked participants to choose the arrangement they liked more. Experiments 1 and 2 tested whether native English speakers prefer arrangements that are consistent with the more frequent orderings in English, and Experiment 3 tested whether nonnative speakers of English living in the U.S. prefer arrangements that are consistent with the orderings in their native language and in English.

Results. Forty-four undergraduates at the University of Southern California (Exp.1) and seventy-seven MTurk workers (Exp. 2) indicated their preference for arrangements that were congruent vs. incongruent with the frequently encountered ordering in English. The proportions of trials where the congruent arrangement was chosen were compared against chance (50%) in a two-tailed one-sample t-test. As predicted, participants preferred arrangements that were consistent with the more frequently encountered ordering in English in both experiments ($M_{Exp1} = 63.63\%$, $p = .001$, and $M_{Exp2} = 58.44\%$, $p < .001$). This pattern was observed for five out of six pairs in Experiment 1, and for all of the ten pairs in Experiment 2.

In Experiment 3 ($n=68$), USC undergraduates who were non-native speakers of English indicated their preference for the same materials used in Experiments 1 and 2. They were subsequently asked to identify the more frequent ordering in their native language for each pair. At the end of the study, participants reported having lived in the U.S. for an average of 4.12 years, and the average self-reported English proficiency was 4.12 on a 1-6 scale. One-sample t-tests revealed that participants preferred the arrangements that were consistent with the more frequent ordering in their native language ($M = 54.87\%$, $p = .008$) as well as in English ($M = 57.56\%$, $p < .001$). The former pattern was observed in the majority of participants for ten out of fourteen pairs, and the latter was observed in the majority of participants for eleven out of fourteen pairs. A follow-up logistic regression using hierarchical linear modeling further revealed that when participants have lived in the US for "zero" years (intercept), preference for arrangements congruent with English orderings was not significantly above 50% ($M_{probability} = 53.86\%$, $p = .115$). However, with each additional year spent in the US, the odds of choosing the congruent arrangement with English increases by 3.82% ($OR = 1.038$, $p = .032$). It is worth noting, however, that although native speakers of fourteen different languages participated in the experiment, an overwhelming majority (forty-three out of sixty-eight) identified Chinese as their native language. Follow-up studies will aim to recruit more participants who are native speakers of other languages.

Discussion. In sum, Experiments 1-3 show that the same visual stimuli are liked more when their spatial arrangement follows the order in which the corresponding semantic concepts appear in natural language. Given that everyday language use is an ecological manipulation of exposure frequency, these findings are compatible with the logic of mere exposure effects (Zajonc, 1968) and their mediation through processing fluency (Reber et al., 1998). Going

beyond earlier research, these findings highlight that remote context variables, like the frequency of the ordered collocation of semantic concepts in the linguistic corpus, can influence aesthetic pleasure across modalities.

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Taking the High Ground: Moral Standards in Consumer Judgment and Behavior

Chairs: Emily Prinsloo, Harvard Business School, USA
Jimin Nam, Harvard Business School, USA
Discussant: Jimin Nam, Harvard Business School, USA

Paper #1: Corporations are Viewed as Psychopaths with Good True Selves

Julian De Freitas, Harvard Business School, USA
Samuel G. B. Johnson, University of Warwick, UK
Zarema Khon, University of Bath, UK
Pechthida Kim, Harvard University, USA

Paper #2: "I'm Not Too Generous": Examining the Desirability of Prosocial Traits in the Self

Shoshana Segal, NYU Stern School of Business, USA
Yonat Zwebner, Arison School of Business, IDC Herzliya, Israel
Alixandra Barasch, NYU Stern School of Business, USA

Paper #3: Tainted Donations

Emily Prinsloo, Harvard Business School, USA
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Paper #4: Morality as Market Friction: Product Valuations Reflect Moral Judgments of Counterparts in Market Exchanges

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SESSION OVERVIEW

Organizations engage in behaviors that improve social welfare, by donating, supporting their communities, and creating value more broadly. Yet, consumers often criticize organizations and individuals, even when their actions are well-intended. While criticism might lead to improvement, 'what the world needs now' is for us to scrutinize our instinct to be critical, and to recognize the good being done. In this session, we explore consumer evaluations of prosocial actions, and the consequences of these evaluations. We ask (1) How do consumers evaluate others in terms of their moral behavior? and (2) What are the downstream consequences of fixating on morality?

The first two papers in this session explore evaluations and their underlying moral standards. De Freitas, Johnson, Khon, and Kim examine people's general tendency to view firms negatively, despite the objective good that firms add to society. Even though consumers ascribe various negative traits to firms in *general*, *individual* firms are viewed as having an underlying, morally good 'essence'. Consequently, when firms morally deteriorate (lose good traits), this is more identity-disrupting than when they morally improve. In the second paper, Segal, Zwebner, and Barasch examine how individuals evaluate their own generosity compared to other interpersonal moral traits. They find that individuals consider generosity to be less desirable than morality and warmth, and are even less likely to exhibit the classic Better-Than-Average effect when evaluating their generosity vs. these other traits. Both papers highlight how individuals view firms and themselves, and that we should recognize good when it is done.

The last two papers highlight how fixating on high moral standards can lead us to leave money on the table, both in prosocial and consumption contexts. Prinsloo, Nam, and Keenan find that consumers negatively evaluate charities for receiving donations from tainted donors, even when the donor engaged in the transgression *after* the donation. Ironically, placing money in the hands of charities arguably creates more good than leaving it in the hands of tainted donors, since charities could use these donations to create welfare (e.g., relieve hunger, promote equal rights, etc.). Finally, Zallot and Paolacci find that buyers' WTP decreases, and sellers' WTA increases, when engaging in a transaction with an immoral agent. The extent to which markets increase welfare depends on whether products are allocated to the consumers who value them most. However, consumers also use market exchanges to sanction those they do not approve of, which interferes with the ability of the market to achieve efficient allocations.

Together, this session exposes the obstacles that organizations and individuals face in our critical world, and suggests that our high moral standards may sometimes be counterproductive, e.g., leading to fewer charitable donations and market inefficiencies. The papers highlight that we should scrutinize when our moral evaluations are useful vs. needlessly critical, and seek ways to maximize overall welfare despite our instincts to be critical.

EXTENDED ABSTRACT

Corporations Are Viewed as Psychopaths with Good True Selves

EXTENDED ABSTRACT

Firms change over time. Just consider *Intel* (memory chips→microprocessors), *Lego* (wooden toys→build-em-yourself blocks) and *Lamborghini* (industrial tractors→luxury racing vehicles). Here we ask which types of changes are so disruptive that consumers believe that the firm's very identity ceases to exist—a dire scenario for brand managers (Aaker 1996; Simões, Dibb, and Fisk 2005). Little work in consumer behavior has examined this question, but psychology literature has found that people are more likely to say that a person ceases to exist if she loses *good* traits than bad or non-moral ones (Strohminger and Nichols 2014), suggesting that they believe in good 'true selves' or 'essences' that are identity-defining (De Freitas et al. 2017). Notably, people even exhibit this bias when they are misanthropes, members of interdependent cultures, or judging outgroup members (De Freitas and Cikara 2018; De Freitas et al. 2018). Might *firms* be positively essentialized? It may seem unlikely, given that consumers appear to vilify big business (Cowen 2019). Even so, we investigate whether consumers believe that the deeper, identity-defining purpose of a firm is to do good.

Study 1 examined whether there is a moral asymmetry in identity judgments about firms. Participants (N=320, 82 excluded) read one of 8 vignettes about firms in different industries (e.g., clothing, technology, tobacco). Between-subjects, a firm was described as either changing from mostly good to mostly bad traits (e.g., making coats from mostly faux fur→mostly real fur by killing coyotes; deterioration) or vice-versa (improvement). Participants indicated how much they agreed, *The [firm name] after the changes is not really the same company as the [firm name] before the changes.* They also indicated whether they agreed more with a Person A, who thinks the company is still the same company, or Person B, who thinks it is not. DVs in all studies were on 0–100 scales.

Participants thought firm identity was disrupted more by deteriorations than improvements (M_{det}=58.97; M_{imp}=45.65; t(236)=3.45, p<.001, averaging across measures), showing this pattern for 7/8 firms.

Studies 2A-2B contrasted moral changes to changes in product *category*, anticipating that moral changes would be at least as disruptive. Participants were assigned between-subjects to the deterioration condition of Study 1, or to a condition in which the product changed to a different product in the same industry (e.g., lipsticks→eye makeup; Study 2A) or an entirely different industry (e.g., lipsticks→jewelry; Study 2B). Participants (total *N*=640, 71 excluded) answered the same DVs as in Study 1, and (on a new page) a manipulation check, *The [firm name] after the changes is mostly selling to customers in a different type of industry than the [firm name] before the changes.*

In Study 2A, participants thought that within-industry changes were at least as likely to sever existing customer ties compared to moral deteriorations (M_{det}=36.71; M_{cat}=44.01; t(280)=-2.12, p=.035), yet viewed moral deteriorations as more identity-disrupting (M_{det}=58.74; M_{cat}=38.78; t(280)=6.13, p<.001).

In Study 2B, participants thought that between-industry changes were much likelier than moral deteriorations to sever existing customer ties (M_{det}= 31.97; M_{cat}= 57.93; t(285)=7.82, p<.001), yet viewed the two types of changes as equally identity-disrupting (M_{det}=56.56; M_{cat}=51.48; t(285)=-1.54, p=.125).

Study 3 tested the proposed essentialism mechanism (Newman, Diesendruck, and Bloom 2011), while ruling out the alternative possibility that deteriorations disrupted the firm's category membership, e.g., clothing or tech (Rhemtulla and Xu 2007). Finally, we asked whether individual differences in negative attitudes about firms—as measured via a psychopathy scale, modified for firms (Hare et al. 1990)<—moderate these effects.

Participants (*N*=320, 47 excluded) read the same vignettes as Study 1. In the prediction condition, they judged whether the firm after the changes would ultimately revert to its previous majority behaviors, *It is likely that the majority of [company name] will intentionally [description of majority behavior before the changes] again.* In the identity condition, participants answered the usual identity question, then (on a new page) an essentialism question (*The [company name] after the changes no longer reflects the true essence of the [company name] before the changes*) and category membership question (*Plainly speaking, if you had to categorize [company name] after the changes, you would say that it is a [type] company (as opposed to another kind of company, such as vegetable store, car company, real estate agency, etc.)*. Finally, participants in both conditions rated 15 statements about the psychopathic traits of "big companies in general" (e.g., *Are big companies conning or manipulative?*).

The moral asymmetry was selectively mediated by intuitions about essentialism (*b*=-7.45,95% CI [-11.42,-4.14]), but not category membership (*b*=-0.23,95% CI [-1.00,.26]). Furthermore, it was *not* moderated by how negatively people viewed firms (*F*(1,135)=0.15, *p*=.70). Negative attitudes (*M*=59.20) were not inconsequential, however, moderating the effect of condition on predictions of whether a firm would revert to its prior behaviors (*F*(1, 130)=4.25, *p*=.041). Those who ascribed higher psychopathic traits were more likely to agree with negative predictions (reverting to bad majority; *b*=0.34, *p*=.042), but agreed no more or less with positive predictions (reverting to good majority; *b*=-0.14, *p*=.39).

Implications. While existing research has focused on the persistence of a consumer's *personal* identity (Bartels and Urminsky 2011), this work focuses on the persistence of *firm* identity. We con-

firm that consumers have stereotypically negative views of firms, and so perhaps what 'the world needs now' is to think of firms in a more positive (or at least more nuanced/critical) manner. After all, many firms objectively improve our lives and engage in social welfare. Encouragingly, we find that consumers still think of individual firms as having positive essences. In ongoing work, we are leveraging this positive bias about *individual* firms as a framing effect to combat negative biases about firms as a *group*—much as intuitions about 'good true selves' have been leveraged to counteract intergroup prejudice (De Freitas and Cikara 2018).

Finally, moral changes may be particularly threatening to perceptions of brand persistence. So, firms should plan for such changes carefully or even avoid them altogether—perhaps especially after publicizing moral traits through efforts like corporate social responsibility (Chernev and Blair 2015) and brand activism (Vredenburg et al. 2020).

"I'm Not Too Generous": Examining the Desirability of Prosocial Traits in the Self

EXTENDED ABSTRACT

Past research has demonstrated that generosity is one of the first and most vital indicators of morality when people form perceptions of others (Hartley et al., 2016; Miller, 2008). This is often translated, both in society and in prosocial literature, to mean that moral traits are important and positive for the self as well (Berman et al., 2015; Brambilla et al., 2011; Flynn, 2003). However, we show that while individuals like to think of themselves as moral and caring, they do not like to think of themselves as equally generous. That is, generosity is perceived as less desirable than these other interpersonal moral traits.

We additionally investigate one important downstream consequence of the decreased desirability of generosity: the better than average effect (BTA; Svenson, 1981). Motivational accounts of the BTA effect (e.g. Alicke, 1985) posit that individuals view themselves as better than average for positive traits due to the *desirability* of these traits. Therefore, to the extent that generosity is less desirable, we would expect people to not rate their generosity as high as traits like morality or caring when engaging in such comparisons. In this case, the BTA effect should be reduced for generosity versus other interpersonal moral traits.

In study 1 (preregistered, N = 197), we investigated the extent to which participants wanted to hold various interpersonal moral traits. Participants indicated their ideal percentile ranking of five interpersonal moral trait constructs (generous, α=.95; ethical, α=.91; trustworthy, α=.85; warm, α=.93; open α=.88) on a scale from 0-100. On average, participants wanted to be in the 66th percentile for generosity, which was significantly lower than their desired percentiles for openness (M = 75.93, *p* < .001), warmth (M = 76.51, *p* < .001), ethicalness (M = 82.10, *p* < .001), and trustworthiness (M = 84.11, *p* < .001). That is, while participants prefer to be in the top quartile for most interpersonal moral traits, they do not want to be "too generous."

Based on the results of Study 1 and established constructs in past literature (e.g., Goodwin, 2015), in all subsequent studies, we compare generosity to the broader interpersonal moral trait constructs of "morality" and "warmth." To establish this conceptualization, Studies 2a and 2b investigate the desirability of generosity, morality, and warmth. In Study 2a (N = 100), we asked participants to select whether they would prefer to think of themselves as a) very moral or very generous and b) very warm or very generous. We found that being generous was less desirable than both other moral traits

(64% preferred to be moral vs. generous, *p*=.005; 80% preferred to be warm vs. generous, *p*<.001). Study 2b (N=100) replicated these effects for whether participants preferred to be *perceived by others* as a) very moral or very generous and b) very warm or very generous. We found similar results, such that being perceived as generous was less desirable than both other moral traits (65% preferred to be perceived as moral vs. generous, *p*<.003; 78% preferred to be perceived as warm vs. generous, *p*<.001).

Building on these findings, Study 3 (N=181) sought to examine whether desirability perceptions of generosity impact BTA ratings. We elicited desirability perceptions and BTA ratings (counterbalanced) from participants for generosity, morality, and warmth. Desirability was measured using three items (e.g., "how important is it to be a generous person," α=.87). Results again revealed a significant difference in desirability (*p*<.001), such that participants rated generosity as less desirable (M=5.30) than morality (M=5.74, *p*<.001) and warmth (M=5.78, *p*<.001). Similar results were observed for BTA ratings, which were measured using comparisons to the average person, from 1 ("I'm much less generous than the average person") to 7 ("I'm much more generous than the average person"). We found a significant effect (*p*<.001), such that generosity reduced the BTA effect (M=4.81) compared to morality (M=5.15, *p*=.003) and warmth (M=5.25, *p*<.001). There was no different between moral and caring for both measures, which suggests that within interpersonal moral traits, generosity is uniquely perceived. We next ran mediation analyses to determine whether desirability mediates the relationship between trait and BTA ratings. We found a significant indirect effect of trait on BTA ratings (95%CI [-.44, -.18]), suggesting that reduced generosity in BTA ratings was at least partially driven by a lower desirability to be generous.

We have additionally replicated these main effects for BTA ratings and desirability ratings across 11 studies (N = 3,161, all *p*'s < .01).

While past literature suggests that generosity is an important moral trait when evaluating others, our results support the notion that individuals do not want to be "too generous" themselves. We additionally show that this effect translates into self-other perceptions such as BTA beliefs, which has important implications: increased BTA beliefs have been shown to improve subjective well-being and increase task performance (Aspinwall & Taylor, 1993; Ehrlinger & Dunning, 2003). This suggests that a lower desirability for generosity might lead to reduced levels of moral behaviors when they are construed as generous.

Tainted Donations

EXTENDED ABSTRACT

Consumers are myopic in their thinking and often exhibit double standards. For example, many institutions, academic institutions included, were scrutinized for accepting donations from Jeffrey Epstein, a convicted sex offender, even though many of these gifts were accepted before his conviction. Ironically, given that charities use money for welfare creation, society is better off when funds are spent by those other than the "tainted donor." In this research, we examine paradoxical expectations, and potentially damaging evaluations that nonprofit institutions face, in the context of tainted donations. We also explore mitigation strategies.

In five preregistered studies, we find that consumers penalize charities who have received donations from tainted donors (i.e., donors who engage in morally corrupt behavior), even when the charity-donor transaction occurred before the transgression. Specifically, we find that consumers evaluate charities to be lower in morality and trustworthiness, and even indicate lower behavioral intentions to volunteer or donate (Study 1A-C). This effect occurs even if the tainted donor's donation is involuntary, i.e., court-ordered (Study 2), and extends to real donation decisions (Study 3). Finally, we explore potential charity response strategies (Study 4A&B).

In study 1A, participants (*N*=599) evaluated a hunger alleviation charity that had received $1,000,000 from a high-profile donor about a year ago. Then, we randomly assigned participants to one of three conditions. In the control condition, participants received no additional information. In the crime before condition, participants read that "*shortly before* his donation, the donor sexually harassed several women". In the crime after condition, the transgression occurred "*shortly after*" the donation. Results show that participants perceived the charity to be less moral relative to a control (*M* = 5.81) when it received a donation from a tainted donor who transgressed before (*M*=5.05, *t*(596)=6.51, *p*<.001) and after (*M*=5.23, *t*(596)=4.94, *p*<.001) the donation. A similar pattern emerged for trust and behavioral intentions (all *p*<.05).

Studies 1B and 1C demonstrate the robustness of the effect across donation amounts and types. In Study 1B, participants (*N*=1498) evaluated charities that received donations between $5,000 and $1,000,000 from tainted vs. non-tainted high-profile donors. In Study 1C, participants (*N*=801) evaluated charities that accepted monetary vs. non-monetary donations from tainted vs. non-tainted high-profile donors. Across all donation amounts and types, participants perceived the charity to be less moral, less trustworthy, and had lower intentions to volunteer and donate when it received a donation from a tainted (vs. non-tainted) donor (all *p*<0.05).

In Study 2, participants (*N*=301) evaluated a charity that received a voluntary vs. involuntary donation from a tainted donor. In a similar paradigm to that of the previous studies, participants read that the tainted donor donated money in the voluntary condition. In the involuntary condition, participants additionally read that the donor was required to donate as part of the court sentence. The results reveal that participants did not differentiate between a voluntary versus involuntary donation from a tainted donor in terms of charity moral credit, trust, and behavioral intentions (all *ps* n.s.).

In Study 3, we extend the findings to a consequential setting. In an incentive-compatible choice paradigm, participants (*N*=401) evaluated two charities: Iodine Global Network and amfAR. Participants read the mission of each charity, and amfAR was described to have received a donation from a tainted donor, sex offender Harvey Weinstein. Participants then chose to give $100 to one of the two charities and were told that the decision of one randomly selected participant would be implemented. The results reveal that participants were significantly less likely to choose amfAR versus the Iodine Global Network in the tainted donor versus control condition (73.6% vs. 82.5%, χ²(1, *N* = 401) = 4.60, *p* < 0.05).

Study 4A explored rebound strategies. Participants (*N*=1054) read about a charity that received a tainted donation. Then, we randomly assigned participants to one of seven reaction conditions: the charity either did not react, condemned the donor's crimes, condemned the donor's crimes and rejected all future donations, condemned the donor's crimes and redirected the unspent funds to another charity, condemned the donor's crimes and redirected the entire donation to another charity, or condemned the donor's crimes and returned the donation. We also administered a control. Results show that relative to the control, the charity was penalized most in the no reaction condition, both in terms of moral credit and behavioral intentions (all *p* < .001).

Finally, in Study 4B, we manipulated whether the charity provided a reason ("to do good") for accepting a tainted donation. In

the reasons condition, the charity explained, "we have accepted the donation. This gives us an opportunity to use the money to do good." Participants assigned significantly more moral credit to the charity when it explained that it wanted to do good ($M = 4.88$) versus provided no reason ($M = 4.46$), $t(594) = 3.23$, $p<.001$. Relative to a non-tainted control ($M = 5.63$), however, penalization still occurred, $t(594) = 3.86$, $p<.001$.

Our results are surprising considering the results of a pilot: Participants indicated that a tainted versus non-tainted individual *should* donate a higher portion (13.56 vs. 6.16/100) of windfall earnings to charity, $t(298) = 3.73$, $p<.001$. Thus, consumers think that tainted individuals *should* donate more, but paradoxically penalize charities for accepting such donations.

In sum, consumers penalize charities for receiving donations from tainted donors, although they think that these individuals *should* donate more money to charity. In addition, consumers penalize charities even when the donor's transgression occurs *after* the donation. On the one hand, the outrage makes intuitive sense. On the other hand, consumers might hurt those in need since the tainted donations could be used for good. Our findings join recent warnings that moral standards often limit the acceptability of solutions that could create social welfare (Bloom 2016).

Morality as Market Friction: Product Valuations Reflect Moral Judgments of Counterparts in Market Exchanges

EXTENDED ABSTRACT

The extent to which markets increase welfare depends on whether products are allocated to the consumers who value them most. Behavioral research has investigated the extent to which product valuations depend on normatively irrelevant features of the product (e.g., how attributes are framed (Levin & Gaeth, 1988) and of the situation (e.g., whether products are being bought or sold, (Knetsch & Thaler, 1991)). It has not, however, looked at market exchanges as instances of social interactions between people with naturally differing characteristics. In this work we show that product valuations, and thus market exchanges, are shaped by people's moral assessment of their counterpart in the transaction.

Morality is fundamental to people's view of themselves and others (Newman et al., 2014; Strohminger et al., 2017); moral character traits have been shown to be central in interpersonal impression formation (Goodwin et al., 2014). These beliefs and values have a broad-ranging influence, affecting among others decisions relating to social ties (Mosleh et al., 2021) opinions of products (Lee & Kwak, 2016; Stavrova et al., 2016) and donations (Capraro & Rand, 2018). Importantly, morally relevant information is increasingly accessible to consumers (e.g., through social media, (Bennett, 2012; Sun et al., 2014)rapidly forming political participation aimed at a variety of targets, ranging from parties and candidates, to corporations, brands, and transnational organizations. The group-based "identity politics" of the "new social movements" that arose after the 1960s still exist, but the recent period has seen more diverse mobilizations in which individuals are mobilized around personal lifestyle values to engage with multiple causes such as economic justice (fair trade, inequality, and development policies, raising the question of how it affects marketplace behavior. Across seven studies, we show that buyers and sellers change their reservation prices in response to information about their counterpart's moral character (i.e., their actions or beliefs); they lower their willingness to pay (WTP) and increase their willingness to accept (WTA) when interacting with people they deem immoral. As WTP and WTA are generally not normally distributed, we performed both non-parametric tests, and parametric tests on logarithmically transformed values. Results are qualitatively identical.

In Study 1 (N = 399), we randomly assigned participants to either state their WTP (buyer role) or WTA (seller role) for a Barnes&Noble voucher in an exchange with another participant. We orthogonally manipulated perceived moral character by asking participants to state their agreement with morally loaded statements (e.g. "it's ok to lie on your CV") and varying whether there was a match or a mismatch between the buyer's and the seller's opinion. We find that median WTA was higher ($65 vs. $47, p<.001) and median WTP was lower ($25 vs. $45, p<.001) in the mismatch condition than in the match condition. In a control group where no information was provided about the counterpart's opinions, participants behaved similarly to the match condition (WTA=$50, WTP=$45), in line with research showing we default to believe others to be generally moral (Newman et al., 2014). Study 2 (N=360) replicated this experiment under incentive-compatible conditions, yielding qualitatively similar results.

The next set of studies investigate whether morality has a unique role in driving people's valuations within exchanges. Study 3 (N=833) used a similar design to the previous two studies, but varied the extent to which differences in agents' opinions across four statements concerned moral or non-moral domains. We found that the degree to which having differing opinions affected valuations depended on the number of moral statements included in the set (WTA $p<.001$; WTP $p=.037$). Contrast analysis confirmed that when opinion differences were entirely non-moral, they did not influence valuation (WTA $p=.998$; WTP $p=.999$); when opinion differences where entirely moral, valuations were significantly different (WTA $p<.001$; WTP $p<.001$). Study 4 (N=1545) put participants in hypothetical market exchanges with people who committed one moral violation sampled from a set spanning the six moral foundations (Graham et. al. 2009, Haidt 2012, Landy and Bartels 2018), and found that individual level ratings of the "wrongness", or egregiousness, of the violation correlated with reservation prices (WTA, $p<.001$; WTP $p=.001$). Study 5 (N=413) built on research showing that moral judgment of an action is conditional on the agent's intent to perform it (Cushman, 2008). We found that, when faced with a market agent who had performed the same negatively valenced action, reservation prices depend on whether these actions were performed intentionally (WTA $p< .001$; WTP $p=.002$).

The final studies investigated whether reservation prices respond to moral character information for self- or other-directed reasons. People may be willing to pay less for a product because the possibility of engaging with an immoral counterpart is unattractive; alternatively, a lowered valuation might reflect a desire to reduce the value that the seller would obtain by selling the product. Study 6 (N=294) manipulated whether participants considered a brand whose owner was accused of an immoral act or praised for a moral act, and whether profit from the sale of their product would accrue to the owner or to a third party. We found that the reduction in WTP for a product sold by an immoral vs. a moral person was smaller when the profit from the sale would not accrue to the owner ($p=.001$); this suggests that the effect of morality on reservation prices is at least partially driven by a desire to actively and negatively influence market outcomes for immoral agents. Study 7 (N=345) tested whether completing a transaction that reduces (vs maximizes) the surplus an immoral counterpart receives suffices in making consumers feel better about the exchange. Participants considered the purchase of a product from a seller that was either moral or immoral, at either market value or below market value. We found that the negative effect

of seller's morality on predicted happiness with the exchange disappeared when the transaction was less favorable to the seller (p<.001).

Whereas participation in a market has been previously described as affecting moral character (c.f. Falk & Szech, 2013), we investigate the reverse relationship, demonstrating how the presence of moral values affect market exchanges. Reservation prices incorporate moral judgment, making transactions more or less likely to occur depending on people's approval of their counterparts; this may exert 'friction' on the market to the extent that it interferes with its ability to achieve efficient allocations. These findings further our understanding of marketplace morality, showing that consumers may use market exchanges not only to satisfy their needs, but also to sanction actions and beliefs they do not approve of.

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How Authenticity is Created and Perceived in the Marketplace

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Paper #1: Authenticity Work as Performance: A Qualitative Meta-synthesis

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Paper #2: Why Wealth Taints Authenticity: The Influence of Brand Founder's Social Class on Brand Evaluations

Rosanna K. Smith, University of Georgia, USA

Lan Anh N. Ton, University of Georgia, USA

Ernest Baskin, Saint Joseph's University, USA

Paper #3: The Preference for Consuming Spontaneity

Jacqueline R. Rifkin, University of Missouri-Kansas City, USA

Katherine M. Du, University of Wisconsin-Milwaukee, USA

Keisha M. Cutright, Duke University, USA

Paper #4: Are you for Real? Perceptions of Authenticity are Inaccurate and Biased

Erica Bailey, Columbia University, USA

Aharon Levy, Yale University, USA

SESSION OVERVIEW

Authenticity has become a modern marketplace superlative—a pre-eminent value in a post-modern economy rife with seemingly frivolous consumption. Scholars have suggested that "consumers' search for authenticity is one of the cornerstones of contemporary marketing" (Brown, Kozinets, and Sherry 2003, p. 21). As such, authenticity is a powerful path into consumers' minds and wallets. Consumers talk more about (Morhart et al. 2015) and are willing to pay more for (Beverland 2005; Newman and Dhar 2014; Smith, Newman, and Dhar 2016) products that they perceive to be authentic. Consumers gravitate towards authentic public figures, like leaders (Avolio et al. 2004), artists (Moulard et al. 2014), and celebrities (Moulard, Garrity, and Rice 2015), as well. Even children as young as preschoolers place increased value on authentic offerings (Frazier and Gelman 2009; Gelman et al. 2015). Thus, it is increasingly imperative that marketplace entities of all kinds "excel at rendering authenticity" (Gilmore and Pine 2007) if they wish to thrive.

The four papers in this session—one conceptual and three empirical—add to our understanding of this imperative. These works leverage a diverse set of approaches and theoretical frameworks to explore how authenticity is created and perceived—what factors promote (or fail to promote) the perception of authenticity in the marketplace?

The first paper (Beverland and Cankurtaran) presents a qualitative meta-synthesis of authenticity work. Drawing from twenty-nine papers in leading business journals, these authors identify strategies and cues that offer clarity over the nature of "authenticity work," which ultimately provides tools for how authenticity can be created and maintained. In doing so, this work challenges the contrast between being authentic and performing authenticity, suggesting that all authenticity work is performed.

The second paper (Smith, Ton, and Baskin) explores how information about a founder's social class influences perceptions of brand authenticity. They find that the authenticity attributed to a brand becomes "tainted" when consumers become aware that the brand founder comes from an economically-privileged background. This is driven by decreased attributions of founder effort, which subsequently dampens brand evaluations.

The third paper (Rifkin, Du, and Cutright) investigates the relationships between spontaneity, authenticity, and consumption preferences. Specifically, they demonstrate that people seem more authentic when they behave spontaneously, which drives a preference for consuming spontaneous (vs. planned) actions; however, situations involving heightened personal risk can attenuate this preference.

The final paper (Bailey and Levy) examines how accurate people are at detecting authenticity in their world. Their work reveals that authenticity is perceived with limited accuracy and biased by the individual making the judgement, which provides a new and important consideration for entities who wish to be seen as authentic.

Together, this methodologically- and theoretically-diverse session enhances our understanding of factors affecting how authenticity is created and perceived in the post-modern economy. This session will appeal to scholars interested in authenticity, branding, social cognition, and multi-methods approaches. Moreover, the insights derived from this research arm an array of commercial entities with greater knowledge of how they may render authenticity to consumers, leading to more positive outcomes.

We conduct a qualitative meta-synthesis of authenticity work, identifying the need to balance being authentic and doing authenticity performances. We explore the paradoxical nature of this work through a semiotic square. Performing authentically involves character and strategic work, and two paradoxical forms - real strategic work and ideal character work.

Authenticity Work as Performance: A Qualitative Meta-synthesis

EXTENDED ABSTRACT

There are few claims more compelling, and recently, more common, than "being authentic". Authenticity is viewed as the gold standard in public life - spanning politics, leadership, culture, and the marketplace (Umbach and Humphrey 2017). Authenticity is an enduring ideal (Potter 2011), the standard of modern capitalism (Giddens 1991), central to post-modern marketing (Brown 2001), and the core consumer identity-goal (Arnould and Price 2000). Furthermore, authenticity is central to service encounters (Price, Arnauld and Tierney 1995), cultural branding (Holt 2004), consumer identity work (Belk, Wallendorf, and Sherry 1989; Zhang and Patrick 2021), co-creation with consumer communities (Leigh, Peters and Shelton 2006), and the consumption experience (Chronis and Hampton 2008; Grayson and Martinec 2004; Lasaleta and Loveland 2019; Vredeveld and Coulter 2019) (among others). With tensions arising between historic definitions and ideological discourses of authenticity and the profane nature of the marketplace (Belk et al. 1989), many have noted how marketplace authenticity is inherently contradictory or paradoxical (Rose and Wood 2005). Paradox frames how authenticity is rendered in the marketplace (Gilmore and Pine 2007) and drives much of what we identify as "authenticity work" (Plüg and Collins 2020).

Although recent reviews have brought much needed clarity to definitions of authenticity (Lehman, O'Connor, Kovács and Newman 2019; Nunes, Ordanini, and Giambastiani 2021) as well as subcategories such as brand authenticity (Moulard, Raggio, and Folse 2021), research on authenticity work remains beset by fragmenta-

tion, contradiction, and lack of synthesis. Paralleling previous debates on the nature of authenticity, the lack of consensus regarding marketized authenticity work arises due to the highly contextual nature of previous studies, their primarily qualitative nature, and the differing theoretical and research traditions that frame them. Gaining clarity over the nature of authenticity work is critical since rendering authenticity in the marketplace is essential to brand equity including attachment, liking, price premiums, relationship status, and loyalty (among others) (Becker, Wiegand, and Reinartz 2019; Morhart et al. 2015). Furthermore, greater clarity over the nature of authenticity work provides marketers with the tools needed to help consumers make authenticity judgments about brands and supportive programs.

To address this challenge, we undertook a qualitative meta-synthesis of authenticity work, drawing on leading publications within marketing and management (that covered external-, or market- facing aspects of authenticity work). A qualitative meta-synthesis operates much like a meta-analysis in a number of ways: included studies need to focus on the construct of focus (authenticity work), study findings are treated as data, and the outcome of the synthesis should not only summarize existing studies but also offer new insights for theory (Timulak 2009). Our final dataset, drawn from 4*/4 ranked marketing and management journals in the UK Association of Business Schools Academic Journal Guide, consisted of 29 papers. Study findings and supportive contextual information were entered into ATLAS.ti and coded by both authors following standard qualitative research procedures (Spiggle 1994).

The first part of our findings identified that authenticity work involves the deployment of four strategies (downplaying, connecting, immersion and alignment) and five cues (making, status, empathy, membership, and context) that help address authenticity paradoxes (truth vs. imagined, sincere vs. insincere, culture vs. commerce, timelessness vs. relevance, and coherence vs. dilution). Doing this effectively, involves two performances, which we label "character" and "strategy". Engaging in these performances challenges the "being" vs. "doing" dualism that has previously framed many debates in marketplace authenticity (Beverland, Farrelly and Quester 2010). This debate has framed authenticity in terms of what is genuinely real vs. what is put on for effect. As our findings identified that authenticity work was aimed at addressing contradiction and paradox arising from paired concepts, for the second part of our findings we deployed a semiotic square to help "penetrate and enrich apparent binary oppositions" (Kozinets 2008, p.868) and offer new insights for advancing theory and practice.

Our semiotic square begins with our central binary opposition – the tension between the real (indexical or intrinsic to an object) and the ideal (iconic and socially constructed). This tension reflects a contrary of truth, and gives rise to two contradictions: one of being and one of doing. Each also generates complementarities. The real gives rise to complimentary of identity while the ideal gives rise to the complimentary of expectations. To complete our square, the real gives rise to what we called the work of character, while the ideal gives rise to what we label the strategic work. In exploring the tensions and contradictions we identify that authenticity work also gives rise to real strategic work (such as that represented by storytelling) and ideal character work (such as that embodied in emerging notions of brand purpose for example), reinforcing our case that all authenticity work is ultimately performed.

We contribute to theory and practice in a number of ways. Our meta-synthesis of marketplace authenticity work identifies consistencies across a range of studies and theoretical traditions, providing much needed coherence in this area. Our semiotic square enables us to interrogate these findings further, identifying the need for new forms of authenticity work which highlight the essential performed nature of all forms of authenticity in the marketplace. In light of recent clarifications of the construct of authenticity that highlight its formative nature (Nunes et al. 2021), our review of work also identifies how authenticity can be created and maintained in the marketplace. Furthermore, we expand on how managers can use notions of authenticity as consistency, conformity and connection (Lehman et al. 2019) in a dynamic way to ensure the contradictory elements of authenticity remain balanced over time. In terms of practical implications, our results identify connections between particular paradoxes and relevant campaign strategies and cues. Finally, in terms of future research our findings have implications for our understanding of narrative transportation and storytelling (van Laer, de Ruyter, Visconti, and Wetzels 2014), brand purpose and activism (Vrendenburg, Kapitan, Spry, and Kemper 2020), and cultural branding (Holt 2004).

Why Wealth Taints Authenticity: The Influence of Brand Founder's Social Class on Brand Evaluations

EXTENDED ABSTRACT

After her company's success, Kylie Jenner was hailed as the youngest self-made billionaire (Abad-Santos 2018). However, as writer, Roxane Gay, stated, "[Kylie] grew up in a wealthy, famous family. Her success … comes by virtue of her privilege." Although wealth is desirable, being born wealthy often dulls the shine of an individual's achievements. Conversely, being born poor tends to enhance others' appreciation of an individual's success. Here, we examine why a founder's social class influences brand authenticity.

Information about a brand's origin can influence perceived authenticity (e.g., Newman and Dhar 2014). A founder's social class is an aspect of a brand's origin that may influence authenticity via attributional processes (e.g., Malle 2011). Wealth may decrease brand authenticity because it dilutes the causal link between the founder and brand as it is unclear if the brand is the direct result of the founder's effort (internal attribution) or other cause, namely, their wealth (external attribution). By contrast, a brand created by a founder with a poor background enhances authenticity because the brand is more likely to be attributed to the founder's effort rather than external causes. We tested this reasoning across three studies.

Study 1 examined how privilege type influences brand evaluations and authenticity in a 2 (level: low, high) x 3 (privilege: wealth, education, social network) between-subjects design. In the wealth conditions, participants read: John Patton, the founder of the Cosmo company, grew up in a very *poor/wealthy* family. In the education conditions, the founder *did/did not* receive formal education. In the social network conditions, the founder had *few/many* social connections. Participants rated brand evaluations ($\alpha = .93$) on a 7-item scale (e.g., To what extent was your overall impression of the brand positive (vs. negative)?) and perceived authenticity (i.e., I think this bottle company is authentic).

A 2 x 3 between-subjects ANOVA on brand evaluations revealed an interaction ($F(2, 533) = 5.59$, $p = .004$, $\eta_p^2 = .02$). Brand evaluations increased when the founder grew up poor vs. wealthy (4.77 vs. 4.33; $F(1, 533) = 8.21$, $p = .004$, $d = 0.43$). There was no difference in the education conditions ($F(1, 533) = 0.37$, $p = .54$) and a marginal difference in the social network conditions ($F(1, 533) = 2.81$, $p = .094$).

The same 2 x 3 analysis on perceived authenticity showed an interaction ($F(2, 533) = 4.12$, $p = .017$, $\eta_p^2 = .015$). Authenticity increased when the founder grew up poor vs. wealthy (4.71 vs. 4.09; $F(1, 533) = 9.49$, $p = .002$, $d = 0.46$), with no difference in the educa-

tion ($F(1, 533) = 0.04$, $p = .84$) and social network conditions ($F(1, 533) = 0.88$, $p = .35$).

A mediation analysis (Model 4, Hayes 2018) with brand evaluations as the DV, poor/wealth as the IV, and authenticity as the mediator was significant (95% CI = [.07, .38]).

Study 2 examined whether the internal attribution of effort precedes authenticity. Participants read about a founder from a poor (vs. wealthy) background. They rated brand evaluations ($\alpha = .94$) and perceived authenticity. To capture the internal attribution of effort ($\alpha = .85$), they rated a 3-item scale (e.g., I think that this cup of coffee is a true reflection of the effort of John Patton).

Brand evaluations increased in the poor vs. wealthy condition (5.15 vs. 4.79; $t(195) = 2.07$, $p = .04$, $d = 0.30$). The internal attribution of effort was higher in the poor vs. wealthy condition (4.69 vs. 3.96; $t(195) = 3.51$, $p = .001$, $d = 0.50$). Perceived authenticity also increased in the poor vs. wealthy condition (5.64 vs. 4.84; $t(147) = 3.87$, $p < .001$, $d = 0.57$). A serial mediation (Model 6, Hayes 2018) with brand evaluations as the DV, poor/wealth as the IV, and internal attribution of effort and perceived authenticity as sequential mediators was significant (95% CI = [.05, 25]).

Study 3 tested a boundary condition by manipulating both social class and whether the founding involved hardship or prosperity in a 2 (class: poor, wealthy) x 2 (founding: hardship, prosperity) between-subjects design. Participants rated brand evaluations ($\alpha = .96$) and perceived authenticity. For the internal attribution of effort, they rated: To what extent did you see this coffeehouse as a reflection of John Patton's effort (vs. luck)?

A 2 x 2 between-subjects ANOVA on brand evaluations revealed a main effect of class ($M_{poor} = 5.20$ vs. $M_{wealthy} = 4.52$; $F(1, 356) = 24.07$, $p < .001$, $d = 0.52$), a main effect of founding ($M_{hardship} = 5.01$ vs. $M_{prosperity} = 4.71$; $F(1, 356) = 5.15$, $p = .024$, $d = 0.22$), and an interaction ($F(1, 356) = 4.51$, $p = .034$, $\eta_p^2 = .012$). In the poor conditions, brand evaluations increased with hardship vs. prosperity (5.49 vs. 4.89; $F(1, 356) = 9.81$, $p = .002$, $d = 0.50$). In the wealthy conditions, there was no difference ($F(1, 356) = 0.01$, $p = .92$).

The same 2 x 2 analysis on the internal attribution of effort showed a main effect of class ($M_{poor} = 5.47$ vs. $M_{wealthy} = 4.40$; $F(1, 356) = 42.11$, $p < .001$, $d = 0.62$), a main effect of founding ($M_{hardship} = 5.60$ vs. $M_{prosperity} = 4.26$; $F(1, 356) = 65.81$, $p < .001$, $d = 0.79$) and no interaction ($F(1, 356) = 0.24$, $p = .62$).

The same 2 x 2 analysis on perceived authenticity revealed a main effect of class ($M_{poor} = 5.60$ vs. $M_{wealthy} = 4.89$; $F(1, 356) = 22.97$, $p < .001$, $d = 0.50$), a main effect of founding ($M_{hardship} = 5.41$ vs. $M_{prosperity} = 5.07$; $F(1, 356) = 5.52$, $p = .019$, $d = 0.23$), and no interaction ($F(1, 356) = 1.14$, $p = .29$).

Although the wealthy founder's hardship enhanced attributions of effort and authenticity, these assessments neither aligned with those for the poor founder nor boosted brand evaluations. We contribute to authenticity and social class research by showing that a founder's wealth can "taint" brand authenticity. Future studies will identify when a privileged origin can regain its authenticity.

The Preference for Consuming Spontaneity

EXTENDED ABSTRACT

From TV and film characters, to musicians, to political figures, people in public-facing roles are often seen acting spontaneously. However, is this behavior rewarded by consumers? And if so, why? The current research explores when and why consumers prefer to consume others' spontaneous actions.

We find that consumers often prefer to consume others' spontaneity, and that this is because spontaneous actors seem more authentic. In particular, when people act without a previously-made plan, they appear to be acting in accordance with their "true selves" (Kernis and Goldman 2006). That is, a politician who speaks off-the-cuff seems truer to themselves than one who is scripted. We suggest that it is the value consumers place on authenticity (Arnould and Price 2000; Beverland and Farrelly 2010) that drives a preference for spontaneity.

While spontaneity can make actors seem more authentic, it can also lower perceptions of the end-product's quality. That is, while "free-styling" might make a rapper seem more authentic, for instance, the actual rap *per se* might be lower-quality than a pre-written performance. Prior research supports this intuition, since in-advance planning is associated with higher-quality goal-relevant outcomes (Achtziger, Gollwitzer and Sheeran 2008; Gollwitzer 1999). As such, we expect that the preference for spontaneity will be attenuated in situations when personal risk is heightened, such as when consumers expect to receive the end-product (rather than merely observe the process), or when consumers' own outcomes are tied to those of the actor.

Six studies (five pre-registered) support our theory. An initial field pilot leveraged real online articles to explore the preference for spontaneity. We constructed a dataset of Buzzfeed articles about spontaneity (i.e., about improvised scenes in TV and movies) from the last five years ($n = 10$), as well as 'control' articles that were matched to the spontaneity articles on date of publication and Buzzfeed's content category (TV & Movies; $n = 49$), and compared the total instances of social media engagement (sum total of Facebook comments, "shares", "reactions", Pinterest "pins", etc.). Consistent with a preference for spontaneity, the online articles about spontaneity generated significantly more social media engagement ($M = 14482.8$) than the control content ($n = 49$; $M = 7543$, Mann-Whitney $Z = 2.53$, $p = .012$).

Moving to more controlled experiments, in Studies 1A ($N = 150$) and 1B ($N = 147$), consumers were given the opportunity to watch a clip from a several-years-old football game (1A) and an on-going e-sports game (1B). They could choose to watch either a team that leveraged planned plays, or a team that leveraged spontaneous plays. Across both the determinate (i.e., game that already occurred) and indeterminate (i.e., ongoing game) contexts, consumers overwhelmingly preferred to watch the spontaneous teams (1A: 82.0% chose spontaneity; 1B: 80.3% chose spontaneity).

Though supportive of a preference for spontaneity, one might wonder whether participants were imagining fundamentally different actors or experiences—that is, they could be more novel, exciting, or skilled. To control for this, Study 2 participants ($N = 385$) watched a video of a band's performance, and were told afterwards that it was planned versus spontaneous. Holding the performance constant, describing it as spontaneous increased participants' interest in watching another video from the same band ($P_{Spontaneous} = 54.4\%$ vs. $P_{Planned} = 43.2\%$; $X^2 = 4.81$, $p = .028$), over a video of a different band.

Study 3 ($N = 496$) begins to test the proposed underlying process. We suggest that, relative to planned actions, spontaneous actions increase the actor's perceived authenticity, but also lower the end-product's perceived quality. If this is true, the preference for spontaneity should be attenuated when personal risk is heightened. To test this, we introduced a condition where participants imagined being the end-customer of spontaneity, rather than merely observing as in the prior studies. Results supported our predictions: Consistent with prior studies, when participants imagined watching live legal proceedings, they were more interested in a lawyer that relied on spontaneity (vs. planning; $M_{Spontaneous} = 4.71$ vs. $M_{Planned} = 3.94$, $p < .001$) because the lawyer seemed more authentic ($M_{Spontaneous} = 5.29$

vs. $M_{Planned} = 4.00$, $p < .001$; $ab = .91$, 95% CI [.63, 1.20]). When they imagined hiring a lawyer for their *own* legal needs, however, the preference reversed ($M_{Spontaneous} = 2.86$ vs. $M_{Planned} = 5.28$, $p < .001$), driven by concerns about the quality of the lawyer's arguments ($M_{Spontaneous} = 5.62$ vs. $M_{Planned} = 3.34$, $p < .001$; $ab = -1.33$, 95% CI [-1.68, -1.01]).

Study 4 ($N = 200$) further tests process and reveals another boundary condition based on personal risk. All participants had the choice of e-sports game to watch. Consistent with Studies 1A and 1B, most participants chose to watch an e-sports game involving a spontaneous (vs. planned) team ($P = 75.5\%$), as this team seemed more authentic ($r = -.25$, $p = .012$). However, when we tied participants' own outcome (i.e., the size of their actual compensation bonus) to the game's outcome (i.e., how many points the focal team scored), the preference for spontaneity was attenuated ($P_{Spontaneous} = 75.5\%$ vs. $P_{Planned} = 47.1\%$; $X^2 = 17.00$, $p < .001$), given participants' beliefs about quality of gameplay ($r = .29$, $p = .004$).

Across several domains ranging from artistic (music) to cognitive (law), and from individual (lawyer) to group (sports teams) actions, we observe a preference for consuming spontaneity. By exploring the underlying roles of authenticity and quality concerns, we also identify that spontaneity can be a double-edged sword—highly desirable as an audience-member, but less so as a recipient. These results may therefore reveal an interesting divergence in outcomes: spontaneity can increase impressions of the actor, but decrease impressions of the end-product itself. This work advances understanding of consumers' preferences for experiences and entertainment, delves further into the role of authenticity in marketing, and has implications for celebrities, executives, politicians, and others in public-facing roles.

Are you for Real? Perceptions of Authenticity are Inaccurate and Biased

EXTENDED ABSTRACT

Popular press pieces laud authenticity as a key metric for selecting friends, judging potential mates, and electing leaders, implicitly assuming there is a kernel of truth embedded in these judgments: that we can discern an authentic person the way we can discern an authentic product.

Others are deemed authentic when they seem to behave in line with their "true- or core-self" (Kernis & Goldman, 2006, p. 294. Functional perspectives on perceived authenticity assume that individuals can discern "real, true or genuine" people in the same way they can judge an authentic product (Newman 2019). Past research has implicitly assumed that judgments of authenticity are related to the target's authenticity, reflected in research on the antecedents of authenticity. For instance, perceived authenticity is associated with the target's morality (Bai et al., 2019), their perceived self-knowledge, and self-consistency (Peus et al., 2012)hide information, and deceive others, but rather lead with authenticity and integrity. In this article, we empirically investigate the concept of authentic leadership. Specifically, we examine the antecedents and individual as well as group-level outcomes of authentic leadership in business (Study 1; n = 306). These antecedents parallel variables linked to individual expression of authenticity (Gino et al., 2015; Kraus et al., 2011). However, the accuracy of authenticity judgments remains untested.

Our core proposition in the present research is that perceived authenticity is (1) inaccurate, that is other-ratings of authenticity are not related to self-ratings of authenticity, and (2) perceived authenticity is biased by rater-based processes when making authenticity judgments. We propose that authenticity judgments will be inaccurate for a number of reasons.

First, the standards against which to judge authenticity are difficult to discern compared to other individual differences. For example, people are able to accurately predict individual differences in socioeconomic status and personality traits in others (Ambady & Rosenthal, 1992; Kraus et al., 2019)speech, the body, tone of voice. Unlike authenticity, these differences have generalizable standards for comparison, where what is high vs. low extraversion is common across individuals. However, authenticity can appear remarkably different between individuals. Being accurate at recognizing authenticity requires knowing that person's true self, observing their behavior, and comparing the two.

Second, lay people are "intuitive psychologists" who favor simplistic associations between observed behavior and the internal states of others, a tendency referred to as the fundamental attribution error (Ross, 1977), as in classic example, "she eats because she is hungry" (Heider 1958). If individuals tend to attribute the behavior of others to be internally-derived, we propose that they would similarly consider behavior of others to largely be authentic.

Finally, decades of research on deception detection has found that individuals are barely able to accurately detect lies above chance (for review, see Bond & Depaulo, 2006). While inauthenticity and lying are related, lying is an extreme version of inauthenticity. Indeed, there are many ways that individuals can be more or less authentic that do not involve outright lies, such as sharing selective positive features on dating websites, or omitting negative aspects in the recall of an experience. If individuals have poor accuracy at detecting lies compared to truths, this suggests that detecting authenticity should also have low accuracy.

Because the standards by which to judge authenticity are relatively obscure, the process of judging authenticity is prone to bias. Specifically, we hypothesize two biases which yoke authenticity judgments to the rater making the judgment (rather than the target of the judgment). Decades of research have demonstrated that there are predictable asymmetries between self- and other-perception, which occur because people are biased in how they see themselves (Alicke and Govorun 2005) and how they see others (Ross, 1977). We integrate literatures on deception detection, egocentrism, and person perception to propose two biases which will distort authenticity judgments: a positivity bias and an egocentrism bias.

First, we suggest that raters will exhibit a positivity bias in their authenticity judgments of others. Deception research has found that people reliably exhibit a bias towards truth (DePaulo et al., 1997; Zuckerman et al., 1981). When people are not informed about the base rates of lies to truths, they overestimate the amount truths, potentially as a means of maintaining cohesion and reducing social costs (ten Brinke, Vohs, and Carney 2016). In addition, the fundamental attribution error suggests that observed behavior would be attributed to simplistic internal motivations. This is in contrast to the self-knowledge an individual has of their own motivations, ranging from impression management and social desirability to authenticity. Thus, we hypothesize that others will exhibit a positivity bias in their authenticity judgments relative to a self-rated authenticity. That is, they will default to truth in their authenticity judgments of others.

Second, we propose that authenticity judgments are egocentric, whereby authentic raters will assume others are also authentic. Egocentrism suggests that individuals view and judge others in line with how they view themselves (Nickerson, 1999; Ross, 1977). Indeed, when individuals attempt to understand the inner states of others, they begin at the own point of view and adjust only incrementally (Epley et al., 2004; Tamir & Mitchell, 2013). Therefore, we hypothesize that a raters own authenticity will be predictive of their authenticity judgments of others.

Overview of Studies

We first confirm lay beliefs about the ability to detect authenticity, and the importance of authenticity in interpersonal relationships in Studies 1a-1b. In Studies 2-3, we test the accuracy and biases in authenticity ratings, utilizing a unique interpersonal setting: randomly assigned groups of individuals with little to no prior interactions with one another. The random assignment to these groups mitigates issues in selection that typically occur in interpersonal relationships. We follow these groups over a six-week period, surveying them at multiple timepoints. Participants rated their own authenticity, and the authenticity of every other person in their group. This allowed us to directly compare self- and other-ratings of authenticity and test for biases in authenticity judgments. We find no correlation between self- and other-ratings of authenticity. Social Relations Modeling and Bayesian analyses confirm this null relationship. Second, we find support for the positivity bias and egocentrism bias in authenticity ratings.

In Study 3, we add authenticity meta-perceptions (e.g., what do targets assume about the visibility of their authenticity to others?). We find that authentic individuals expect to be perceived as more authentic. Authenticity meta-perceptions were similarly not correlated with authenticity judgements.

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Treat Yourself (but Not Myself): Unearthing Discrepant Beliefs about Self-Care, Leisure, and Self-Gifting

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Kelley Gullo Wight, Indiana University, USA

Paper #1: No Bandwidth to Self-Gift: How Feeling Constrained Discourages Self-Gifting

Jacqueline R. Rifkin, University of Missouri-Kansas City, USA
Kelley Gullo Wight, Indiana University, USA
Keisha M. Cutright, Duke University, USA

Paper #2: Viewing Leisure as Wasteful Undermines Enjoyment

Gabriela N. Tonietto, Rutgers University, USA
Selin A. Malkoc, The Ohio State University, USA
Rebecca Walker Reczek, The Ohio State University, USA
Michael Norton, Harvard Business School, USA

Paper #3: Great for You but Not for Me: Examining Actor versus Observer Perceptions of Self-Care

Pooja Somasundaram, Indiana University, USA
Jenny G. Olson, Indiana University, USA

Paper #4: The Signaling Value of Leisure: How Information About Leisure Activities Affects Perceptions of Well-being and Professional Judgments

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Andrea C. Morales, Arizona State University, USA

SESSION OVERVIEW

We are in what is called the "decade of self-care" (Carraway 2019; Karlis 2019, Silva 2017). This domain of consumption goes by many names—*self-care*, *self-gifting*, *me-time*, *leisure*, *wellness*—and spans a variety of product categories, ranging from small technological purchases like meditation apps (e.g., Headspace), to personal care products like skincare and personalized vitamin services (e.g., Care/Of), to large-scale luxury wellness retreats (e.g., The Ranch Malibu). Despite this variety in nomenclature and consumption opportunities, this domain of consumption is defined by the promise of increasing consumers' well-being.

The self-care market is vast and growing. Consumer interest in self-care has increased dramatically over the last several years, with rising rates of related Google searches (Karlis 2019), over 18 million hash-tags on social media (Carraway 2019), and over three-quarters of consumers reportedly shopping with a "self-care mindset or mission" (Goldschmidt 2019). Apps pertaining to well-being, such as Headspace and Happify, were the most downloaded category of app in 2018 (Pesce 2018), and IRI has valued this market overall at $450 billion, up $50 billion from the year before (IRI 2017, 2018).

Despite these trends in self-care, however, there are many unanswered questions in the realm of consumer behavior: What are consumers' beliefs about self-care and leisure, and how do these beliefs affect their self-care engagement and eventual outcomes? How do we judge others when *they* engage in self-care and leisure, and how does this compare to the way we judge ourselves?

The present session proposes to answer these questions. First, two papers examine consumers' own beliefs about self-care, unearthing a relatively pessimistic view. **Paper 1** (Rifkin, Gullo Wight, and Cutright) finds that consumers believe that they will not be able to derive emotional benefits from self-gifting when they feel resource-constrained, which drives reduced interest and purchase. **Paper 2**

(Tonietto, Malkoc, Reczek, and Norton) reveals a related belief that leisure can be wasteful and unproductive, which drives reduced enjoyment when people engage in leisure.

Next, two papers examine how we judge others' self-care, revealing a far more optimistic perspective. **Paper 3** (Somasundaram and Olson) finds that self-care is seen as more valuable and deserved when others engage in it, relative to one's own engagement. Finally, **Paper 4** (Daniels, Samper, and Morales) finds that seeing others engage in leisure increases how fulfilled they seem, which drives hiring interest.

These four papers reveal an interesting discrepancy in consumers' beliefs about self-care, in which we encourage others to treat themselves but are cynical about our own self-care. In addition to featuring one of ACR's highlighted themes, we believe this session will stimulate fascinating conversations about how to reconcile this discrepancy, and will appeal broadly to scholars interested in well-being, issues of work versus leisure, resource constraints, social cognition, self versus other perspectives, and hedonic consumption.

No Bandwidth to Self-Gift: How Feeling Constrained Discourages Self-Gifting

EXTENDED ABSTRACT

Self-gifting has been called the "philosophical rallying cry" of many of today's consumers (Bereznak 2017; Fottrell 2017; Green 2017; Norton 2017; Olen 2014), and in response, many major companies have started to position their offerings as *self-gifts*, or purchases one can make with the intention to improve one's own emotional well-being (Checkner 2019; Deng 2017; Voight 2015). While products positioned as self-gifts are growing in prevalence, little is known about what drives consumers' interest in self-gifting (c.f., Heath, Tynan, and Ennew 2011; McKeage, Richins, and Debevec 1993; Mick 1996; Mick and Demoss 1990a, b, 1992; Mick and Faure 1998; Olshavsky and Lee 1993). When and why are consumers more or less interested in self-gifting?

The current research proposes that interest in self-gifting depends upon consumers' perceptions of resource constraint. Resource constraint can impact consumer behavior in a variety of ways; most relevantly, resource constraints are cognitively draining (Shah et al. 2012). Moreover, according to an initial pilot, consumers believe that self-gifting is unique in that it requires a capacity for *savoring* (i.e., being able to actively attend to and appreciate positive emotions; Bryant and Veroff 2007) in order to derive benefit. Taken together, we suggest that consumers are aware of the distracting nature of constraint and consequently believe that feeling constrained will hamper their ability to savor and, in turn, diminish self-gifting's benefits. We therefore predict that resource constraints should decrease interest in products when they are framed as self-gifts, but not when those same products are framed neutrally.

Four studies (three pre-registered) test these predictions. In Study 1 ($N = 927$; pre-registered), participants wrote about a recent resource constraint (time or money) either being imposed or lifted, or did not write anything at all (3 between-subjects conditions). After viewing an ad for headphones framed as a self-gift ("Carve out me-time"), they indicated purchase interest. Consistent with our predictions, those recalling an imposed resource constraint were less inter-

ested in self-gifting ($M = 3.43$), relative to both the less-constrained ($M = 3.85$) and neutral conditions ($M = 4.33$, both $ps < .01$). In this and all subsequent studies, the effects generalized to both temporal and financial constraints.

In Study 2 ($N = 571$; pre-registered), we tested the proposed mechanism. After writing about a resource constraint either being imposed or lifted, participants viewed an ad for headphones that was either framed neutrally (no tagline) or as a self-gift ("Reduce your stress"). As predicted, resource-constrained participants thought they would be less able to derive benefit from the self-gift headphones ($M_{\text{more\_constrained}} = 3.60$ vs. $M_{\text{less\_constrained}} = 4.83$, $p < .001$), which drove reduced purchase interest ($M_{\text{more\_constrained}} = 3.84$ vs. $M_{\text{less\_constrained}} = 4.44$, $p < .001$; mediation $ab = .99$, 95% CI [.66, 1.32]). Importantly, these effects did not occur in the neutrally-framed condition (both $ps > .23$; two-way interaction $ps < .050$; significant moderated mediation), supporting our prediction that resource constraint only suppresses interest in self-gifting (and not all consumption).

Study 3 ($N = 820$; pre-registered) further tested process through moderation. If the negative effect of constraint on self-gifting interest is driven by a belief that one will not be sufficiently capable of savoring to derive the emotional benefits, then the effect should be attenuated by challenging this lay belief. To test this, we varied whether a self-gifting product was described as requiring a capacity for savoring in order to benefit (the theorized lay belief), or as a *means to attain* a capacity for savoring (challenging the lay belief). Results supported our reasoning: Resource constraints reduced purchase interest in the lay belief condition ($M_{\text{more\_constrained}} = 3.95$ vs. $M_{\text{less\_constrained}} = 4.49$, $p = .010$), but the effect was completely attenuated when we challenged the lay belief ($M_{\text{more\_constrained}} = 4.25$ vs. $M_{\text{less\_constrained}} = 4.47$, $p = .281$; interaction: $p = .130$).

Study 4 ($N = 136$) tests the accuracy of consumers' lay beliefs about self-gifting. After manipulating current feelings of resource constraint, lab participants were instructed to engage in self-gifting (eating a real biscotti with a self-gifting intention), and we measured well-being before and after. We found that self-gifting can improve emotional well-being, regardless of resource constraint ($M_{\text{pre}} = 4.80$ vs. $M_{\text{post}} = 5.09$, $p < .001$). Perhaps more importantly, we found that consumers have mis-calibrated expectations about their ability to derive emotional benefits from self-gifting: Rather than being less able to derive benefit, those feeling resource-constrained experienced a greater over-time boost to their emotional well-being ($M_{\text{pre}} = 4.58$ vs. $M_{\text{post}} = 4.97$, $p < .001$), relative to feeling less resource-constrained ($M_{\text{pre}} = 5.05$ vs. $M_{\text{post}} = 5.22$, $p = .060$, interaction $p = .092$). This finding is consistent with prior research suggesting that consumers are poor at predicting hedonic outcomes (Lowenstein and Schkade 1999; Mitchell et al. 1997).

Underscoring the ecological validity of these effects, in supplemental studies, we show that resource constraints undermine actual choice of self-gifting experiences, willingness to purchase self-gifts, and engagement with social media ads for self-gifting. We also corroborate the proposed underlying mechanism through qualitative coding of open-ended responses. Throughout our studies, we also cast doubt on alternative explanations such as feelings of deservingness, affordability, having earned it, justifiability, and a general hedonic orientation.

Overall, our studies reveal that resource constraints suppress interest in self-gifting due to consumers' beliefs about their ability to derive benefits. Importantly, though, these beliefs are miscalibrated, suggesting that those who are least likely to engage in self-gifting are the ones who can stand to benefit the most. In addition to having important consumer well-being implications, this research makes theoretical contributions to research on self-gifting and resource constraint.

Viewing Leisure as Wasteful Undermines Enjoyment

EXTENDED ABSTRACT

Consumers often feel that they cannot make time for all of their desired and necessary tasks, leading leisure activities to be routinely jettisoned (Southerton 2003). Although leisure engagement offers a host of psychological (Coleman and Iso-Ahola 1993; Kahneman et al., 2004), and health benefits (Gump and Matthews 2000; Pressman et al., 2009), we propose that not all consumers value leisure, with some believing that using their (limited) time to engage in leisure is wasteful.

We propose that negative beliefs about leisure's value subsequently reduce hedonic utility from leisure pursuits. People's beliefs and expectations can become something of a self-fulfilling prophecy, in the way that, for example, expecting a product to taste better can lead it to actually be perceived as better-tasting (Lee et al., 2006). Thus, believing leisure is a wasteful use of time, lacking meaningful benefits, could diminish the primary benefit of leisure: enjoyment. However, negative beliefs about leisure's value should not undermine enjoyment indiscriminately. Prior research has distinguished between terminal leisure that is immediately rewarding, and instrumental leisure that serves as an instrument to achieving a longer-term goal (Botti and McGill, 2011; Kruglanski et al, 2018). Believing leisure is wasteful should be particularly detrimental for terminal leisure activities whose primary motivation is pleasure and less so for instrumental activities that are more productive because they are performed as a means to another (productive) purpose. Four studies test the effects of chronically held and primed beliefs about leisure on enjoyment of enacted leisure activities.

Study 1 (N=302) followed a 2(terminal, instrumental) x beliefs about leisure (measured) design. Participants who had celebrated Halloween were recruited for this study. They first indicated what they did (e.g., went to a party; took kids trick or treating) from a pretested list of terminal and instrumental leisure activities. They then indicated how much they enjoyed their Halloween experience (0=not at all, 100=extremely). Finally, they indicated agreement with five statements about leisure's wastefulness (e.g., "Time spent on leisure activities is often wasted time," "Leisure activities are not a productive use of time," $\alpha = .84$; 1=strongly disagree, 7=strongly agree). We found a significant interaction. For terminal leisure activities, greater endorsement of the belief that leisure is wasteful was associated with decreased enjoyment (B = -3.58, $p = .012$). However, there was not a significant relationship between beliefs about leisure and enjoyment for relatively instrumental leisure activities (B = 1.32, $p = .32$). Thus, negative beliefs about leisure uniquely undermined enjoyment of relatively terminal leisure activities. For those activities that are more instrumental – serving a purpose beyond (or in addition to) the pursuit of pleasure – we did not observe a detriment to believing leisure is wasteful.

Building on this, Study 2 (N=199) examined enjoyment of a variety of leisure activities and well-being. Participants indicated how much they tend to enjoy various leisure activities (e.g., hanging out with friends, watching TV, exercising) on average (1=not at all, 7=to a great extent). A pretest was used to classify each activity as terminal or instrumental, and a factor analysis further supported these classifications, with terminal and instrumental activities loading onto separate factors. As such, items were averaged together to form two scales corresponding to enjoyment of terminal and instrumental activities, respectively. Participants then completed scales assessing

happiness (Lyubomirsky and Lepper 1997), depression (Radloff 1977), anxiety and stress (Lovibond and Lovibond 1995). Finally, participants completed the same scale assessing beliefs about leisure used in Study 1 ($\alpha = .85$).

As in Study 1, we found that believing leisure is wasteful was associated with significantly reduced enjoyment of terminal ($r = -.16$, $p = .022$) but not instrumental leisure activities ($r = .06$, $p = .43$). Furthermore, in line with the idea that believing leisure is wasteful may harm not only the immediate enjoyment of leisure, but also the long-term well-being benefits of leisure, we found that negative beliefs about leisure were associated with lower reported happiness ($r = -.14$, $p = .049$) and greater reported depression ($r = .33$, $p < .001$), anxiety ($r = .39$, $p < .001$), and stress ($r = .24$, $p = .001$).

The final two studies experimentally tested the detrimental effect of believing leisure is wasteful by manipulating beliefs about leisure.

In Study 3 (N=189), we manipulated leisure beliefs by providing participants with articles that either primed that leisure is wasteful, leisure is productive, or that breakfast is unimportant (control). After the prime, participants played Tetris on the computer for about five minutes, which a pretest confirmed is considered leisure. Those primed to believe leisure is wasteful enjoyed playing the game significantly less ($M = 52.25$) than those primed that leisure is productive ($M = 61.94$, $p = .058$) and the control ($M = 64.62$, $p = .014$), which did not differ ($p = .58$). Thus, priming negative beliefs about leisure undermined enjoyment. Note that we find a detriment from believing leisure is wasteful rather than a boost from believing leisure is productive, establishing the direction of the effect.

Because the term "wasteful" may have a particularly strong negative connotation, in Study 4 (N=458), we added a fourth condition priming the belief that leisure is "unproductive" in order to test robustness. After the prime, participants watched a humorous video, which a pretest confirmed was considered leisure. As expected, the wasteful ($M = 55.11$) and unproductive ($M = 55.11$) conditions did not differ ($p = .80$). More importantly, participants in both the wasteful and unproductive conditions enjoyed watching the video less than those primed that leisure is productive ($M = 61.94$; vs. wasteful: $p = .086$; vs. unproductive: $p = .045$) and those in the control condition ($M = 64.62$; vs. wasteful: $p = .053$; vs. unproductive: $p = .026$). The productive and control conditions did not differ ($p = -.21$). Thus, priming the belief that leisure lacks value decreases enjoyment of leisure.

Although leisure engagement offers a myriad of established benefits, not all consumers deem leisure valuable. We find that believing leisure is wasteful undermines enjoyment of enacted leisure as well as long term well-being.

Great for You but Not for Me: Examining Actor versus Observer Perceptions of Self-Care

From workplace wellness programs and napping rooms, to FitBit challenges and mobile mindfulness apps, consumers and marketers are investing in "self-care." The current research examines these practices, which we define as behaviors consumers voluntarily engage in to improve their well-being. At the individual level, taking care of ourselves predicts greater life satisfaction (Diener, Lucas, and Oishi 2002), prosocial behavior (Lyubomirsky, King, and Diener 2005), and improved relationships (Diener and Seligman 2002). At the organizational level, workplace wellness initiatives predict greater productivity, decreased absenteeism, and lower healthcare expenditures (Baicker, Cutler, and Song 2010; Spector 1997). Despite these tangible benefits, wellness initiatives are often underutilized (Global Wellness Institute 2016). Why?

The current research examines one potential reason: consumers might undervalue *their own* self-care relative to *others'* self-care. Time is a finite resource that requires making trade-offs among various activities. For example, consumers tend to prioritize their own work/productivity over pleasurable experiences (Keinan and Kivetz 2008; Kivetz and Keinan 2006). Time spent on massages, yoga, and therapy sessions may be seen as passive leisure (i.e., "a nonproductive use of time"; Veblen 1899/2007), which is generally aversive (Hsee, Yang, and Wang 2010). Self-care may also be considered selfish and unnecessary, making it difficult to justify. Specifically, consumers may feel undeserving of the "indulgence" of a bubble bath or meditation (cf. Cavanaugh 2014), and ultimately discount the value of their own self-care relative to others. Lastly, prior work on self-compassion demonstrates that consumers often extend greater kindness toward others than themselves during times of distress (Neff 2003). Taken together, self-care may be a specific domain where consumers as "actors" evaluate the same behavior differently than "observers" (Jones and Nisbett 1972).

We examine this possibility across six studies, featuring various domains and operationalizations of self-care's value. Study 1 assessed value via consumers' emotional tone when speaking about self-care. We scraped 10,000 "self-care" tweets from Twitter over a two-day period and ran them through the Linguistic Inquiry and Word Count (LIWC; Pennebaker et al. 2015) software. Our key predictor was a ratio between 2nd/3rd-person pronouns (other-referencing; observer perspective) and 1st-person pronouns (self-referencing; actor perspective). Greater other-referencing (vs. self-referencing) predicted greater positivity ($\beta = .59$, $p < .001$).

Study 2A (AsPredicted #50565) assessed value via time allocation. Specifically, online participants allocated 100 points across three categories (productivity, self-care, and leisure) for either themselves or another person. A 2 (Actor/Observer) $\times$ 3 (Activity) mixed analysis of variance revealed a significant main effect of Activity ($p < .001$), which was qualified by a significant interaction ($p = .015$). Relative to another person, consumers allocated more time toward their own productivity ($p = .033$), less time to their own self-care ($p = .003$), and an equal amount of time to leisure ($p = .813$). Ancillary analyses revealed that the three activities vary in their anticipated well-being benefits. Namely, productivity is seen as more meaningful than pleasurable ($p < .001$), leisure is more pleasurable than meaningful ($p < .001$), but self-care is equally meaningful and pleasurable ($p = .158$). Thus, self-care is not the same as leisure, as it has both "work" and "play" elements.

Study 2B assessed value via webinar choice. Undergraduates read about two classes being offered by the university—one geared toward self-care and one geared toward financial literacy. Participants selected a webinar for themselves (Actor) or one to recommend to other students (Observer). While financial literacy was preferred in both conditions, participants were less likely to choose self-care for themselves than other students (29.4% vs. 42.5%; $p = .033$).

Study 3 assessed value via self-reported importance. Undergraduates were invited to participate in a creative self-care activity (i.e., they completed an online coloring page; Actor) or to evaluate another student's creative self-care activity (i.e., they saw a completed coloring page from a 21-year-old named Alex; Observer). The key dependent variable was the extent to which they perceived this activity to be a valuable use of time and energy (i.e., valuable, necessary, important, beneficial, essential, and productive; $\alpha = .95$). As expected, participants perceived their own self-care to be less valuable than someone else's self-care ($p < .001$). There were no differences when Alex was male or female.

Study 4 (AsPredicted #49327) replicates our proposed perception asymmetry and offers preliminary evidence for the underlying mechanism. Online participants imagined that they (Actor) or someone else (a 36-year-old named Alex; Observer) received a flyer to participate in a free hot yoga class. They then completed the perceived value index used previously ($\alpha = .93$) and evaluated the extent to which they/Alex felt deserving of taking time to practice self-care (e.g., "I/Alex deserve(s) to take this time for self-care"; $\alpha = .80$). The results revealed a significant indirect effect: participants felt less deserving of self-care for themselves versus another person, which ultimately predicted lower value (Model 4, Hayes 2017; $\beta = .61$, 95% CI: .49, .71).

Study 5 (AsPredicted #60016) tests whether individual differences in self-compassion moderate the Actor/Observer asymmetry. Online participants completed two blocks of questions in a counterbalanced order. In one block, they imagined themselves (Actor) or another person (Observer) practicing self-care over the weekend (agnostic to behavioral domain). They then completed the perceived value index used previously ($\alpha = .94$). In another block, they completed the Self-Compassion Scale Short Form, which includes items like "When something painful happens, I try to take a balanced view of the situation" ($\alpha = .92$; Raes et al. 2011). Replicating Studies 3 and 4, participants perceived another person's self-care as having greater value than their own ($p < .001$). Importantly, this effect was qualified by the predicted interaction ($p = .012$) such that the asymmetry was attenuated at higher levels of self-compassion.

Across six studies, we demonstrate that consumers discount their own self-care relative to others' self-care. This perception asymmetry is driven by perceived deservingness and is attenuated at higher levels of self-compassion. Our work contributes to the time consumption literature by focusing on self-care, an understudied use that is conceptually and empirically distinct from work and leisure.

The Signaling Value of Leisure: How Information About Leisure Activities Affects Perceptions of Well-being and Professional Judgments

An increasing number of service providers use personal biographies, websites, and social media to vie for consumers' business. Often, service providers must decide whether to include additional personal information, such as information about their activities outside of work, in these settings. While previous literature indicates that disclosing one's leisure activities in professional settings might serve as a negative social signal (e.g., Bellezza et al. 2017), we propose that disclosing one's leisure activities can have positive implications in professional settings. We hypothesize that as an individual discloses increased participation in leisure activities, they are perceived as having higher eudaimonic well-being (e.g., meaning, fulfillment; Ryan and Deci 2001), which subsequently increase observers' perceptions of their professional standing, as well as their interest in hiring or working with the individual. We broadly refer to these outcomes as professional judgments. We also identify extrinsic motivation and activity type as important boundary conditions of our conceptual model.

In study 1, we aimed to test our proposed direct effect of leisure activities on professional judgments in a direct marketing context using Facebook advertisements. To do so, we created two advertisements for a service to match individuals with virtual interior designers. Both ads featured a designer named Christine (who purportedly worked for a virtual design company) and mentioned why Christine enjoys working as a virtual interior designer. The control ad featured no additional information, while the treatment ad mentioned that when Christine is not working, she enjoys hiking, cooking, and streaming concerts. As hypothesized, Facebook users were significantly more likely to click on the advertisement when Christine disclosed her leisure activities ($p<.001$).

While our first study provides practicable, real-world evidence that sharing leisure activities can be beneficial in professional settings, it is unable to offer support for our full conceptual model or rule out potential alternative explanations. Our next two studies address these issues. In study 2A, 375 Prolific participants completed a three-cell (leisure activities: zero, one, three) between-subjects study. Participants were asked to imagine that they were planning to purchase a house and wanted to work with a realtor. They then viewed information about a local realtor named Brian, including his biography and headshot. In the zero-activity condition, Brian did not mention any leisure activities in his biography, while in the remaining conditions, he disclosed one and three activities, respectively. Participants then rated their interest in hiring Brian, as well as their perceptions of his eudaimonic well-being. As predicted, participants were more interested in hiring Brian in the three-activity ($M=5.35$) condition compared to the zero-activity condition ($M=5.01$; $p=.012$) and marginally more interested compared to the one-activity condition ($M=5.10$; $p=.067$). Similarly, participants perceived Brian as having higher eudaimonic well-being in the three-activity condition ($M=5.45$) compared to either the zero-activity ($M=5.02$; $p=.002$) or one-activity ($M=4.99$; $p=.001$) conditions. The zero- and one-activity conditions did not differ across either variable. Eudaimonic well-being fully mediated the relationship between leisure activities and hiring interest. Of note, this study also measured and ruled out extraversion and likability as alternative mediators to eudaimonic well-being.

The goal of study 2B was to replicate study 2A in a context that was directly relevant to our participants. To do so, 206 undergraduate students were told that their school was considering hosting virtual writing workshops and were interested in their feedback on potential instructors. They read a description of a graduate student, Jamie, who was being considered for a position to instruct a writing workshop. Participants read information about Jamie's background that included either one or three leisure activities in which she participated (between-subjects). They then rated how interested they were in attending a workshop hosted by Jamie, as well as their perceptions of Jamie's eudaimonic well-being. As predicted, participants were significantly more interested in attending Jamie's workshop ($M_{\text{Three}}=4.89$ *vs.* $M_{\text{One}}=4.50$; $p=.026$) and had higher perceptions of her eudaimonic well-being ($M_{\text{Three}}=5.50$ *vs.* $M_{\text{One}}=5.03$; $p=.001$) in the three- versus one-activity condition. Again, eudaimonic well-being fully mediated the relationship between leisure activities and interest in attending Jamie's workshop.

Study 3 examined the role of extrinsic motivation. We predict that extrinsic motivation runs counter to eudaimonic well-being, and thus when leisure activities are solely extrinsically motivated, the positive downstream consequences of leisure activities will be attenuated. 457 TurkPrime participants participated in a 3-cell (leisure activities: zero, three, three with extrinsic motivation) experiment. They first read about a woman named Christine and were provided with non-focal background information about her. The zero and three activity conditions were similar to previous studies. In the extrinsic motivation condition, participants read that Christine only participates in the three leisure activities to look good to others. Participants then rated their professional judgments (e.g., workplace value, performance), and perceptions of her eudaimonic well-being. As in previous studies, when comparing the zero- and three-activity conditions, Christine received significantly higher ratings of professional judgments ($M_{\text{Three}}=5.73$ *vs.* $M_{\text{Zero}}=5.52$; $p=.037$) and eudaimonic

well-being (M_{Three}=5.55 *vs.* M_{Zero}=5.05; *p*=.001). However, this effect was attenuated when Christine participated in the activities for extrinsic reasons, and in fact, she was rated significantly lower on professional judgments ($M_{ThreeExtrin}$=4.87) and lower in eudaimonic well-being ($M_{ThreeExtrin}$=3.19) compared to both the zero- and three-activity conditions (all contrasts *p*<.001). The relationship between leisure activities and eudaimonic well-being was again mediated by eudaimonic well-being. This study also ruled out similarity and warmth as alternative mediators.

Our empirical package also includes experiments that differentiate the role of time spent on leisure from time spent on work, rule out status as an alternative mechanism, and identify the moderating role of activity type. With respect the latter, using both an experiment and Twitter data, we find that activities perceived as impeding eudaimonic well-being (e.g., using social media), do not offer professional benefits.

In sum, the present research reveals the ironic effect that highlighting how one spends time outside work can increase one's professional standing. We further demonstrate that well-being can be a meaningful tool utilized in professional relationships. We believe that this research offers novel theoretical insights related to self-care, leisure, time, and well-being while also providing useful advice for marketing practitioners.

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Do Parents Know Best?: Parental Identities and Motivations in Driving Decisions Related to their Children's Well-being

Chairs: Meng-Hsien (Jenny) Lin, California State University, Monterey Bay, USA
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Paper #1: The Role of Parental Style in Sharenting

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Russell Laczniak, Iowa State University, USA
Beatrice Pereira, Iowa State University, USA

Paper #2: Social Media Tools to Empower Mothers for their Children's Educational Growth

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Paper #3: Parental Spending on Youth Sports: Motivations and Expected Return on Investment

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Paper #4: Relationship between Household TV Viewing and Children's BMI: Findings from India Human Development Survey

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SESSION OVERVIEW

All parents want the best for their children. But how "best" is defined is often based on one's own experiences and metacognitions (Li, Haws and Griskevicius 2019; Pechmann, Catlin and Zheng 2020). The question is, do parents really know best? In our ever-changing world as new forms of technology emerge, meaning of privacy is redefined, and while higher education has become more accessible, college tuition continues to increase, and COVID-19 has led to increased screen time for all. Parents face these changes without clear guidance. It becomes imperative to understand how parents can make better (not best) decisions for their children's wellbeing.

Family decision making has been studied in various consumption contexts, including viewing of media and TV ads (Mikeska, Harrison and Carlson 2017; Gentile et al., 2012), shaping healthy eating habits (Grier et al., 2007), to financial planning for children's education investments (Ermisch and Francesconi 2001; Kornrich 2016). Our session includes four papers that examine these consumption practices, particularly taking into consideration how the changing world (external) influences critical family decisions (internal). We learn from four different but similar contexts, about the impact of sharenting, empowering role of social media, collective TV viewing and investment in youth sports.

The four papers examine varying *parental decisions* on sharenting (paper #1), investing in educational spending (paper #2) or youth sports (paper #3) and TV viewing (paper #4). These decisions are relevant not only to their children's growth and wellbeing, but paren-tal decisions often reflect *parental identity*. We find that children's overall well-being is dependent of parental styles (paper #1), empowerment levels of the mother (paper #2), parents' own aspirations and identity as an athlete (paper #3) and parents' own consumption practices (paper #4).

In three of these papers, we explore how *parental use of media* may directly or indirectly have long-lasting effect on their children's wellbeing. Lee and Laczniak examine how different parenting styles lead to different sharenting behavior (content of sharenting, frequency, motives of sharenting, resolving conflicts of information privacy between parents and children). Next, Vijayalakshmi and Lin examine how mothers use social media as a source of information as well as social connections that will empower their decisions related to their children's education planning and investment. While both papers explore the motives of parental use of social media and its impact on their children, the former examines online privacy and frictions, while the latter focuses on the role of social media use in empowering mothers. Vijayalakshmi, Das and Divya examine how individual and collective TV viewing in Indian households may impact children's BMI.

The parents are the key decision maker in investments and resource allocation, which is critical in *family financial planning* and *decision making*. Vijayalakshmi and Lin focus on the role of mothers and how the sense of empowerment may impact their influence on educational spending for their children; while Posteher and Hansom identify factors and drivers of parents in supporting investing money in youth sports for their children.

The Role of Parental Style in Sharenting

EXTENDED ABSTRACT

Sharenting refers to parents' habitual use of social media to share information (e.g., news, images) about their children with family and friends, acquaintances, professional networks, and the world at large (Collins 2017). Previous research has studied this relatively new phenomenon from different perspectives: 1) From the information security perspective, researchers tried to promote parents' awareness of related privacy issues, from problematic data practices within firms to digital kidnapping and child grooming caused by external hikers and evil people (Jones 2013). 2) From the consumer's perspective, Fox and Hoy (2019) studied mothers' vulnerability and how it may translate into increased children's consumer vulnerability in sharenting. 3) From the legislation perspective, researchers discussed the limitations of current legislation on protecting children's online privacy (Bessant 2018; Steinberg 2016).

Parental style, a theoretical framework which classifies parents by how they differentially raise and socialize their children (Baumrind 1980), has been studied within the consumer domain (Carlson and Grossbart 1988; Carlson, Laczniak and Walsh 2001). A wide range of outcome variables have been attributed to parental style, including children's perception on mothers' views of television (Carlson, Laczniak and Walsh 2001), children violent videogame play

levels (Walker et al. 2016), cybervictimization of youth (Dehue et al. 2012), children's use of the Internet (Valcke et al. 2010), and teen self-concept (McClun and Merrell 1998).

However, it is unclear how parental style impact parents' sharenting practices and its consequences on children. Specifically, we are interested whether types of parental style can help alleviate the potential negative consequences of sharenting on children. Utilizing parental style to frame such an investigation may prove to be useful. Indeed, a meta-analysis on parental style and the consumer socialization of children found that parental style, especially authoritative parental style, can lead children to have positive interactions with the marketplace, particularly among older children (Mikeska et al. 2016). Therefore, we seek to understand the role of parental style in sharenting, especially its impact on 1) parents' sharenting practices (e.g., content, form, frequency); 2) negative outcomes on children (e.g., privacy risk, self-identity confusion, distress in parent-children relationship).

Our work will contribute to the literature of consumer socialization research in the advent of sharenting, a new phenomenon within the social media domain. By identifying the interplay of different parent styles on children's perceptions of sharenting behavior, our findings will offer helpful guidance for parents to reduce potential negative outcomes on their children. In addition, as sharenting has dramatically increased due to the social isolation in the COVID-19 pandemic, this paper will contribute to a better understanding on which subsets of children are at higher risks of perceiving that their individuality and privacy are violated, and therefore more likely to experience high levels of conflicts with their parents.

We propose that parental style plays a moderating role in the relationship among motives of sharenting, parents' sharenting practices and outcomes on children.

Parents' motives of sharenting. We identified four main reasons for sharenting: 1) seeking parental advice (Verswijvel et al. 2019); 2) maintaining social connections for both parents themselves and children (Duggan et al. 2015); 3) archiving information about children's growth (Blum-Ross and Livingstone 2017); 4) impression management (Kumar and Schoenebeck 2015; Davidson-Wall 2018).

Parents' sharenting practices. Our focus on sharenting practices includes but is not limited to the following aspects: parents' choice of content (e.g., positive or negative information, with or without Personal Identifiable Information), form (e.g., text, image, video), frequency, awareness of privacy risk, willingness to listen to the children.

Potential negative impact on children. Prior work suggests that three negative outcomes of sharenting may affect children: 1) privacy loss/privacy crime (Siiback and Tracks 2019); 2) confusion or embarrassment on self-identity/self-image/digital presence (Choi and Lewallen 2018); 3) distress in parent-children relationship (Steinberg 2016).

Parental Style. Based on two dimensions of warmth and restrictiveness (Maccoby and Martin 1983; Carlson, Laczniak and Walsh 2001), there are four types of parental style: 1) Authoritative parents, are high on both warmth and restrictiveness, and as a result are likely to balance children's rights and responsibilities. Authoritatives encourage self-expression from offspring and expect children to act maturely and in accordance with family rules but also allow a certain degree of autonomy. 2) Neglecting parents, who are low on both warmth and restrictiveness, offer little encouragement or guidance for children's development. As a result, communication between neglecting parents and their children is generally strained and minimized. 3) Authoritarian parents, who are low in warmth, but high in restrictiveness, try to control children, by endorsing adult

supremacy, and discouraging verbal interactions with their children. 4) Indulgent parents, who are high in warmth, but low in restrictiveness, tend to be lenient, accepting, affirmative, and nonpunitive in dealings with children. Indulgents give children adult rights without concomitant responsibilities and communicate openly with them.

Based on the above, we propose the following Hypothesis:

Hypothesis 1:   *Compared to authoritarian and neglecting parents, authoritative and indulgent parents are more likely to be concerned about potential privacy risk of sharenting, to listen to children's feelings and feedback, and to adopt their sharenting practices to alleviate negative outcomes on children.*

Hypothesis 2:   *Children of authoritative parents will be least likely of all children to experience negative outcomes of sharenting*

Hypothesis 3:   *Neglecting parents are least likely of all parents to engage in sharenting.*

Hypothesis 4:   *Compared to other parents, authoritarians are more likely to focus on their own needs while ignoring children's feelings and feedback when engaging in sharenting.*

Hypothesis 5:   *Children of Authoritarians will be most likely of all children to experience negative outcomes of sharenting.*

Data will be collected from both parents and children (10 years or older) via self-administered questionnaires through online paid panels. Children 10 years old or older are chosen because of their ability to respond to items presented in an online survey format. Parents will provide information concerning their motives of sharenting, parental style, sharenting practices, while children will report the impacts of sharenting on their relationship with parents and overall well-being.

Social Media Tools to Empower Mothers for their Children's Educational Growth

EXTENDED ABSTRACT

Despite the significant impact that women may have on future generations, a mother's empowerment is not as well-studied as other demographic variables (e.g., income, education), especially in children's education (Roushdy, 2004). Empowerment theory emerged in the social sciences as a "model for responses to problems that disproportionately impact those with less power and fewer resources" (Christens *et al.,* 2011; p.172). Overall, this ideology seeks to create a more inclusive society, especially by paying particular attention to those who are often marginalized; here, mothers. In this paper, we focus on understanding how a psychologically empowered mother may positively impact her child's educational needs. In particular, we consider mothers' social media use as an antecedent of empowerment. We examine the following research questions: (a) how does a mother's social media use influence her children's educational related outcomes? And (b) how does psychological empowerment explain this relationship?

Through social media, women have been able to build their self-confidence and gain access to information, thus helping them make better-informed decisions. Marketing researchers have found that such processes are suggested to result in feelings of empowerment for the consumer. Others have found that empowered consumers demonstrate the agency to be more involved with firm and product decisions (Hanson and Yuan, 2018; Fuchs *et al.,*2010) and tend to spend more. Similarly, research in organizational settings shows that psychological empowerment leads to higher job satisfaction, organizational commitment, job performance, lower turnover intentions, and employee strain (Seibert *et al.,* 2011). At the individual level, empowerment improves subjective well-being, self-esteem, mental health, and reduces risky behaviors (Christens and Lin, 2014).

Therefore, we draw on psychological empowerment theory (Zimmerman, 2000), which offers a comprehensive measure to capture women's status and sense of power. Prior research in marketing has predominantly focused on only one dimension of empowerment— intrapersonal, which deals with an individual's competence, self-efficacy, and control (Zimmerman, 2000). However, empowerment has another significant dimension—interactional empowerment, which focuses on collective action and interpersonal relationships (Zimmerman, 2000). Yet, we have little to no idea about how interactional empowerment affects consumption. Key constructs studied in this paper are active/passive social media use, dimensions of psychological empowerment (intrapersonal and interactional), and educational savings and expenditures. We focused on educational expenditure in all our studies as it is suggested to be an indicator of educational outcomes (Kingdon, 2005), educational attainment, and skill level (Saha, 2013) in children.

In three studies conducted with mothers of adolescent children, we first establish the relationship between social media use and educational decisions via a behavioral experiment (Study 1). A between-subjects ($n = 114$) design with two conditions, passive ($n = 58$) vs. active social media use was constructed. We recruited participants in the US through the Qualtrics panel, who identified themselves as mothers and had at least one child between ages 11 and 17. We focused on this age range because critical educational expenditures are likely to be considered when the child is nearing college. We primed active (vs. passive) condition by asking participants to read educational articles on a FaceBook page and engage by writing status messages and sharing with friends (vs. only read). The results suggest that parents who are more active on social media are likely to invest more in their children's education ($M_{active} = 3.60$ vs. $M_{passive} = 2.98$, $F (1, 103) = 3.61$, $p = .06$) and education-related items ($M_{active} = 3.09$ vs. $M_{passive} = 2.69$, $F (1, 103) = 4.03$, $p = .04$). But why do active users spend more on their children's education? We examine the role of psychological empowerment to explain the same.

In Study 2 we surveyed mothers ($n = 182$) using a Qualtrics panel to develop the relationship between social media use, psychological empowerment, and educational spending. In Study 3 ($n = 126$) using an M-Turk panel we further measured alternative education spending-related behaviors such as saving for college or donating to school. The results of both Studies 2 (presented here) and 3 suggest that active use of social media increases perceived competence (β (CI) = .24 [.03, .44]), leading to increased investment in children's education (β (CI) = .42 [.04, .80]). Passive use leads to higher control (β (CI) = .18 [.03, .34]), collective action (β (CI) = .19 [.05, .33]) and interpersonal relationships (β (CI) = .19 [.07, .32]). However, none of the factors arising from passive use leads to increased investment in children's education. What is even more significant is that how empowerment takes form, whether intrapersonal and interactional, could lead to different behavioral spending responses. Intrapersonal empowerment, influenced by recognition needs (β (CI) = .23 [.04, .42]), appears to increase spending behavior in individuals. Interactional empowerment, influenced by cognitive needs (β (CI) = .22 [.03, .41]), appears to increase saving behavior in individuals (β (CI) = .74 [.34, 1.13]). The results from both the studies seem to highlight a more significant impact of passive use, rather than active use, on psychological empowerment.

We show that women's empowerment is critical to children's educational investments, apart from health investments. By extending the theory of psychological empowerment to examine educational expenditures, we show that psychological empowerment has a critical role in other contexts than previously studied— community welfare (Zimmerman and Rappaport, 1988) and organizational commitment (Seibert *et al.,* 2011). Through this finding, we argue that psychological empowerment is (a) a necessary motivational (not just as an output variable) variable, and (b) should be treated as a multidimensional construct (not just on its intrapersonal component). Second, we also highlight the need to focus on social media use rather than Internet access to better understand consumer behavior. Finally, we shine a light on considering mothers and their educational expenditure as a critical part of consumption and investment decisions. Parents consider education as a long-term investment and an equalizer, which will help prosper and wellbeing of future generations (Hill and Lai, 2016).

Parental Spending on Youth Sports: Motivations and Expected Return on Investment

EXTENDED ABSTRACT

Youth sports in the United States represent a massive industry with nearly 45 million athletes; nationwide, 75% of families with children have at least one child participating in athletics (Merkel, 2013). From 2010 to 2017, the youth sports industry grew by 55%, and it currently represents a 19 billion-dollar market (Bjork & Hoynes, 2021). Projections show that the market could reach a remarkable 77.6 billion dollars by 2026 (Research & Markets, 2019). This study explores the motivations that parents have for investing in youth sports.

Research has highlighted several positive outcomes of youth sports, particularly with regard to social and physical benefits for the child participants (e.g., Marsh & Kleitman, 2003; Melnick, Miller, Sabo, Farrell, & Barnes, 2001). In conjunction with studies on the experiences of young athletes, it is integral that we consider the role of parents in youth sports, as parents not only shape their child's choice of extracurricular activities, but also provide tangible and intangible support. Children influence the consumption activities of families (e.g., Palan & Wilkes, 1997), yet we know relatively little about the ways in which family values are shaped by youth sports consumption (Epp, Price, & Kozinets, 2005).

The financial burden for parents of children participating in youth sports can be immense, often constraining the family budget (Bean et al., 2014). Many parents justify these sacrifices by planning on their child's athletic excellence as a means for paying for their college education. However, in reality, the National Collegiate Athletic Association (NCAA) reports that less than 4% of high school athletes will play for a Division I or II program (Merkel, 2013), with far fewer receiving scholarships that will alleviate the cost of tuition. Ironically, the total cost of the investment that parents make in memberships, equipment, private training, camps, and travel expenses during middle and high school can greatly exceed the value of the potential college scholarship (Hyman, 2012).

The 2019 Harris Poll conducted for financial firm TD Ameritrade offers valuable insight into parent consumption behavior with regard to youth sports. Despite the scarcity of full-ride scholarships (covering the entire cost of college), results indicated that one in 10 sports parents anticipate that their child's scholarship will be a full ride; moreover, one-third of parents expressed a desire for their child to become a professional athlete or Olympian (Harris Poll, 2019). To pay for youth sports expenses, parents reported cutting back on entertainment, taking fewer vacations, and even taking on second jobs – all in hope of winning the lottery of a full-ride scholarship for their child. Yet, nearly 75% of American sports parents report that youth sports have adversely affected their savings and investments for retirement (Global Sport Matters, 2019). Importantly, The Harris Poll also found that one in five sports parents devote over 20 hours per week to their child's sport, indicating that financial spending on youth sport is accompanied by substantial time investment.

Given these considerable costs, our primary research focus was to identify underlying motivations for parents investing in youth sports for their children. Our overarching research question asked: what are parents' end goals for financially supporting their child's participation in athletics? We hypothesized that parents' commitment to sport would be positively correlated with dollars invested in youth sports. Second, we considered the role of parental identity in consumption behavior. For families with one or more parents who had played sport at the collegiate level, we hypothesized that sports lineage would impact the parents' commitment to their child's athletic endeavors, as well as influence how much money they would spend on youth sports.

To investigate these questions, we conducted a survey for quantitative analysis. We recruited participants through Amazon Mechanical Turk (MTurk). A total of 393 parents of athletes completed a survey reporting their motivations for their child participating in sport, their commitment to their child's participation in sport, and their family lineage of sport.

Our analysis revealed three primary motives that parents have for their children when they invest in youth sports: positive health and wellbeing, life lessons, and a college scholarship. It appears many parents believe that investing in youth sports comes with a return-on-investment that will pay out in the form of a college scholarship. We measured parent sport commitment using an adaptation of the Sport Commitment Model (Scanlan, Carpenter, Schmidt, Simons, & Keeler, 1993), a 19-item questionnaire which examines sport commitment, sport enjoyment, personal investments, social constraints, and involvement opportunities. Results indicated a positive relationship between four aspects of the model and dollars spent on youth sport. Therefore, parental commitment to their child's sport influences the amount of their financial investment.

Finally, we found support that parental decisions regarding youth sports are consistent with consumer behavior research, such that personal values and attitudes are heavily intertwined with consumption (e.g., Kahle et al., 2001; Gillespie, Leffler, & Lerner, 2002). Specifically, in families with at least one parent who is a former collegiate athlete, parents reported higher levels of sport commitment and spent nearly twice as much on youth sports as families without this lineage.

With the onset of COVID-19, youth sports programs faced sudden restrictions and closures; parents were forced to consider the ways in which youth sports are embedded within family priorities, patterns, and spending behaviors. The pandemic did not prevent parents who can afford the pay-to-play model from continuing to invest in their children's athletic careers. As just one example, a California family temporarily moved to Oklahoma so their daughter could continue participating in softball (Butler, 2020). However, the pandemic has further exacerbated financial disparities in youth sport (O'Neal, 2020). It can be difficult for parents who are heavily identified with their child's sporting activities, such as those looking for a return-on-investment, to process that they can no longer make the financial sacrifices they have in the past (Sanderson & Brown, 2020). Taken together, these findings have important implications for parent-child interactions regarding the value of investing in sport, particularly in the aftermath of the pandemic.

Relationship between Household TV Viewing and Children's BMI: Findings from India Human Development Survey

EXTENDED ABSTRACT

With the COVID-19 pandemic, one thing that has seen a significant rise across the world is the rise of adults and children's screen time. Researchers have captured the influence of the introduction of mass media (e.g., TV) in various south Asian countries. For instance, TV has been influential in getting women to adopt better health practices (Tidwell et al., 2019). Similarly, TV has helped in creating political and social awareness in the viewers. At the same time, TV has brought about lifestyle changes in the viewers. Several studies have reported that children's TV viewing significantly increases their Body Mass Index (BMI) (Davison, Francis, & Birch, 2005). Even though TV viewing alone cannot increase BMI, it is suggested to have a significant impact in increasing the time spent being sedentary which in turn leads to increased BMI (indicator of obesity/overweight conditions) (LeBlanc et al., 2015). Sedentary behaviour is associated with poor health outcomes like obesity in children and youth (LeBlanc et al., 2015). Obesity, in turn, increases social risks like isolation or chances of being bullied and could lead to lifelong health related concerns such as hypertension and Type 2 diabetes (Katzmarzyk et al., 2015; Center for Diseases Control and Prevention, 2017). Further, researchers have also noted that parents have a significant impact on children's TV viewing habits (Valkenburg et al., 1999), hence BMI. Consequently, academics, policymakers and doctors have repeatedly focused on advising parents to reduce their children's screen time consumption for a healthy life (American Academy of Paediatrics, 2016).

Most of these studies have focused on higher (vs. lower) per-capita income countries as the obesity and overweight rates have been higher (vs. lower) in such countries. However, the rates of obesity and over-weight children are increasing in India (Little et al., 2016; Gulati 2003). While several reasons for increasing obesity rates in India have been speculated and investigated, the influence of TV viewing has not yet been considered.

Therefore, the current research examines (a) whether TV viewing, after controlling for other factors, is a significant predictor of BMI and (b) the role of adults in influencing children's BMI in an Indian context. Furthermore, we understand how these results might change for different income and caste groups. The data for this study was obtained from the India Human Development Survey (IHDS). IHDS comprises a nationally representative sample of 41,554 Indian households from 1503 villages and 971 urban neighbourhoods in India. Such a large-scale analysis of TV's impact on children's BMI has not been conducted before. The following variables were measured at the individual level in the survey — child's anthropometric measures (used to construct BMI), child's gender, TV viewing duration and other variables for robustness checks (viz., distance to school and time spent in non-sedentary activities). The variables measured at the household level include total household income,

caste and highest education of an adult within the household. Using the unique identifier associated with each household, we were able to combine both the individual and household level data variables.

We make three significant contributions. One, we find that higher income and upper caste children view more television and have higher BMI rates. This result is a stark departure from previous findings that higher TV viewing and higher BMI rates are traditionally seen in lower income households (Lee, 2009; LeBlanc et al., 2015). The results suggest that there is a U-shaped relationship between income groups and children's TV viewing duration. While the highest income family children watch the most amount of TV, the least amount of TV is viewed by children of the middle-income group families (there were no differences between income groups 3 and 4). Next, we find that children in the highest caste group (Brahmins) spent significantly more time watching TV as compared to the three other lower caste groups- other backward caste ($M = 2.21$ vs. 2.14, t (27981) = 3.00, $p < .001$), scheduled caste ($M = 2.21$ vs. 2.10, t (15877) = 4.84, $p < .001$) and scheduled tribe ($M = 2.21$ vs. 2.07, t (7444) = 4.79, $p < .001$)

Second, our results show that TV viewing by adults (vs. children) in the household has a far greater influence on children's BMI. This was true for all the age groups. More interestingly, we find that for children in the age groups of 8-12 ($\beta_{5.1} = .14$, $p < .05$) and 13-15 ($\beta_{5.1} = .17$, $p < .05$), adults' TV viewing has a significant impact on children's' BMI. In fact, the impact of TV viewing on BMI continues to be significant even after controlling for other sedentary behaviours. Further, there was significant effect of income (across all age groups), caste (for 8-12 and 13-15 age groups), household school level education (for 5-7 and 13-15 age groups) and household college education (for 13-15 age group).

Three, we find that children between the ages of eight and fifteen (vs. five to eight) are most vulnerable to the influence of TV (13-15: $\beta_1 = .10$, $p < .01$). For the other age groups, there was no significant relationship between children's TV viewing duration and their BMI. Further, control factors such as income, caste (higher) and parents' education had a positive influence on children's BMI.

There are several likely reasons due to which adults' TV viewing could influence children's BMI. It is likely that children are engaging in co-viewing with them and hence the sedentary activity is increasing their BMI levels. Moreover, children might be more exposed to food ads and also more likely to consume snacks during co-viewing. Finally, adults spending more time watching TV would also mean less time for other activities including interactions and engagement with the children on health-related issues. Future research should confirm these speculations.

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Virtuous or Vicious? New Insights Into Moral Processes in the Marketplace

Chairs/Discussants: Anika Stuppy, Tilburg University, Netherlands
Femke van Horen, Vrije University, Netherlands

Paper #1: When and Why Does Non-Moral Self-Control Signal Moral Character? Willpower as a Moral Ability
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Paper #2: Thou Shall Not Steal: When Do Copycats Trigger Moral Concern?
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Paper #3: Consumer Aversion Toward Company Waste: An Environmental Harm-Based Moral Perspective
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Paper #4: Can Voting Reduce Conspiracy Beliefs? Evidence from Two High-Profile U.S. Elections
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SESSION OVERVIEW

Understanding the consequences and antecedents of morality-driven judgment and choice is an important goal for consumer research. Moral norms serve, however, not only as guides for decision-making and behavior, but also as the basis for evaluating our own and others' actions. This session showcases research that provides new insights into how consumers form moral judgments in four important marketplace contexts. Questions addressed in this session include how consumers form moral judgements about i) other consumers ii) their own behavior towards companies iii) the behavior of companies towards society, and iiii) public policy makers.

First, Gai and Bhattacharjee explore moral judgements in consumer dyads. People infer other's moral character based on how much self-control they exert. Traditionally, exerting willpower is associated with moral "goodness" and not exerting willpower with moral "badness". Yet, the authors show an asymmetry in inferences of moral character from self-control. That is, self-control successes are more morally diagnostic than failures. Moral goodness thus requires *both* good intentions and the ability to act on them.

Second, Stuppy and colleagues investigate when consumers judge their behavior towards companies as immoral. A phenomenon that has received scarce attention compared to the reverse relationship: companies behaving immorally towards consumers. The authors investigate this process in the setting of brand imitation. Their results show that consumers feel guilty about buying imitations when they feel kinship towards original brands, when original brands have invested heavily into their product, or are relatively small and vulnerable.

Third, Xu and Bolton uncover how consumers form moral judgements about companies that engage in wasteful manufacturing processes. This work distinguishes two prevalent forms of wastefulness—excess resource-use (i.e., inefficient production)—and excess resource-disposal (i.e., byproducts/residuals). Interestingly, consumers judge the wasteful use of resources (vs. equivalent disposal-based waste) as less harmful and thus less immoral. Interventions that make

environmental harm or resource scarcity salient can sensitize consumers to the immoral nature of wasteful production.

Finally, Kim and colleagues examine how consumers form moral judgements about policy makers. More and more consumers hold "conspiracy beliefs" and are thus convinced that politicians/policy makers pursue malicious intent. The authors track the development of such beliefs during two elections. Importantly, conspiracy beliefs decreased (vs. increased) among consumers who supported winning (vs. loosing) candidates. This pattern suggests that consumers' perceived sense of personal control plays a pivotal role in forming moral judgments.

When asked "What does the world need right now?" many people might respond "morality". Indeed, our society needs answers to global moral crises such as rampant environmental destruction, dwindling civic engagement, and growing racism. This session serves to enhance the field's understanding of how moral judgements are formed to provide answers to these pressing issues. For instance, what leads consumers to make "good" choices in the marketplace (e.g., moral products)? Which factors might spur "good" behaviors (e.g., voting) and diminish dangerous societal developments (e.g., conspiracy beliefs)? We expect this session to encourage a broad discussion of how consumers' moral compass can be (re)calibrated to make the world a better place.

When and Why Does Non-Moral Self-Control Signal Moral Character? Willpower as a Moral Ability

EXTENDED ABSTRACT

Self-control refers to the ability to choose options with greater long-term benefits over those that are immediately tempting but costlier in the long term (Inzlicht et al., 2014). While self-control is deemed morally relevant when it affects group welfare (Mooijman et al. 2017), open questions remain about when *personal* self-control dilemmas with no direct social consequences (i.e., those typically considered "non-moral") are ascribed moral relevance. Past research offers two competing Hypothesis. One is the *moral-neutrality hypothesis*, which predicts that self-control and moral character are largely unrelated and judged independently (Blasi, 2005). The other is the *master-virtue hypothesis*, whereby willpower is essential to moral character (Baumeister & Exline, 2000). This account predicts that self-control success is viewed as evidence of moral goodness and failure as evidence of moral badness.

We propose a third possibility, the *moral-ability hypothesis,* whereby self-control is thought to reflect the ability to successfully enact good intentions. Prior research finds that moral badness is defined by evil desires, independent of ability (Inbar, Pizarro, & Cushman, 2012). In contrast, we suggest that moral goodness require *both* good intentions and the ability to act on them (cf. Stellar & Willer, 2018). Therefore, we expect that while self-control failure will not be thought to imply bad intentions (and thus bad moral character), success will be thought to demonstrate the ability to realize good intentions (and thus signal moral goodness). Accordingly, we predict an asymmetry in inferences of moral character from personal self-control, such that successes are regarded as more morally diagnostic than failures. Four main experiments (and dozens of replications) corroborate this asymmetry and support the moral-ability hypothesis.

Experiment 1 (preregistered at bit.ly/3mT2254) provided initial evidence of this asymmetry: self-control success increased perceptions of moral goodness, but failure did not lead to inferences of moral badness. Participants (N = 261) were randomly assigned to read vignettes in which target individuals succeeded or failed at self-control in personal consumption choices across four different domains (health, procrastination, budget, patience). Failure had no direct social consequences, though success sometimes involved a small social cost (e.g., turning down a friend's invitation in order to save money). Participants then rated the targets' moral character on a 9-point scale (-4 = mainly a bad person, 0 = not sure, +4 = mainly a good person). Supporting the asymmetry proposed by the moral-ability hypothesis, self-control success increased perceptions of moral goodness relative to failure ($M_{success}$ = 1.93, 95%CI = [1.71, 2.15] vs. $M_{failure}$ = 1.31 [1.09, 1.53], repeated ANOVA $F(1, 259)$ = 15.25, $p < .001$), but moral character ratings significantly exceeded the zero midpoint in both conditions.

Experiments 2 and 3 demonstrated that moral character inferences were enhanced by evidence of willpower (beyond the choice outcomes themselves) and ruled out various alternative explanations. Specifically, Experiment 2 (N = 156; preregistered at bit.ly/3goqt5F) showed that compared to the moral signal value of exerting willpower while experiencing self-control conflict ($M_{success}$ = 2.38 [2.05, 2.71] vs. $M_{failure}$ = 1.28 [0.94, 1.62], $t(153)$ = 4.60, $p < .001$), choosing a far-sighted "should" option without experiencing conflict (i.e., due to preference alone) was less diagnostic ($M_{preferences}$ = 1.83 [1.47, 2.18] vs. $M_{failure}$ = 1.28 [0.94, 1.62], $t(153)$ = 2.24, $p = .026$). Experiment 3 found that the magnitude of the asymmetry was moderated by individual differences in belief in free will, or the belief that willpower truly exists and determines choices (Paulhus & Carey, 2011). Moral-character evaluations increased with greater belief in free will in the self-control success condition ($b = 0.34$, $SE = 0.06$, $t(422)$ = 5.85, $p < .001$), but did not vary with belief in free will in the failure condition ($b = 0.06$, $SE = 0.06$, $t(422)$ = 1.02, $p = .310$). We also found no evidence that these effects were moderated by participants' belief in Protestant ethics, perceptions of their own self-control capacity, or political ideology (ps > .15), suggesting that these factors cannot explain our findings.

Experiment 4 generalized these effects to a realistic evaluative setting and ruled out the possibility of judgmental halo effects (Nisbett & Wilson, 1977). Participants (N = 201) were randomly assigned to view social-media profiles of anonymous individuals who reported current "obsessions" associated with success or failure in resisting temptations (e.g., saving up despite the temptation to splurge on hobbies). Our dependent measure was modeled on real-world social media apps that allow people in individuals' networks to attach personality labels to them: participants were asked to guess the top 3 labels used to describe the target individuals from a set of moral, immoral, warm, and cold traits, with monetary incentives for accuracy. Supporting the predicted asymmetry, participants in the self-control success condition selected more moral traits than those in the failure condition ($F(1, 199)$ = 89.73, $p < .001$), but moral traits were selected more than immoral traits across both conditions ($F(1, 199)$ = 342.74, $p < .001$). Importantly, self-control success also *decreased* the selection of warm traits relative to failure ($F(1,199)$ = 32.90, $p < .001$), ruling out halo effects and indicating that this inferential asymmetry is specific to moral character.

Navigating the social world entails constantly evaluating the trustworthiness and moral character of strangers. The current research suggests that people readily infer moral character from entirely personal consumption choices during apparently "non-moral" self-control conflicts, but see success as far more morally diagnostic

than failure. Beyond the well-documented centrality of intentions to moral evaluations, our findings suggest that morality also depends on competence. Good intentions may not translate to good outcomes without "moral ability."

Thou Shall Not Steal: When Do Copycats Trigger Moral Concern?

EXTENDED ABSTRACT

Copycats imitate the trade dress of leading brands to take advantage of the latter's brand equity. According to past work, consumers hold ambivalent attitudes about copycats. On the one hand, copycats are liked as, due to their visual similarity to the leader brand, they feel like familiar and high-quality products (Warlop and Alba 2004). On the other hand, consumers dislike copycats when they feel unduly persuaded into buying copycats through similarity tactics (Van Horen and Pieters 2012).

Despite these insights, former research has neglected the possibility that consumers reject copycats due to moral feelings towards the imitated brand. Past work on morality has studied moral concerns related to the behavior of brands towards consumers/workers (e.g., unfair pricing, sweatshop labor; Campbell and Winterich 2018). The reverse relation – moral concerns of consumers towards brands – and the circumstances under which such concerns enter the decision-making process, has received scant attention. Unlike counterfeits, which are illegal and unequivocally immoral forms of imitation (Zaichkowsky 2006), copycats take unfair advantage of the reputation and work of original brands within legal boundaries. Moral concerns towards the original brand might thus be situation-dependent. By examining situational drivers of copycat morality, our work unpacks an underexplored moral process affecting copycat evaluation.

To decode when copycats trigger moral concern, we draw on the theory of moral foundations (Haidt 2007). People hold culturally shaped core moral values that, when being violated, activate moral concern (Hauser 2006). In the present work, we focus on three moral foundations relating to the setting of brand imitation: reciprocity, harm/care and ingroup loyalty (Graham et al. 2011). We posit that when buying copycats violates these moral foundations, consumers feel as they are overstepping moral boundaries. Six preregistered experiments test circumstances that trigger consumers' reciprocity, harm/care, and ingroup loyalty principles and examine effects on moral concern and copycat preference.

According to the reciprocity principle, consumers should consider it wrong to buy copycats when original firms have invested heavily into their product. That is, because increasing the original firms' investment (e.g., in terms of money/time) should accentuate perceptions of unfairly taking advantage (Adams 1963). To test this idea, study 1a created pairs of original fast-moving-consumer-goods that were low (e.g., basic shampoo) versus high (e.g., innovative shampoo) in terms of firm investment. We presented each original product next to its copycat and participants indicated their preference (1 = original to 7 = copycat). As predicted, copycat preference was lower for high-investment (vs. low-investment) products ($t(150)$ = 3.04, $p = .003$). Study 1b replicated Study 1a. In addition, as copycats are typically morally ambiguous products, whereas counterfeits are uniformly considered as morally bad, we examined whether imitation type would moderate the basic effect. As predicted, we detect an interaction between firm investment and imitation type ($F(1, 392)$ = 3.584, $p = .059$). Replicating Study 1a, copycats were less preferred for high-investment (vs. low-investment) products ($F(1, 392)$ = 5.106, $p = .024$). Among counterfeits, investment had no effect on copycat preference ($F < .1$, $p = .663$). Study 1c tested our pre-

diction in a new product category (apparel) and provides process evidence. Besides measuring copycat preference, we also measured moral concern as a mediator (e.g., Buying the copycat would make me feel guilty). Study 1c held quality perceptions constant to rule out such alternative account. Copycat preference was lower for high-investment (vs. low-investment) products (c = -.39, 95% CI [-.41, -.39]). Moral concern fully explained this effect (a*b = -.33, 95% CI [-.47, -.21]).

Next, we examined how activating the moral principle of harm/care shapes copycat preference. People feel morally obliged to protect the weak and vulnerable from harm (Alicke et al. 2008). Therefore, copycats should feel more wrong when they imitate vulnerable/small original firms. Study 2a thus manipulated whether an original lemonade brand was manufactured by a large or small firm (between-subjects). Next, we measured preference for a copycat version of this lemonade and moral concern towards the original as our mediator. As expected, copycat preference was lower when the original firm was small (vs. large; c = .76, 95% CI [-1.03, -.49]). Again, moral concern fully explained this effect (a*b = .63, 95 % CI [-.43, .83]). Study 2b adopted a moderation design to generate additional process evidence. We suggest that consumers feel it is immoral to buy copycats when doing so harms a smaller, vulnerable company. Therefore, the effect of firm size on copycat preference should be stronger among consumers who focus on an action's outcomes (i.e., consequentialists), as compared to an action's moral worth (deontologists), when making moral judgements. Study 2b used the same design as Study 2a including a measure of consumers' moral orientation. As predicted, moral orientation moderated the effect of firm size (β = .072, $t(598)$ = 1.880, p =.061). Among consequentialists (+1SD), the effect of firm size on copycat preference was significant (β = .443, $t(598)$ = 7.228, p <.001). Among deontologists (-1SD), the effect was attenuated (263, $t(598)$ = 4.278, p < .001).

Study 3 explored how activating the moral principle of ingroup loyalty affects copycat preferences. We predicted that copycats that imitate home (vs. foreign)-country brands should trigger moral concerns because, by purchasing knockoffs of "their" brands, consumers betray their own kind. To test this prediction, we varied the country of origin of consumers (Scots vs. Americans; between-subjects) and imitated brands (Scottish vs. American Whiskey; within-subjects) in a 2X2 mixed design. We detected an interaction between these factors on moral concern, $F(296)$ = 36.91, p < .001 and copycat preference, $F(296)$ = 38.34, p < .001. Scots felt that imitating Scottish (American) Whiskey was more unfair (fair) and demonstrated lower (higher) preference for the Scottish (American) copycat. Among Americans, this pattern reversed. Moral concern partially mediated this effect (a*b = -.14, 95% CI [-.23,-.08]).

Our research provides evidence that copycats can trigger a moral process in which consumers perceive that they are morally transgressing against original brands. By identifying several situational drivers of this effect, our findings provide insights as to how brands can combat competition by a copycat.

Consumer Aversion Toward Company Waste: An Environmental Harm-Based Moral Perspective

EXTENDED ABSTRACT

"Waste not, want not" is a well-known adage expressing aversion to waste. Past research echoes this sentiment, finding that consumers are strongly averse to creating waste (e.g., Arkes 1996; Bolton and Alba 2012). However, little is known about how consumers react to others' wastefulness, such as company waste – which is ubiquitous throughout business activities and harms the environment (Cooper 2005). The present research focuses on company waste during product manufacturing, where waste can arise from excess *use* of resources (i.e., inefficient production) and excess *disposal* of resources (i.e., byproducts/ residuals). Consider fashion waste: the production of garments entails the *use* of large amounts of natural resources (e.g., fashion is the second-largest consumer of the world's water) as well as enormous *disposal* of waste (e.g., fashion is also the second-largest producer of water waste) (McFall-Johnsen 2020). How do consumers react to company waste arising from excess use versus disposal of resources?

While prior research has examined aspects of wasteful disposal (Xu, Bolton, and Winterich 2021), less is known about consumer reactions to company's wasteful use of resources – a major contributor to resource depletion and environmental harm (Schandl et al. 2018). We theorize that consumers are relatively insensitive to company's wasteful use of resources compared to equivalent waste in the form of disposal – arising from reduced perceptions of environmental harm and immorality. For example, wasteful use of resources may be less accessible due to the lack of media coverage and government regulations, leading consumers to judge its environmental consequences as less frequent and important (Menon, Raghubir, and Schwarz 1995); it may be less tangible, with its environmental impact less direct and more difficult to visualize, leading consumers to underestimate its severity (Royzman and Baron 2002); and its environmental impact (resource depletion) may seem more future-oriented, leading consumers to discount its harm (Carmi and Bartal 2014; Strathman et al. 1994). Building upon past research on harm-based morality (Schein and Gray 2018), reduced harm perceptions will lead consumers to judge company's wasteful use of resources as less immoral (compared to equivalent waste in disposal), resulting in relative insensitivity to such company waste.

Given this theorizing, we propose two interventions to boost consumer sensitivity to company's wasteful use of resources: educating consumers about the environmental harm of company waste, and making resource scarcity salient. In addition, we examine the flip side of excess company waste, namely waste mitigation or company sustainability initiatives. Given the aforementioned relative insensitivity, we propose that: i) consumers will react less favorably to firm sustainability efforts that focus on reducing resource *use* (compared to equivalent sustainability initiatives focused on reducing *disposal*) and ii) scarcity/harm-based interventions will increase consumer appreciation of such sustainability initiatives.

Study 1 tests our theory in the field. We ran two separate ads as A/B testing on Facebook, featuring water waste in the fast fashion industry. Supporting our theorizing, consumer engagement was significantly lower when the ad featured wasteful use versus disposal (clickthrough rates: 0.38% vs. 0.59%; $\chi^2(1)$ = 5.30, p = .021).

Study 2 uses a controlled lab experiment. Participants read about an apparel manufacturing company with company waste in the form of excess use/disposal of resources; all other aspects of the description were held constant (e.g., type of resource, price and quality of products). Participants then rated their attitudes/intentions toward the company, as well as perceptions of environmental harm and immorality. Supporting our theorizing, consumer attitudes/intentions were less unfavorable when company waste took the form of resource use (M_{use} = 3.58 vs. $M_{disposal}$ = 2.97, $F(1,214)$ = 7.82, p = .006), driven by perceptions of reduced environmental harm (M_{use} = 4.96 vs. $M_{disposal}$ = 5.46, $F(1,214)$ = 4.60, p = .033) and immorality (M_{use} = 3.77 vs. $M_{disposal}$ = 4.46, $F(1,214)$ = 11.04, p = .001), which serially mediated.

As evidence of robustness, we conducted several conceptual replications with i) incentive-compatible scenarios (consequential

DVs), ii) different operationalizations of company waste (e.g., wording and context), and iii) different levels of waste magnitude. We find consistent support for our theorizing and we also rule out alternative explanations based on waste magnitude, price, quality, warmth, and competence perceptions.

Study 3 examines an intervention (educational messaging about how waste harms the environment) in a 2 (use/disposal) × 2 (intervention/control) design using the stimuli of study 2. Analyses revealed a two-way interaction ($F(1,271) = 38.53$, $p < .001$): consumers are less sensitive to company's wasteful use of resources in the control condition ($M_{use} = 3.81$ vs. $M_{disposal} = 2.95$, $t(271) = 5.08$, $p < .001$) but this effect was attenuated after the intervention ($M_{use} = 2.67$ vs. $M_{disposal} = 2.59$, $t(271) = .45$, $p = .650$). Likewise, study 4 examines natural resource scarcity as a moderator in a similar 2 × 2 design and finds a similar two-way interaction ($F(1,312) = 6.10$, $p = .014$): consumers are less sensitive to company's wasteful use of resources in the control condition ($M_{use} = 3.55$ vs. $M_{disposal} = 2.89$, $t(312) = 4.04$, $p < .001$) but this effect was attenuated after the intervention ($M_{use} = 3.19$ vs. $M_{disposal} = 3.10$, $t(271) = .55$, $p = .583$). These results provide support for interventions to boost consumer sensitivity to company's wasteful resource use by educating consumers about the environmental harm of company waste and making resource scarcity salient.

Finally, studies 5A-5C test the flip side of excess company waste, namely company waste mitigation. Consistent with our theorizing, we find that i) consumers react less favorably to company sustainability initiatives that focus on reducing resource use (versus disposal), but ii) a scarcity/harm-based intervention can effectively boost consumer response. We observe these effects in both lab and field studies and with consequential DVs (e.g., Facebook A/B testing).

Together, these studies provide evidence that consumers are relatively insensitive to company's wasteful use of resources (versus equivalent waste in the form of disposal). By shedding light on how, why, and when consumers are differentially averse to company waste, this research contributes to the literatures on consumer waste aversion and waste management, while providing guidance to practitioners and policy makers regarding effective interventions and sustainability initiatives.

Can Voting Reduce Conspiracy Beliefs? Evidence from Two High-Profile U.S. Elections

EXTENDED ABSTRACT

Among the activities that people perform as citizens, voting is arguably the most sacred. Many theorists consider voting to be a moral action, as it is the primary way people influence the government toward the greater good (Brennan 2012). This lens comports with the 2021 ACR conference's theme, "What the World Needs Now," which encouraged research on this societal activity. We studied the potential impact of voting on a mindset with moral implications, conspiracy beliefs. Conspiracy beliefs — thinking that elite groups with immoral intent exert control over important events (Douglas, Sutton, and Chichoka 2017) — offer insights on the current state of consumers' moral concerns (Raab et al. 2013).

We tested whether voting, particularly for the winning candidate, impacts conspiracy beliefs. Voting, election outcomes, conspiracy beliefs share theoretical links. One, embracing conspiracy beliefs can bolster one's sense of control (van Prooijen and Acker 2015), and the act of making choices (i.e., voting) increases perceived control (Botti and McGill 2006). Two, conspiracy beliefs cement on negative, not positive, events (Douglas et al. 2019), suggesting they may abate if one's preferred candidate wins the election.

Two longitudinal studies (Rindfleisch et al. 2008) of highly-contested elections — 2020 U.S. Presidential election and 2021 U.S. Senate runoff election in Georgia — tracked conspiracy beliefs right before the election (Time 1; T1) and after the winners were announced (Time 2; T2). We tested the hypothesis that voting for winning candidates would predict reduced conspiracy beliefs from T1 to T2 compared to those who did not vote or voted for losing candidates.

Study 1 tested our hypothesis with voters in the 2020 U.S. Presidential election, which was highly anticipated and watched around the world. Data collection took place twice; once on November 2, 2020 (T1; one day before the election), and again on November 8-10 (T2). At T1, participants were N=600 U.S. Mechanical Turk adults (44.80% female; $M_{age} = 39.17$, $SD = 11.91$). Among those participants, N=525 (87.50%) returned for T2.

At both T1 and T2, conspiracy beliefs were measured with the Generic Conspiracist Beliefs (Brotherton et al. 2013; T1 α=.96; T2 α=.97) and Conspiracy Mentality Scale (Imhoffs and Bruder 2014; T1 α=.93; T2 α=.94). Scales were standardized and averaged to create a conspiracy beliefs index. At T1, four items measured support for liberal and conservative ideology, and Democratic and Republican candidates (1=not at all; 100=very much so). Liberal/Democrat responses were reversed. Items were standardized and averaged to form a political attitude index (α=.90). Higher scores indicate more conservative attitudes. At T2, participants indicated whether they voted in the election (no versus yes).

Both studies used mixed models, with conspiracy beliefs modeled as the within-subject factor of time (T1 vs T2), political attitudes and voting behavior as between-subjects factors, and random effects for subject-level intercepts. The higher order interaction between time, political attitudes, and voting behavior was significant, $F(1, 521) = 4.05$, $p = .045$, indicating different patterns for voters and non-voters. Among voters, the time x political attitudes interaction was significant, $F(1, 480) = 9.50$, $p = .002$. Slope analyses revealed that conspiracy beliefs dropped significantly from T1 to T2 among liberal voters, $b = -0.118$, 95% CI=[−0.16, −0.075], whereas conservative voters showed no change, $b = -0.023$, 95% CI=[−0.066, 0.02]. Conspiracy beliefs also dropped among non-voters with more liberal attitudes, $b = -0.173$, 95% CI=[−0.342, −0.004]. Non-voters with conservative attitudes showed no significant change, $b = 0.12$, 95% CI=[−0.049, 0.289]. As predicted, liberal voters (supporting the winner, Biden), experienced significant reductions in conspiracy beliefs, whereas conservative voters (supporting the election loser, Trump), were unchanged. Conspiracy beliefs among liberal non-voters also dropped, which was unanticipated. While the gravity of that particular election may have produced that result, Study 2 assessed whether it replicates.

Study 2's Senate election took place just two months after the Presidential election. New research indicates that supporting the winning or losing candidate can have surprisingly long-lasting cognitive and emotional effects (Toshkov and Mazepus 2020), suggesting potential impacts for Study 2's voters. Namely, if Democrats win that means that liberal voters will have experienced two recent election wins; if Republicans lose, their voters have experienced two losses. Accordingly, we predicted that conspiracy beliefs among voters for winners and losers would show decreases and increases, respectively, if the election outcome mirrored the Presidential election.

As before, data collection took place before the election and after results were announced (T1: December 30, 2020 to January 4, 2021; T2: January 7-12). T1 participants were N=314 Prolific workers (57.60% female; $M_{age} = 35.00$, $SD = 13.22$). Of those, N=256 (81.50%) returned for T2. Only residents of Georgia were eligible

for participation. Conspiracy beliefs, political attitudes, and voting behavior were measured as in Study 1.

As in Study 1, we tested whether changes in conspiracy beliefs between T1 and T2 were explained by political attitudes and voting behavior. The interaction of time, political attitudes, and voting behavior was marginally significant, $F(1, 252)=3.60$, $p=.059$. Among voters, the time x political attitudes interaction was significant, $F(1, 200)=8.56$, $p=.004$. The more that voters supported liberal (winning) candidates, the more their conspiracy beliefs dropped, $b=-0.082$, 95% CI=$[-0.158, -0.007]$. By contrast, the more that voters supported the conservative (losing) candidates, the more their conspiracy beliefs increased, $b=0.077$, 95% CI=$[0.001, 0.152]$. Non-voters' conspiracy beliefs did not significantly change, $F(1, 52)<1$, both for those who supported liberal, $b=0.041$, 95% CI=$[-0.100, 0.181]$, and conservative candidates, $b=-0.057$, 95% CI=$[-0.197, 0.082]$.

Two longitudinal studies of high-profile elections showed that voting for winning candidates predicted significant reductions in conspiracy beliefs. Study 1 also documented decreased conspiracy beliefs among non-voters who supported the winning candidate and Study 2 showed stronger conspiracy beliefs among voters supporting losing candidates. The act of making choices and whether one's preferred outcome evinces may be pivotal to understanding what underlies conspiracy beliefs — and how to change them.

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The Negative Impact of COVID-Related Stress on Eating Behaviors and Effective, Practical Interventions

Chair: Maria Langlois, INSEAD, France

Paper #1: Does COVID-Related Stress Affect Self-Control and the Ability to Make Healthy Food Choices?

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Paper #2: The Impact of Stress Level on Food Choice Motives and Nutritional Quality of Diet During COVID-19 Lockdown in France

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Paper #3: Explaining the Socioeconomic Gradient of Obesity: A Longitudinal Analysis of the Psychosocial Factors That Led Low Socioeconomic Status (SES) Americans to Gain More Weight During the COVID-19 Crisis

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Paper #4: The Effects of Mindful Eating on Snack Intake and Eating Rate

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SESSION OVERVIEW

Stress is linked to numerous negative health outcomes, including those involving food consumption behaviors. Research has identified stress as a major factor in appetite regulation, addiction relapse, and various maladaptive coping mechanisms (Sinha & Jastreboff 2013). Prior research associates (Cartwright et al. 2003), and experimentally demonstrates (Zellner et al. 2006), that higher levels of stress tend to drive individuals towards more nutrient-deficient, calorie-dense foods. The COVID-19 pandemic represented an unprecedented stressor that significantly impacted well-being and, subsequently, dietary choices and weight gain. In this proposed special session, we start by examining how the COVID-19 situation influenced stress, food choice motives, consumption, and weight gain. We then explore how a practical, cost-effective intervention, mindful eating, may help address some of these issues through reduced consumption of calorie-dense snack foods.

Elevated stress had a negative impact on dietary choices during the pandemic. Not only do these poor dietary decisions put individuals at higher risk for short-term weight, but they also increase their risk of obesity in the long-term, as consumers begin to form unhealthy consumption habits that may persist over time. Mindfulness has been shown to reduce stress and increase subjective well-being (Keng et al. 2011), while also mitigating the impact of stress on behavior (Creswell and Lindsay 2014).

In the first paper, **Falkenstein and co-authors** investigate how stress resulting from the pandemic influenced food choice in the face of temptation through a study on Chinese and French participants a few months after the onset of the pandemic. They found a small negative correlation between stress from the pandemic situation and healthy food choices when faced with tempting alternatives. **Marty and Nicklaus** surveyed a sample of French adults during the first confinement period and recorded food consumption behaviors, along with food choice motives and stress. They found that heightened stress increased the importance of pleasure as a food choice motive in order to self-soothe, leading to poorer diet quality.

In the third paper, **Langlois and Chandon** investigate how perceived socioeconomic status in an American population influenced stress, diet quality, and weight gain during the pandemic. They find that Americans with lower socioeconomic status experienced greater stress, which subsequently reduced exercise, increased food consumption, and reduced diet quality, leading to higher weight gain. Finally, **Tapper and colleagues** show how mindful eating can reduce consumption of calorie-dense snacks by slowing down the rate of eating.

Together, these four papers highlight the importance of studying how stressors such as the Covid-19 pandemic interact with individual differences in eating motives and socioeconomic status to influence food consumption. While all the papers focus on the behavioral components associated with dietary choices, they each provide insights into theoretical and practical means of addressing the overarching issue of overeating.

Does COVID-related stress affect self-control and the ability to make healthy food choices?

EXTENDED ABSTRACT

The Covid-19 pandemic has impacted people's wellbeing, e.g. the demise of close relatives, the lack of social interactions and financial pressures, which has resulted in post-traumatic stress symptoms and depression (Brooks et al., 2020). Such acute stressors lead to the increased release of stress neuromodulators such as noradrenaline and cortisol (Hermans et al. 2014).

In lab experiments, acute stress has been induced by different procedures such as an ice-bucket challenge type cold-pressor task (Schwabe et al., 2008) and a task mimicking a stressful interview situation (Trier Social Stress Test; Kirschbaum et al., 1993). Previous studies found that such acute stress led to less dietary self-control (Maier et al., 2015; Cohen's d=0.6) as well as more impulsive decision-making (Fields et al., 2014, Hedges'g =0.590).

Over time, experienced stress can turn into chronic stress, marked by increased activity of cortisol and an emotional numbing. Chronic stress has been found to induce increased risk-taking be-

havior when using an incentivized lottery paradigm (Ceccato et al., 2016; r=0.18; p=.011).

Here, we investigated whether and how the Covid-19 crisis is an exogenous stressor that impacts healthy food choices, specifically in the eye of temptation.

We preregistered the following Hypothesis for our study:
1. The Covid-19 pandemic leads to increased stress.
2. The Covid-19 induced stress levels correlate with self-control abilities.

Methods

Our study consisted of two parts: (1) An online study was carried out in China and France from June to September 2020, several months after the onset of the COVID-19 pandemic (China onset: December 2019, France onset: January 2020). Participants were asked to make choices between foods and report their stress levels amongst other items. (2) Each participant was also asked to cut and send a hair strain to extract their hair cortisol levels as a biological marker of chronic stress.

Sample:

After applying our pre-registered exclusion criteria, N= 553 participants (77.9% females) were analyzed. Their age ranged from 18 to 65 years (M_{age}= 25.8, SD=6.76). Most (54%) participants earned less than 1000 EUR per month and were students (50.1%). Participants were recruited in China (n = 199) and France (n = 354). Of the Chinese sample, 53 participants were residents in Wuhan, 94 in Beijing, and 52 in Suzhou. Of the French sample, about 44% were from Ile-de-France. The regional distributions were chosen to ensure variance in COVID-19 severity.

Stress Measures:

- Self-report stress level since the beginning of the CO-VID-19
- Self-report stress level at the moment
- Short version of the Trier Inventory for Chronic Stress (TICS) measuring chronic stress (Petrowski et al., 2019)
- Hair cortisol measure as a biological indicator of chronic stress (currently being pre-processed, available at time of conference)

Food choice task:

We used a food choice task adapted from Maier et al., 2015. Participants rated the tastiness and healthiness of different food items. The ratings were used to construct a food choice set for each participant that satisfied the following two characteristics: (1) Half of the trials showed two foods where the tastier item was also perceived as healthier (2) the other half of the trials showed foods where the tastier item was less healthy and thus there was temptation, and self-control was required to make a healthy choice. Each participant made a total of 20 foods choices with the instruction that (1) they should try to make healthy choices and (2) at the end of the experiment one trial could be implemented.

General risk behavior:

We also asked participants about their willingness to engage in risky behaviors using the DOSPERT scale (Blais & Weber, 2006) and specific COVID-19 related risk behaviors (e.g., not wearing masks).

Analysis & Results

1) Did the COVID-19 pandemic lead to increased non-acute stress?

Due to the lack of a "pre-COVID-19 measure" in our study, we compared the self-reported chronic stress-levels of the same short version of the TICS with prior literature conducted in healthy participants (Petrowski et al., 2019). We found that the mean reported TICS in our study was significantly higher than the score in the previous literature ($M_{COVID19\text{-}Study}$=16.55, $SD_{COVID19\text{-}Study}$=5.96 vs. $M_{literature}$=9.42, $SD_{literature}$=6.33, t(3019)=24.11, p<.001). This result indicated an enhanced stress level among our participants.

2) Is the ability to make healthier choices linked to stress?

No associations were found between stress and healthy choices in genera: stress since the pandemic (r(536) = -.07, p = .126), stress at the moment (r(536) = -.02, p = .675), TICS score (r(533) = -.03, p = .484).

3) Is the ability to make healthier choices when self-control is required linked to stress?

When focusing on food choices that require self-control, we find a very low, albeit significant, correlation with pandemic-induced stress (r(539) = -.09, p = .043). This result indicated that stress, induced by the pandemic, negatively influenced individuals' ability to choose healthy foods in the face of temptation. The other two stress measures yielded no significant correlations (stress at the moment: r(539) = -.01, p = .791; TICS score: r(539) = .01, p = .904).

4) Is stress also linked to other risky behaviors?

We found a small yet significant negative correlation between perceived stress since COVID onset and willingness to engage in risky behavior across life domains (r(539) = -.09, p = .035) and risky behavior linked to COVID-19 (r(539) = -.26, p < .001). However, these two measures did not explain our effects of stress on dietary self-control.

Discussion

We found that the higher the COVID-19-induced perceived stress, the lower people's ability to make healthy food choices when self-control is required. However, this negative correlation was very small and did not hold when investigating both countries separately. We found opposite effects for other risky behaviors outside the food domain. Together, our results showed much smaller effect sizes as compared to controlled lab studies. In a next step, we will investigate whether self-control on dietary choice is also linked to biological markers of stress (i.e., hair cortisol levels) and potential underlying psychological mechanisms.

The Impact of Stress Level on Food Choice Motives and Nutritional Quality of Diet During COVID-19 Lockdown in France

EXTENDED ABSTRACT

At the beginning of the COVID-19 pandemic, governmental authorities imposed nationwide lockdowns to avoid fast-growing transmission of the virus. The first lockdown in France took place from March 17th to May 10th, 2020. During this period, most of the population was asked to stay home except for grocery shopping, medical care, legal obligations and physical activity within a 1 km radius. The threat of virus transmission and major disruptions in daily routines caused by the lockdown (e.g., working from home) were likely to lead to negative feelings (stress, loneliness, depression) and to alter food consumption habits. This uncommon situation of drastic changes in the general population gave the unexpected opportunity to study how stress levels may translate into short-term changes in food choice motives and ultimately changes in the nutritional quality of diet.

A sample of 938 French adults (79% women, mean age of 38.7 ± 11.6) completed online questionnaires on Qualtrics at the end of April 2020 (ethical approval delivered by the ethical evaluation committee for research of INSERM, reference: n°20–683, delivered on April 27th, 2020). Participants were asked about their level of stress, loneliness and depression during the lockdown on continuous scales from 0 to 100, and about their perceived level of change in their eating habits: 'yes, a lot' / 'yes, to some extent' / 'yes, a bit' / 'no'. They were also retrospectively asked about their food choice motives and food consumption during the month before and in the first month of the lockdown. The importance of nine food choice motives was assessed during the month before and in the first month of the lockdown: health, convenience, sensory appeal, natural content, ethical concern, weight control, mood management, familiarity, and price, scoring from 1 to 4 (Steptoe et al. 1995; Cottet et al. 2017). Principal component analysis was performed on the difference (during lockdown – before) of the nine subscales scores to define independent motivational components that were likely to change during the lockdown and we identified: 1/ importance of sustainability (+health, +natural content and +ethical concern), 2/ importance of ease (+convenience, +familiarity and +price), and 3/ importance of pleasure (+sensory appeal, +mood management, -weight control). Food intakes were recorded using a food frequency questionnaire including 110 foods, 12 non-alcoholic beverages and 4 alcoholic beverages (Kadawathagedara et al. 2017). Changes in nutritional quality were estimated by comparing the adherence to the French food-based dietary recommendations before and during the lockdown using the simplified PNNS-GS2, scoring from −17 to 11.5 (Chaltiel et al. 2019).

Among the 938 participants, 80% declared having changed their eating habits during the lockdown. A positive association was found between perceived change in eating habits and level of stress ($F_{(3,934)} = 14.17$, $p < 0.001$), loneliness ($F_{(3,934)} = 5.01$, $p = 0.002$) and depression ($F_{(3,934)} = 10.83$, $p < 0.001$). Overall, the nutritional quality of diet significantly decreased during the lockdown compared to the month before (-0.32 PNNS-GS2, 95%CI [-0.47; -0.18]). Despite an increase in fruit and vegetables (+0.59 portion/day, 95%CI [+0.51; +0.68]), pulses (+0.15 portion/week, 95%CI [+0.09; +0.21]), and fish and seafood (+0.14 portion/week, 95%CI [+0.05; +0.22]) consumption, a sharp increase in the consumption of processed meat (+32 g/week, 95%CI [+23; +41]), sweet-tasting beverages (+37 mL/day, 95%CI [+21; +52]) and alcoholic beverages (+8.6 g of alcohol/week, 95%CI [+5.7; +11.6]) negatively affected the overall adherence to the French dietary recommendations.

To explore the relationship between stress, changes in motivational components, and changes in nutritional quality, we conducted a parallel mediation analysis and found a significant indirect effect of a higher level of stress on a decrease in nutritional quality through an increase in the importance of pleasure during the lockdown (-0.0012, 95%CI [-0.0024; -0.0004]). Indirect effects of stress on changes in nutritional quality through changes in the importance of sustainability (0.0005, 95%CI [-0.0002; 0.0014]) or ease (-0.0001, 95%CI [-0.0002; 0.0003]) were not significant. We also conducted parallel mediation analyses with loneliness and depression in the same way, but we did not find any significant association with changes in motivational components or in nutritional quality.

These results highlight the effect of stress in promoting short-term changes in the food decision making process (i.e., redefining the importance of certain food choice criteria) that translate into changes in food consumption and nutritional quality of diet, and ultimately may have an impact on health outcomes. By promoting more pleasure-oriented food choices, a higher level of stress was as-sociated with a decrease in the nutritional quality of diet during the lockdown. Stress, feelings of emptiness, and boredom management by eating were common behaviours in the French population during the lockdown with 63%, 63%, and 57% prevalence in a 1092 sample of French adults, respectively (Cherikh et al. 2020). In the present study, "pleasure" was defined as an enhanced importance of sensory appeal, but also of mood management. Occasional emotion regulation by eating has been associated with the consumption of sweet foods (De Lauzon et al. 2004; Macht 2011) which may explain the negative relationship between changes in importance of pleasure and nutritional quality of diet. In a context where temporary stress due to a specific, time-limited situation seems to negatively impact short-term eating behaviours, the investigation of the role of chronic stress in shaping presumably deleterious long-term eating habits (e.g., in deprived populations) requires major attention.

Explaining the Socioeconomic Gradient of Obesity: A Longitudinal Analysis of the Psychosocial Factors That Led Low Socioeconomic Status (SES) Americans to Gain More Weight During the COVID-19 Crisis

EXTENDED ABSTRACT

Obesity and low socioeconomic status (SES) are two prominent risk factors associated with COVID-19 (Patel et al., 2020; Popkin et al. 2020). If individuals with low SES gained more weight during the early months of the COVID crisis, it would mean that their vulnerability to the virus has further increased. This is particularly concerning given that people with low SES already tend to have a higher body mass than people with high SES (Dinsa et al. 2012; Wang and Beydoun 2007), a phenomenon known as the socioeconomic gradient of obesity.

Although there is strong evidence that SES and obesity are strongly associated in high- and middle-income countries, there is still a lot of uncertainty about why people with low SES are more likely to have obesity. For instance, we do not know whether the socioeconomic gradient is explained by differences in energy expenditures or in energy intake. The literature on the psychosocial explanations for the SES obesity gradient is also inconclusive (Claassen et a. 2019); these authors note that a significant hurdle lies in studies only addressing one or two psychosocial factors, which prevents the comparison of their relative importance in mediating the association between SES and obesity.

To address these concerns, we conducted a longitudinal multi-wave survey measuring subjective SES, weight change and the environmental and psychological factors that may influence their association. We focused on weight change, rather than food choices, to respond to the call for more externally valid studies of obesity in psychology (Holden et al. 2020; Loyka et al. 2020).

Method

We recruited American residents via Prolific in three separate waves from March 2020 to May 2020. A total of 886 respondents (507 Female) participated in all three waves.

The surveys featured self-disclosure questions aimed at understanding changes in health-oriented behaviors, such as diet/eating styles, exercise, social connectedness, and stress, as well as the Three-Factor Eating Questionnaire (Karlsson et al. 2000) and questions about individuals' experiences during the pandemic (e.g., employment status). We measured all the environmental and psychological factors hypothesized to link SES with BMI, as reported in Claassen and colleagues' 2019 review paper. However, we did not measure factors that are not under the control of the participants,

such as the built environment. To rule out reverse causation, SES and psychological factors were measured during the first two waves of the study, whereas weight change was measured in wave 3.

Results

We utilized the MacArthur Scale of Subjective Social Status (Adler et al. 2000) as the independent variable; this scale consists of a 10-point ladder, where the top of the ladder represents those who are the best off (i.e., the most money, education, and respected jobs), while the bottom of the ladder consists of people who are the worst off in American society. Self-reported weight change during the pandemic was the outcome variable. Age and sex were included as covariates in all models. Trichotomized for illustration (but the continuous measure was used in all the analyses).

ows that respondents in the bottom third in terms of SES were more likely to have gained weight and less likely to have lost weight in the six-week interval of the study. We used Hayes' PROCESS (2017) model 4 (bootstrap sample = 10,000, 95% CI) to examine to what extent the link between SES and weight change was mediated by the psychosocial factors mentioned earlier.

Compared to low SES respondents, those with high SES spent more time outdoors, experienced less stress, focused more on the future than on the present, and expected higher future wellbeing. Apart from grocery scarcity, which was not associated with SES, these results are aligned with the literature. Figure 2 further demonstrates that stress was the only mediator to be strongly associated with weight change and, hence, the only factor to mediate the effects of SES on weight change during the pandemic ($M = -.03$, CI = [-.07; -.01]). The residual effects of SES were not statistically significant, indicating full mediation.

To examine whether stress leads to weight gain by reducing energy expenditures or increasing energy intake, we conducted a second mediation analysis using PROCESS model 81 (bootstrap sample = 10,000, 95% CI). Figures 1 and 3 show that stress decreased physical activity ($M = -.04$, $p = .02$), increased portion sizes ($M = .04$, $p = .008$), and led to a decline in the quality of foods consumed ($M = -.06$, $p < .001$). All three indirect effects were statistically significant and fully mediated the effects of stress.

People with lower SES experienced greater stress during the pandemic, which led them to exercise less, eat more and eat less healthily, thus increasing their chances of weight gain. Despite the advantage of the panel structure of the data and the control variables, SES was measured and hence questions about causality and identification remain open. Our more recent work has effectively manipulated subjective SES and is ongoing.

The Effects of Mindful Eating on Snack Intake, Hunger and Eating Rate

EXTENDED ABSTRACT

Background

Mindful eating is often thought to promote healthier eating. A key feature of mindful eating is paying attention to the sensory properties of one's food (such as its sight, smell, taste and texture) and a number of studies have found this reduces subsequent intake of high calorie snacks (Allirot et al. 2018; Arch et al. 2016; Higgs & Donohoe 2011; Robinson et al. 2014; Seguias & Tapper 2018; Tapper et al. 2018). However, the mechanisms underlying this effect are unclear and several other studies have failed to find such effects (Arch et al. 2018; Whitelock et al. 2019; Whitelock et al. 2018; Seguias & Tapper under review; Tapper & Sequias 2020). In this study

we (a) sought to replicate the effects of mindful eating on subsequent snack intake and (b) explored the possibility that effects are brought about by a reduced rate of eating. Previous research has shown that a slower eating rate is associated with lower food intake (Robinson et al. 2014), possibly because of increased orosensory exposure (i.e., food is in the mouth for a longer period of time) which promotes the release of gut hormones that in turn reduce appetite (Hawton et al 2019; Krop et al. 2018). We explored the possibility that mindful eating leads people to eat less of a subsequent snack because (1) they have eaten more slowly so feel less hungry, and/or (2) carryover effects mean they also eat the subsequent snack more slowly.

Methods

A total of 211 females were randomised to one of three conditions: mindful eating (MIND), slow eating (SLOW), normal eating (CONTROL). After completing a filler task, rating their current hunger level and answering questions on demographics, all participants were asked to eat a 30g portion of cookies that had been broken into 12 pieces. Those in the MIND and SLOW groups were asked to eat one cookie piece each time they heard a beep. The beeps were sounded every 15 seconds. For those in the MIND condition, each beep was also followed by an instruction to attend to a specific sensory property of the food (such as its taste or texture). Those in the CONTROL group were simply asked to eat the cookies in the absence of any beeps or instructions. Participants then rated their hunger for a second time and completed additional filler questions, before being presented with 60g of cookie pieces and 30g of crisps for a supposed taste test. They were asked to rate the cookies and crisps on a number of dimensions and told they could eat as many as they liked since the remainder would be thrown away. The researcher then left the room for 5 minutes. On the researcher's return, the participant was asked to rate their hunger for a third time as well as the extent to which they paid attention to the smell, taste and texture of the first cookie snack and to the snacks in the taste test. They also completed a funnelled debrief to check for suspicion. To allow for assessment of eating rate, participants were recorded via a webcam from the start of the study until the point at which the researcher returned to the room following the taste test. Study procedures and analysis were pre-registered at https://osf.io/xbjpt.

Results

One participant withheld consent, 18 guessed their food intake was being measured and there were protocol deviations for a further 25 participants. Video recording errors occurred for an additional 16 participants. Excluding these left a total sample of 167 for the analysis of food intake and 151 for the analysis of eating rate. Mean snack consumption in the taste test was 25g ($SD = 17$) in the MIND condition, 25g ($SD = 20$) in the SLOW condition and 34g ($SD = 21$) in the CONTROL condition. These means were significantly different ($p = 0.014$, $\eta_p^2 = 0.051$) and post-hoc tests confirmed that food intake was lower in the MIND compared to the CONTROL condition ($p = 0.028$, $d = 0.50$) and in the SLOW compared to the CONTROL condition ($p = 0.027$, $d = 0.48$) but that there was no difference between the MIND and SLOW conditions. However, there were no significant group differences in hunger following the first cookie snack. Participants in the MIND condition reported paying significantly more attention to the smell, taste and texture of their first cookie snack compared to participants in the SLOW and CONTROL conditions ($p < 0.001$, $d = 1.13$ and $p < 0.001$, $d = 1.03$ respectively), but there were no group differences during the taste test. Nevertheless, rate of consumption, calculated in bites per minute from first to last bite, showed a trend toward a group difference ($p = 0.055$, $\eta_p^2 = $

0.038) with a slower rate of eating in the MIND compared to the CONTROL condition ($M = 4.75$, $SD = 1.47$ and $M = 5.51$, $SD = 1.83$ respectively, $p = 0.068$, $d = 0.45$).

Discussion

The results support previous studies showing effects of mindful eating on subsequent snack intake. The fact that equivalent reductions in intake occurred when participants simply ate at a slower rate is consistent with the view that effects are brought about by increased orosensory exposure. Although this slowed rate of eating was not associated with greater reductions in reported hunger, it is possible our measure of hunger was not sufficiently sensitive to detect such changes. Whilst eating the subsequent snack, those in the mindfulness group did not report paying more attention to their food but they did show a trend toward eating more slowly. These results suggest that although there may not be cognitive carryover effects from mindful eating (in terms of attention) there may be behavioural ones (in terms of a slowed eating rate). Since mindful eating may also increase the amount of pleasure obtained from food (Seguias & Tapper under review), it could be an effective and sustainable strategy for slowing eating rate, which could in turn help protect against weight gain. Nevertheless, further research is needed to confirm carryover effects on rate of eating and to examine effects outside the laboratory and over longer periods of time.

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How Effective is Choice Architecture?

Chair: Crystal Reeck, Fox School of Business, Temple University, USA

Paper #1: What is the Impact of Simplification of Information on Pension Contributions? It Depends!

Avni Shah, University of Toronto, Canada
Matthew Osborne, University of Toronto, USA
Jaclyn Lefkowitz, Harvard University, USA
Alissa Fishbane, Ideas 42, USA
Dilip Soman, University of Toronto, Canada

Paper #2: Nudging App Adoption: Choice Architecture Increases Consumer Adoption of COVID-19 Digital Contact Tracing

Crystal Reeck, Fox School of Business, Temple University, USA
Nathaniel A. Posner , Columbia Business School, Columbia University, USA
Kellen Mrkva, Columbia Business School, Columbia University, USA
Eric J. Johnson, Columbia Business School, Columbia University, USA

Paper #3: Joint vs Separate Evaluation as a Choice Architecture Tool to Support Needy Charities

Rishad Habib, Sauder School of Business, University of British Columbia, Canada
David J. Hardisty, Sauder School of Business, University of British Columbia, Canada
Katherine White, Sauder School of Business, University of British Columbia, Canada

Paper #4: Temporal Reframing Boosts Productivity: A Field Experiment

Aneesh Rai, University of Pennsylvania, USA
Marissa A. Sharif, University of Pennsylvania, USA
Edward H. Chang, Harvard University, USA
Katherine L. Milkman, University of Pennsylvania, USA
Angela L. Duckworth, University of Pennsylvania, USA

SESSION OVERVIEW

Consumers make myriad choices daily – how to spend time, whether to save, whether to give, and whether to consume different products. The choice architecture of how these decisions are structured may have substantial influence on the nature of those decisions, nudging certain behaviors. Advocates of choice architecture are now situated broadly, from high levels of government to consulting practices to market managers. As we consider what the world needs now, one potential answer is more deployment of choice architecture to promote the social good. However, the question may arise: how effective is choice architecture?

The proposed session explores this topic across four empirical papers. The first paper from Shah and colleagues examines this question in the domain of retirement savings. Using a large field study (N=126,673), they identify heterogeneity in responses to a nudge designed to promote savings – simplification. Using follow-up laboratory experiments, they find that reducing informational complexity via simplification increases attention and recall of information on the form.

The second paper from Reeck and colleagues examines this question in the context of digital contact tracing apps for COVID-19. Such apps can help stymie the spread of COVID-19, and most people indicate support for such apps. However, their adoption rates are low.

One reason for this may be the choice architecture of the app design, which makes enabling the app properly more difficult. Across four pre-registered experiments (N=2,613), we demonstrate that the choice architecture of the app design has substantial influence on the likelihood that consumers enable the app. Indeed, the effects we find are even larger than some traditional nudges, such as changing defaults.

The third paper from Habib and colleagues examines how choice architecture can be used to promote charitable giving. Charities in the early stages of fundraising often have difficulty attracting donors. Across four studies and one large dataset, the authors demonstrate that jointly as opposed to separately evaluating charities increases donations to those at earlier stages of fundraising. Joint presentation makes it easier to evaluate options and make comparisons, highlighting the relative neediness of the charity with less progress towards its goal.

The fourth paper from Rai and colleagues examines how choice architecture can be used to alter how consumers spend their time and increase volunteering. In a pre-registered field experiment (N=9,108), trained volunteers were assigned to receive either temporally reframed goals (e.g., volunteering 4 hours each week) or a control condition (e.g., volunteer some hours each week). Temporal reframing produced a significant 8% average increase in volunteer hours. The magnitude of this boost was consistent throughout the 12-week intervention period and did not vary by gender, volunteer tenure, or prior volunteering levels.

Together, these papers demonstrate the effectiveness of choice architecture at shaping consumer behavior across a range of domains. At the theoretical level, these papers contribute to basic theories of consumer attention, motivation, and decision making. Practically speaking, this work has broad implications for what the world needs now, from public health to volunteers.

What is the Impact of Simplification of Information on Pension Contributions? It Depends!

EXTENDED ABSTRACT

People regularly fail to save enough for retirement. There are several barriers and obstacles that prevent individuals from forgoing consumption today in order to secure a better financial pathway for the future. For many individuals, the sheer complexity of comparing the rates of various savings options (e.g., a traditional bank savings account versus a retirement savings account), calculating how much a contribution would accrue over time, and determining where and how to make a contribution can all be substantial obstacles that prevent individuals from saving.

In response to these cognitive and procedural barriers, researchers and practitioners have routinely advocated for simplifying basic forms and notices. A recent meta-analysis found that simplification was one of the most common nudges used by policymakers, used as a behavioral lever in a whopping 36% of nudge unit trials (DellaVigna and 2021). Simplifying forms via improving the visual appeal, personalizing the communication, adjusting framing or formatting of existing communication, or including planning prompts that provide clear action steps have motivated action across a broad range of behaviors such as take-up of welfare benefits and submission of financial aid assistance for university (Bhargava and Minoli 2015; Bettinger et al 2012).

While different strands of research have found evidence that simplification is beneficial at a broad-level, there is limited work to determine whether simplification is always effective at improving behavior and whether it will always yield positive effects. This is particularly important as most previous research documenting the effectiveness of simplification have found mainly positive effects and have focused on cultural contexts where there is a social norm to save for, and even have, a retirement. To study this substantive problem, we aimed to test the effectiveness of several behavioral interventions aimed at simplifying information on retirement savings.

Specifically, we collaborated with two different retirement providers (N=126,673)—one that was ranked highly in rate of returns relative to its peers and one that was ranked lower though had very high customer satisfaction ratings relative to peers, and tested whether simplified retirement account statements improved retirement savings contributions relative to the standard, status quo statement typically used. A representative set of account holders from each firm were randomly assigned to receive either a standard retirement account statement, which served as the control group, or one of four simplified retirement account statement forms that included a behavioral nudge intervention (i.e., gain frame, loss frame, future visualization prompt, or a wallet cutout providing an action checklist of steps to make a contribution).

Regardless of firm or treatment group, all statements contained information on their current account balance, projected monthly income at the time of retirement, the firm's absolute rate of return, and how the firm compared relative to other government approved retirement firms, and how individuals could make additional savings contributions if they so choose. The treatment interventions were not significantly different from one another across any the measures (*p's* > .71), thus allowing us to present results by each intervention and collapsed across the four intervention groups.

The effectiveness of simplifying the account statement was highly dependent on the firm. For the higher-ranking firm, all of the simplification interventions increased the likelihood of making a voluntary retirements savings contribution and the amount they contributed. For customers in the high-ranking firm, each of the four simplification treatment interventions significantly improved contribution likelihood and contribution amount relative to the control by 39% (*p's* <.022). Receiving the simplification intervention statements also improved contribution amounts, both in terms of aggregating across conditions (*B*=.026, *SE*=.008, *p*=.001), as well as individually, (*p's* <.036). Relative to the standard account statement, receiving a simplified account statement increased total contribution amounts by 43%.

However, when looking at results from low-ranking firm customers, we found a significant backfire effect of simplification. For low-ranking firm customers, the same interventions significantly decreased the likelihood of making a retirement contribution by just over 30% relative to the standard form (*z*=-2.37, *p*=.018). Simplifying the forms also produced backfire effects on total contribution amounts, significantly lowering savings by roughly 4%, *B*=-.010, *SE*=.005, *p*=.035.

To determine what drove this difference, we conducted further laboratory studies. First, we found (N=299) that not only were simplified retirement account statement perceived as easier to understand than the standard account statement (*p* = .023), but there also changed the attention and recall of information of the forms relative to the control statement. Individuals given the simplified form spent significantly more time reading the form and were more likely to accurately recall information relative to the control statement (Time Spent: $M_{Simplified\ Form}$ = 30.6 seconds, $M_{Standard\ Form}$ = 20.0 seconds,

$t(297)$ = 2.98, p =.003; Recall Accuracy: $M_{Simplified\ Form}$ = 38.7%, $M_{Standard\ Form}$ = 3.4%, $z(297)$ = 7.49, p <.001). Thus, simplification may unintentionally turn individuals' attention to negative information such as the ranking information more easily than those who received standard forms, in turn leading individuals to be less likely to save for retirement than if they had received the more complex form.

Across two field experiments and a follow-up laboratory experiments, we find that reducing informational complexity via simplification increases attention and recall of information on the form. However, this does not always yield positive results. When simplification increases the attention and salience of negative information (e.g., the firm is lower ranked on a particular attribute relative to other firms) then simplification can be detrimental, significantly decreasing retirement savings and motivation to save for the future relative to more complex or obfuscated forms. From a theoretical perspective, our work contributes to research on the importance of informational fluency on decision-making. Although normative models propose that decision-makers weight cues by their objective validity, our work demonstrates that this is not the case. Simplification can increase the probability that decision-makers even engage with and recall information. At a broader theoretical and substantive level, our work shows the importance of scaling interventions and how they interact within the context of the decision environment–in this case, the firm's rank relative to others.

Nudging App Adoption: Choice Architecture Increases Consumer Adoption of COVID-19 Digital Contact Tracing

EXTENDED ABSTRACT

In 2020, a novel coronavirus ravaged the world, causing a global death toll of over 3.1 million. A new technology developed for smartphones, called digital contact tracing (DCT), enables faster detection and treatment by informing people about their exposures to infected individuals. Widespread usage of DCT has had tremendous impact in China and other countries. It has been estimated that DCT apps in China saved over 150,000 lives and reduced economic losses by 2% of GDP (Xiao, 2020). Surveys in many countries showed a substantial willingness to adopt DCT (Altmann et al., 2020; IGHI, 2020). Actual adoption has been much lower in most countries, however. We investigate a key aspect that could partly explain why so few people adopt and enable these apps, namely the way privacy decisions are presented in these apps. Prior research has demonstrated that privacy preferences are largely constructed (Acquisti, Brandimarte, & Loewenstein 2015; Bellman, Lohse, & Johnson, 1999; Lichtenstein & Slovic, 2006), meaning that people do not have a stable privacy preference stored in memory, but rather assemble a preference when making decisions. This implies that changes to the way a decision is presented, termed *choice architecture* (Thaler & Sunstein, 2008), could drastically influence privacy decisions and whether they enable DCT apps. Thus, the design of DCT apps may impact how many people adopt and enable them.

The choice architecture of DCT (and smartphone apps more generally) involves several aspects. One important feature is whether choices about privacy are separated into multiple decisions or integrated into a single decision. We hypothesized that integrating these into a single decision would make people more likely to enable these apps. We also hypothesized that we could facilitate adoption by formatting adoption *as if* it was the default response without actually changing what happens if no choice is made. Unlike previous research, we simply manipulate whether an option is phrased as if it is the default response, without pre-selecting an option.

We examined the influence of the choice architecture of DCT apps across four pre-registered experiments. Participants in Experiment 1 (n=509) were presented with a simulated app installation and asked whether they would enable certain app features. We varied how the options were presented using a 2 (default format: opt-in vs. opt-out format) × 2 (integration: integrated vs. separated) between-subjects experimental design. Analyses revealed the opt-out format more than doubled uptake compared to the opt-in format. About 28% of participants enabled the app in the "opt-in format" condition, whereas 79% enabled the app in the "opt-out format" condition, z=10.86, Exp(B)=9.74, p<.001. Despite not actually changing the default in this experiment, the default formatting manipulation had a large effect. In fact, the effect was larger than the average effect in a meta-analysis of experiments where defaults are actually changed (Jachimowicz et al., 2019). Integrating the disclosures and feature decisions into a single choice also increased adoption. Specifically, 59% of participants fully enabled the app in the integrated condition, compared to 49% in the condition with separated disclosures and privacy decisions, z=2.21, Exp(B)=1.59, p=.027. In Experiment 2 (n=503) we replicated these effects and demonstrated they were robust across political party affiliation, health status, age, race and income.

In Experiment 3 (n=565), we separated two components of the default format manipulation. Specifically, we predicted that the "opt-out format" made people more likely to enable the app partly because of the opt-out wording itself and partly because the color and position align with options that are habitually chosen in smartphone environments. Additionally, we sought a sample in states that had recently launched a DCT app. We added one condition to isolate whether the effects of default formatting were driven by the opt-out wording, the habit cues (color and position) that typically accompany default options on smartphones, or a combination of these. As predicted, there was a large effect of default formatting, consistent with Experiments 1 and 2, z=6.36, Exp(B)=2.22, p < .001. Furthermore, the condition that isolated "opt-out wording" indicated that this wording alone increased the percentage who enabled the app, compared to the "opt-in wording" (from 51% to 67%, z=3.32, Exp(B)=1.41, p<.001). The percentage who enabled the app was even higher in the opt-out frame condition that also used the typical color and position of default options (82% vs. 67%), z=3.56, Exp(B)=1.57, p<.001. This is consistent with our explanation that the percentage of people enabling the app would be highest when opt-out wording is used along with color and positions that are typically chosen in everyday smartphone environments.

In Experiment 4 (n=1036), we manipulated the color and position of buttons that would enable exposure notification app features. This would allow us to isolate two components of the effect and determine whether blue color or right position (or both) influences adoption. Options to enable an app feature are typically presented in blue or on the right side of an app installation screen, which suggests that either the blue color or the right position could activate habits that cause users to quickly select the button. Presenting the enable button in blue rather than grey increased the percentage of participants who enabled the app features (M_{blue}=88% enabled; M_{grey}=83% enabled, z=2.36, Exp(B)=1.53, p=.018). There was not a significant effect of position, contrary to our hypothesis (M_{right}=87% enabled; M_{left}=84%, z=1.57, Exp(B)=1.32, p=.116).

Digital contact tracing has tremendous potential. In almost every industrialized country, the requisite technology has been developed and attitudes towards DCT are positive (Altmann et al., 2020). In the present research, we demonstrate that the design of DCT apps has a substantial influence on their uptake and whether consumers

enable them properly. Importantly, these effects are achieved without altering defaults. These findings have theoretical implications for behavioral interventions, policy relevance, and practical implications for the uptake of other types of apps as well.

Joint vs Separate Evaluation as a Choice Architecture Tool to Support Needy Charities

EXTENDED ABSTRACT

Charities and individuals often struggle to raise funds in initial stages. Without the backing of existing supporters to provide social proof (Cialdini and Goldstein 2004; Cialdini and Trost 1998) and the high levels of progress that lead to beneficial goal gradient effects (Cryder, Loewenstein and Seltman 2013; Kivetz, Urminsky and Zheng 2006) such charities may falter in their efforts to raise money. We introduce a simple intervention to increase donations to a charity with lower levels of goal progress. In four studies (three preregistered) and one large dataset, we show that asking people to evaluate multiple charities jointly (rather than a single charity on its own) shifts giving to the charity further from its goal. This occurs because presenting charities jointly makes it easier to evaluate options and make social comparisons (Hsee 1996; Ordabayeva and Chandon 2011), highlighting the *relative neediness* of the charity with less progress towards its goal.

In study 1 (N = 100, Prolific, preregistered) we demonstrate our main predicted effect - that people give more to a charity further from its goal in joint evaluations. Participants were shown two organizations jointly, one was further from its goal and had raised $300 out of $3000 and another was closer to its goal and had raised $2700 out of $3000. Both the names of the organizations and their position (left vs right) were counterbalanced in all studies. Participants indicated their likelihood of donating and how they would divide $100 between the two organizations. Participants were more likely to donate, (M = 4.60), t(96) = 2.96, p = .004, and donated more, (M = $58.14), t(96) = 2.79, p = .006, to the organization that had raised less money and had lower progress.

Study 2 (N = 500, MTurk) tests which types of comparisons lead to greater donations to the charity with less funds. All participants were shown two charities that had raised the same amounts as in study 1 - $300 and $2700. The charities either had relatively different levels of progress (e.g., 10% vs 90% as in study 1) or consistent levels of progress (e.g., both at 10%) or no goal information was given. Participants were more likely to donate to the charity that had raised less money when its relative level of progress was lower, t(199) = 2.94, p = .004, but not when it had the same levels of progress as the charity with more funds, t(200) = 1.16, p = .25. This study shows that donations shift to the charity with less funds only when it has lower progress than the comparison charity.

Study 3 (N = 300, Prolific, preregistered) compared joint vs separate evaluations in a 3 (Evaluation type: Joint vs Separate far vs Separate close) factor design. In this study the organization close to its goal only needed £70 to reach it and was clearly labelled as having "£70 to go". Participants determined how an actual £100 donation would be distributed and thus could be the donor who completed the goal (consequential DV). A hybrid t-test (Hsee 1996) revealed that respondents were more sensitive in JE than SE to whether an organization was close to vs far from its goal, t(297) = 5.28, p < .001. In JE, respondents donated significantly more to the organization that was further from its goal than close to its goal (M_{far} = £65.05), t(99) = 5.42, p < .001. Mediation analysis revealed that perceptions of need mediated the effect of joint vs separate evaluation on donations to

the organization far from its goal, β = 4.28, 95% CI[1.63, 7.30] but not the organization close to its goal β = -1.48, 95% CI[-4.11, .82].

Study 4 (N = 541, Prolific, Preregistered) tested joint vs separate evaluations with individuals (rather than organizations) in a design similar to study 2. In order to test if our effects were due to our particular design, we used a scenario from a previous study (Cryder et al. 2013). Participants read about student(s) selling candy to raise money for their school sports team fundraiser. In the joint evaluation condition both students were presented, and one student was close to her goal (needs to sell 2 more candy bars) while the other was far from her goal (needs to sell 32 more candy bars). In the separate evaluation conditions only one student was presented, either close to or far from her goal. We then asked participants their likelihood of buying candy from each student. A hybrid t-test revealed that participants were more sensitive in JE than in SE to progress towards the goal, t(483) = 7.33, p < .001. In JE, they were more likely to buy from the student that was further from her goal (M = 5.92) than close to her goal (M = 4.64), t(169) = 7.40, p < .001. In SE, there was no effect of goal progress on purchase likelihood, t(314) = 1.24, p = .22.

These results are supported by real donation data on small donors that we pulled from Kiva.org, a micro-crowdfunding site. A fixed-effects model predicted percentage change in progress levels from current progress levels, search order ranking of each project (which approximates donor's likelihood of encountering it) and project ID as a fixed effects estimator. When controlling for search order in a fixed effects model, current levels of progress negatively predicted progress towards the goal, β = -1.44xe-06, SE = 5.10xe-07, t = 2.82, p < .005, indicating that projects with lower levels of current progress were likely to make greater progress towards their goal.

Overall, our results provide converging evidence that joint presentation of charities can effectively shift donations to the one further from its goal. In doing so, we contribute to work on the goal gradient hypothesis, social influence, charitable giving, and evaluation mode by demonstrating the circumstances in which people are drawn to organizations that demonstrate lower levels of progress. This work provides insight for charities, and crowdfunding sites to nudge funds to where they are needed most using a simple change in presentation format.

Temporal Reframing Boosts Productivity: A Field Experiment

EXTENDED ABSTRACT

Motivating workers to invest sustained effort toward long-term goals is an important challenge for organizations and policymakers. In recent years, behavioral science has succeeded in generating cost-effective nudges to boost performance on "set it and forget it" goals, such as increasing retirement savings and charitable giving (Cronqvist, Thaler, & Yu, 2018; Thaler & Benartzi, 2004; Breman, 2011). However, unlike nudging a one-time choice, productivity requires repeated decisions to allocate effort towards a target while resisting procrastination, avoiding planning errors, and overcoming forgetfulness (Wieber & Gollwitzer, 2010; O'Donoghue & Rabin, 1999; Zauberman & Lynch 2005; Chasteen, Park, & Schwarz, 2001). In the current investigation, we test whether a *temporal reframing* nudge—breaking down large, long-term goals into an equivalent series of smaller, short-term subgoals—can produce sustained increases in productivity.

Prior research has shown that temporal reframing influences one-time financial decisions by reducing the perceived costs of making lump sum payments. For instance, people are more likely to sign up for a savings program framed as setting aside $5 per day than

$150 per month (Hershfield, Shu, & Benartzi, 2020) or to report they would donate $1 per day than $350 per year (Gourville, 1998). We propose that temporal reframing can also durably increase productivity in the field, because smaller subgoals should be seen as more easily achievable, while also making goal progress feel greater, and creating more imminent and frequent deadlines (Bandura & Schunk, 1981; Soman & Shi, 2003; Ariely & Wertenbroch, 2002). On the other hand, temporal reframing of long-term goals might backfire if the immediate reward of achieving a subgoal breeds complacency (Huang, Jin, & Zhang, 2017; Amar, Ariely, Ayal, Cryder, & Rick, 2011). Subgoals also generate more opportunities to fail on any individual goal, and goal violations can lead to degraded performance and even goal abandonment (Soman & Cheema, 2004; Cochran & Tesser, 1996).

To evaluate the potential of temporal framing as a productivity nudge, we conducted a large, pre-registered (https://osf.io/fyhbx/files/) field experiment. We partnered with Crisis Text Line (CTL), a national non-profit organization that provides free crisis counseling via text message. Anyone who sends a text message to CTL's hotline number is connected with a volunteer trained to discuss the issues brought up by the texter, engage in active listening and collaborative problem-solving, and help develop a plan to ensure the texter's safety. Texters use CTL's service for a wide variety of crises, including suicidal ideation, mental health challenges, and abuse. In order to volunteer for CTL, candidates undergo a screening process and 30 hours of web-based crisis counseling and intervention training. They also commit to a goal of completing 200 hours of volunteering within a year. However, as of October 31st, 2019, fewer than 5% of volunteers who had been with the organization for at least a year had met their 200-hour commitment. Our primary aim was to test if temporally reframing the 200-hour annual commitment would durably increase volunteer productivity.

We randomly assigned 9,108 CTL volunteers to three different experimental conditions. In the *4 hours every week* condition (n = 3,037), volunteers received emails encouraging them to reach their 200-hour goal by volunteering "four hours every week." In the *8 hours every two weeks* condition (n = 3,036), volunteers were encouraged to reach their 200-hour goal by volunteering "eight hours every two weeks." Finally, in the *control* condition (n = 3,035), volunteers were encouraged to reach their 200-hour goal by volunteering "some hours every week." Thus, although the two treatment conditions reframed the 200-hour goal into an equivalent series of smaller subgoals, the *control* condition did not temporally reframe the 200-hour goal; it maintained CTL's standard messaging about volunteers' commitment to the organization. Our intervention was delivered through 6 emails, sent over the course of 12 weeks, all via CTL's usual email system for communicating with volunteers.

Our study's primary, pre-registered dependent measure was the average number of minutes a participant volunteered for CTL in a given week during our study period. Compared to the control condition, either version of the temporal reframing treatment produced about an 8% average increase in hours logged on the counseling platform, and this difference was statistically significant. The magnitude of this boost was consistent throughout the 12-week intervention period and did not vary by gender, volunteer tenure, or prior volunteering levels.

This field experiment demonstrates the substantial and durable benefits of temporal reframing on productivity. Our study suggests that temporal reframing is a costless and autonomy-preserving nudge that can be used to substantially increase productivity. Further, our findings contribute to a small but growing literature on the benefits of nudging repeated choices—such as using social comparison in-

formation to reduce energy consumption (Allcott & Rogers, 2014), real-time feedback to promote water conservation (Tiefenbeck et al., 2018), symbolic rewards to boost volunteer engagement (Gallus, 2017), and wage framing effects to increase factory workers' productivity (Hossain & List, 2012). Our field experiment also advances the nascent literature on temporal reframing (Gourville, 1998; Hershfield, Shu, & Benartzi, 2020). Rather than diminishing over time or even backfiring, we document the objective and universal benefits of this simple nudge to boost sustained effort exerted towards goals over a 12-week period.

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The Multifaceted Nature of Gift-Giving: Spanning Multiple Perspectives, Motives, Orientations, and Stages

Chair/Discussant: Julian Givi, West Virginia University, USA

Paper #1: Gifts That Please Many but Are Given by Few: How and Why Consumers Do Not Give Enough Shared Gifts

Julian Givi, West Virginia University, USA
Elanor F. Williams, Washington University in St. Louis, USA

Paper #2: The Effect of Different Gift-Giving Motives on Givers' Well-Being

Ning Chen, Zhejiang University of Finance and Economics, China
Francine E. Petersen, HEC Lausanne, Switzerland
Tina M. Lowrey, HEC Paris, France\

Paper #3: Close, but not Generous: Machiavellians, Reciprocity, and Prosocial Giving

Rajani Ganesh Pillai, North Dakota State University, USA
Sukumarakurup Krishnakumar, KECK Graduate Institute, USA

Paper #4: Broadening the Framework of Gift Giving

Ernest Baskin, Saint Joseph's University, USA
Kunter Gunasti, Washington State University, USA
Michelle Weinberger (Northwestern University, USA

SESSION OVERVIEW

Gift-giving is an important area of study for consumer psychologists for several reasons: Good gifts bestow consumers with lots of happiness and strengthen their relationships with others, while poorly-chosen ones do the opposite (Goodman and Lim 2014; Ruth, Otnes, and Brunel 1999); billions of dollars are spent on gifts each year; and gift-giving research can inform other vital areas of consumer psychology, such as construal level theory (Baskin et al. 2014) and judgment and decision-making (Steffel and LeBoeuf 2014), among other areas. Thus, there are many good reasons gift-giving has recently received increased attention from consumer psychologists (see Galak, Givi, and Williams 2016). Building on prior work in this domain, the manuscripts in this symposium inform and extend the field's understanding of gift-giving and, collectively, highlight the *multifaceted* nature of gift-giving.

Givi and Williams study gift-giving across *multiple perspectives*; that is, across the giver's and the recipient's perspective. In particular, they explore givers' and recipients' preferences for *personal* gifts—those intended to be enjoyed by only the recipient—versus *shared* gifts—those intended to be enjoyed by the recipient and someone else. They find that givers do not give shared gifts nearly as often as recipients prefer, in part because givers hold exaggerated concerns that shared gifts might make recipients feel less special than personal ones, and in part because givers worry that shared gifts violate gift-giving norms.

Chen, Petersen, and Lowrey investigate givers' emotions across the *multiple motivations* for gift-giving. Specifically, they examine the gifting motives of altruism, egoism, and social-norms-compliance, and they find that altruism leads to both the highest level of positive emotions and the lowest level of negative emotions. In other words, whereas previous work shows that recipients' emotions can vary across different situations, this research demonstrates that the same is true for givers.

Ganesh Pillai and Krishnakumar study consumers' charitable gift-giving tendencies across *multiple levels* of Machiavellianism

and closeness (to the organization). They find that givers higher in Machiavellianism give considerably less but that this is moderated by closeness: when givers feel close to the organization, Machiavellianism severely hinders giving, but when they feel distant from the organization, Machiavellianism has little effect on the amount given. Moreover, for givers higher in Machiavellianism, beliefs about the organization's ability to reciprocate amplifies the inhibitory effect of closeness on the amount given.

Baskin, Gunasti, and Weinberger delineate how gift-giving spans *multiple stages*. Specifically, they extend the classis Sherry (1983) model of gift-giving (which included the stages of Gestation, Prestation, and Reformulation) to create a more nuanced model. This expanded model (also) includes the stages of Gift Realization, Secondary Reformulation, and Storage, and thus paints a more complete picture of the gift-giving endeavor.

In summary, these manuscripts (all of which are in the advanced stages) explore novel aspects of gift-giving and, together, illuminate the multifaceted nature of gift-giving. Given the manuscripts' diverse perspectives, this symposium should appeal to a wide audience, including those interested in gift-giving, self-other decision making, norms, motives, emotions, individual differences, multi-method research, and prosocial behavior.

Gifts That Please Many but Are Given by Few: How and Why Consumers Do Not Give Enough Shared Gifts

EXTENDED ABSTRACT

Most gifts are given to one specific person. But despite having singular recipients, the items that consumers receive as gifts are often enjoyed by multiple people: a mug can be used by anyone who needs a hot drink, a candle makes a room welcoming for everyone, and so on. Our research expands on existing work on giver-recipient asymmetries (Galak, Givi, and Williams 2016) by exploring gift givers' and gift recipients' preferences for *personal* gifts—those intended to be used by only the recipient—versus *shared* gifts—those intended to be used by both the recipient and someone else. Specifically, we show that givers do not give shared gifts nearly as often as recipients prefer. Further, we demonstrate that this occurs because givers hold exaggerated concerns that shared gifts might make recipients feel less special than personal ones, and because givers worry that shared gifts violate gift-giving norms.

Studies 1A-C were initial examinations of givers' and recipients' preferences for personal versus shared gifts. In Study 1A, participants imagined being either the giver or the recipient of a birthday gift between them and a hypothetical friend. They indicated their preference between a *personal* gift of a set of eight "solo" passes for classes at a gym (to be used only by the recipient) and a *shared* gift of a set of four "buddy" passes (to be used by the recipient and a different friend). In Study 1B, participants thought of an actual friend and considered either giving or receiving a birthday gift. They indicated their preference between a *personal* gift of a high-quality cocktail glass that would be customized with the recipient's initials and a *shared* gift of a set of two average-quality cocktail glasses, where one would be customized with the recipient's initials and the other with the recipient's significant other's initials. In Study 1C, participants again thought of an actual friend and considered either giving or receiving a birthday gift; however, their choice of gift was

consequential such that some participants' choices were realized. They chose between a *personal* gift of a set of three glasses (cocktail, stemless wine, beer) that would be customized with the recipient's initials and a *shared* gift of a set of two glasses (both wine), where one would be customized with the recipient's initials and the other with the recipient's significant other's initials. Across the three studies, givers gave the shared gift less often than recipients preferred (Study 1A: Giver = 32% vs. Recipient = 48%, *p* =.007; Study 1B: Giver = 64% vs. Recipient = 80%, *p* =.005; Study 1C: Giver = 37% vs. Recipient = 57%, *p* = .001).

Study 2 examined the reasons for givers' hesitance to give shared gifts and tested whether givers might be more likely to give shared gifts to recipients to whom they feel especially close. Participants considered exchanging either a *personal* cocktail glass or a *shared* cocktail glass set as a birthday gift with a real friend, one they either felt close to, or one they felt less close to. Participants also indicated the extent to which each gift would make the recipient feel special and violate gift-giving norms (*1 = Not at all, 7 = Very much*). We created difference scores for each measure by subtracting ratings for the personal gift from ratings for the shared gift. Givers gave the shared gift less often than recipients preferred (Giver = 54% vs. Recipient = 74%, *p* < .001). The difference scores suggested that this occurred in part because givers overestimated the extent to which the shared gift would make the recipient feel less special compared to the personal gift (M_{giver} = -.79 vs. $M_{recipient}$ = -.26, *p* = .002, mediation CI$_{95\%}$ = [-.97, -.19]), and in part because givers held a stronger opinion than recipients that the shared gift would violate gift-giving norms (M_{giver} = +.49 vs. $M_{recipient}$ = -.12, *p* < .001, mediation CI$_{95\%}$ = [-.52, -.06]). Giver-recipient closeness did not affect the results.

The previous studies used the recipient's birthday as the gifting occasion. When it comes to birthdays—and many other gift-giving occasions, such as Mother's Day, retirements, and so on—the occasion is celebrating one, specific person: the recipient. But certain other gift-giving occasions celebrate both the recipient and someone else, so making the individual recipient feel special is unlikely to be a giver's top priority. For example, a giver contemplating what to give to a married friend as a housewarming gift is likely to have both people in the couple in mind, even if the giver's friend is the only member of the couple who will actually receive the gift. Moreover, for these sorts of occasions, shared gifts are, presumably, more the rule than the exception, so givers' concerns about violating gift-giving norms should not apply. To that end, Study 3 tested whether givers' choices are more aligned with recipients' preferences when the gift-giving occasion celebrates more than just the direct recipient of a gift. Participants again considered exchanging either a *personal* cocktail glass or a *shared* cocktail glass set as a gift; however, some imagined that the gift was a *birthday* gift, whereas others imagined that it was a *housewarming* gift (i.e., the recipient and their significant other moved into a new home; in neither case would the recipient's significant other be present when the gift was given, eliminating this potential confound). In the birthday context, givers gave the shared gift less often than recipients preferred (Giver = 42% vs. Recipient = 59%, *p* = .006), but in the housewarming context, givers and recipients were equally likely to opt for the shared gift (Giver = 82% vs. Recipient = 84%, *p* = .757).

In conclusion, our work adds to the gift-giving literature by identifying a new dimension on which gifts can be categorized, demonstrating a novel giver-recipient asymmetry in preferences for gifts, and shedding light on the psychological mechanisms that contribute to this mismatch.

The Effect of Different Gift-Giving Motives on Givers' Well-Being

EXTENDED ABSTRACT

Gift giving is a positive social exchange between donors and recipients (Sherry 1983) that reinforces relationships (Caplow 1982; Lowrey, Otnes, and Ruth 2004; Otnes, Lowrey, and Kim 1993; Ruth, Otnes, and Brunel 1999). Prior research has focused on factors influencing givers' purchases, as well as the relationship between givers and recipients (Cleveland et al. 2003; Fischer and Arnold 1990; Laroche et al. 2000; Otnes et al. 1993; Saad and Gill 2003; Vanhamme and De Bont 2008). We investigate how giving motivations affect givers' well-being.

An integrative theory of gift-giving motivations (Wolfinbarger 1990; Wolfinbarger and Yale 1993) based on previous work (e.g., Goodwin, Smith, and Spiggle 1990; Sherry 1983) reveals three distinct motives. The **altruistic motive** maximizes the recipient's welfare; it does not aim at gain and voluntarily does good (Batson and Shaw 1991; Leeds 1963). The **egoistic motive** maximizes the giver's own welfare; it aims at garnering social recognition, reinforcing relationships, and establishing status. The **social-norms-compliance** motive maximizes obeying social obligations, including reciprocity and ritual. We will compare these three motives.

Individuals get emotional benefits from spending money on others (Dunn, Aknin, and Norton 2008, 2014). However, we examine the possibility that different motives underlying the same prosocial behavior such as gift giving might produce different implications for givers' well-being.

First, we expect that an altruistic motivation will bring givers happiness. Evidence shows that both gift giving, in particular, and prosocial behavior, more generally, affect happiness (Aknin, Barrington-Leigh, et al. 2013; Aknin, Dunn, et al. 2013; Aknin, Dunn, and Norton 2012; Aknin, Hamlin, and Dunn 2012; Dunn et al. 2008; Dunn, Gilbert, and Wilson 2011; Elliott, Friston, and Dolan 2000)survey data from 136 countries were examined and showed that prosocial spending is associated with greater happiness around the world, in poor and rich countries alike. To test for causality, in Studies 2a and 2b, we used experimental methodology, demonstrating that recalling a past instance of prosocial spending has a causal impact on happiness across countries that differ greatly in terms of wealth (Canada, Uganda, and India. Emotional benefits exist even when giving is anonymous, going beyond social rewards (Frey and Meier 2004).

Second, we expect that a social-norms-compliance motive will not increase happiness to the same extent. When people's helping behaviors emanate from self-imposed or external pressures, the subjective well-being associated with these actions is eliminated (Konrath 2014; Weinstein and Ryan 2010).

Finally, we expect that an egoistic motivation might produce mixed emotions. Given that the motive itself is to obtain personal gain, givers might experience positive emotions. But egoistic givers might be less happy than altruistic givers. Recalling an altruistic (other-focused) helping behavior or prosocial spending led to higher levels of positive affect compared to recalling an egoistic (self-focused) behavior or personal spending (Aknin et al. 2011; Wiwad and Aknin 2017). Moreover, any positive emotion may be tainted by the simultaneous experience of negative emotions related to feelings of lower moral character (Wiwad and Aknin 2017) or other psychological costs associated with egoism (Crocker, Canevello, and Brown 2017)

We present three experiments examining givers' emotions as a consequence of giving with three manipulated motives. We focus on

the aspect of well-being that refers to a balance between positive and negative emotions (Diener 2000; Kahneman, Diener, and Schwarz 1999). This is the emotional component of hedonic well-being (Diener 2000; Kahneman et al. 2004; Kahneman and Deaton 2010)

In study 1, participants ($N = 117$, $M_{age} = 28.29$) read a hypothetical scenario in which they buy a gift for a co-worker's birthday. In a between-subjects design, the giving purpose was described as making the co-worker happy (altruistic and pure altruistic, where giving was anonymous), reinforcing the identity as a "team player" (egoistic), or as expected by officemates (social norm). Then, we measured happiness (i.e., happy, cheerful, thrilled, excited; $\alpha = .92$). Results revealed a significant effect of gift-giving motives on givers' happiness ($F(3, 113) = 3.88$, $p = .011$; $M_{pure\ altruism} = 4.50$, $M_{altruism} = 3.91$, $M_{egoism} = 3.65$, $M_{sn} = 3.31$). Post-hoc tests showed significant differences between pure altruism versus egoism ($t(60) = 2.51$, $p = .015$), and pure altruism versus social norm ($t(60) = 3.71$, $p < .01$). These results suggested that pure altruistic/altruistic motives led to greater happiness than egoistic/obeying-social norms motives.

In study 2, motives were manipulated as in study 1 ($N = 156$, $M_{age} = 30.02$). We measured happiness and self-conscious negative emotions (i.e., guilty, regretful, remorseful, ashamed; $\alpha = .93$). Results revealed that motives significantly influenced givers' happiness ($F(2, 153) = 6.36$, $p < .01$; $M_{altruism} = 4.66$, $M_{egoism} = 4.31$, $M_{sn} = 3.80$) and negative emotions ($F(2, 153) = 4.85$, $p < .01$; $M_{altruism} = 2.60$, $M_{egoism} = 3.44$, $M_{sn} = 3.30$). Post-hoc tests showed significant differences in happiness between altruism versus social norm ($t(105) = -3.65$, $p < .01$), and egoism versus social norm ($t(103) = -1.91$, $p = .059$), suggesting altruistic/egoistic motives had positive effects on happiness. The significant differences in negative emotions were between altruism versus egoism ($t(102) = -2.71$, $p < .01$), and altruism versus social norm ($t(105) = -2.50$, $p = .014$), suggesting that altruism produced the lowest level of negative emotions.

In study 3, participants ($N = 161$, $M_{age} = 22.65$) read the same scenario. We again measured participants' happiness and self-conscious negative emotions. We found a significant main effect of motives on givers' happiness ($F(2, 158) = 7.44$, $p < .01$; $M_{altruism} = 5.09$, $M_{egoism} = 4.54$, $M_{sn} = 4.01$) and negative emotions ($F(2, 158) = 4.93$, $p < .01$; $M_{altruism} = 1.52$, $M_{egoism} = 2.19$, $M_{sn} = 2.05$). Post-hoc tests showed significant differences in happiness between altruism versus egoism ($t(108) = 2.06$, $p = .042$), and altruism versus social norm ($t(104) = 3.98$, $p < .01$). Post-hoc tests also showed significant differences in self-conscious negative emotions between altruism versus egoism ($t(108) = -2.93$, $p < .01$), and altruism versus social norm ($t(104) = -2.72$, $p < .01$), again suggesting that altruism led to the lowest level of negative emotions.

The results suggest that gift-giving motivations affect givers' emotions differently. Altruism produces the highest level of positive emotions, but the difference, especially with egoism, is not so striking, and egoistic giving also makes givers happy. However, altruism is also associated with the lowest level of negative emotions, while egoism produces a high level of negative emotions. Thus, from a broader perspective, altruism has the greatest positive impact on hedonic well-being via positive and negative emotions.

Close, but not Generous: Machiavellians, Reciprocity, and Prosocial Giving

EXTENDED ABSTRACT

Consumers spend money on others in at least two ways, gifts to others and donations (Dunn et al. 2008). In this paper, we investigate consumers' donations to organizations, which is a specific form of prosocial giving. Giving money as donations is often considered altruistic and prosocial (Batson 1998). However, not all prosocial giving is altruistic (Simpson and Willer 2015). Sometimes people give to prosocial causes to increase utility to themselves (e.g. build relationships, increase self-esteem, be recognized for their actions; Hilbert and Horne 1996). We examine how Machiavellianism, defined as a tendency to distrust, engage in manipulative behaviors, and gain control (Dahling, Whitaker, and Levy 2009), influences donations. Machiavellianism has been associated with greater concern for maximizing self-benefits (Sakalaki, Richardson, and Thepaut 2007), lower likelihood of helping others (Wolfson 1981), lower interest in developing closer relationships (Lyons and Aitken 2010), and greater engagement in pretend altruism in the presence of others (Bereczkei, Birkas, and Kerekes 2010). Therefore, we predict that consumers with high Mach tendencies will donate less. High-Machs could use donations as a strategic tool to build relationships and to advance self-interests. Therefore, high-Machs will donate less to organizations that are closer to them because there is less utility that can be derived by donating more when they already share a close relationship.

To use donations as an effective strategy to advance high-Machs' self-interest, they would also need to perceive the receiver's ability to reciprocate. Higher ability of the receiving organization to reciprocate may signal to high-Machs that there is a low need for donations and their generosity would be perceived as less impactful. Therefore, we argue that the giver's beliefs about ability of the receiving organization to reciprocate further interacts with Machiavellianism and relationship closeness to influence donations.

Therefore, we hypothesize:

Hypothesis 1: Consumers with higher Machiavellianism will spend lesser on donations.

Hypothesis 2: Consumers with higher Machiavellianism will spend significantly lesser amounts of money on donations when they have a close relationship with the receiving organizations than they would if they had less close relationships with the receiving organizations.

Hypothesis 3: Hypothesis Consumers with higher Machiavellianism will spend lesser money on donations when they have a closer relationship with the organization, and when they believe that the receiving organization is able to reciprocate their donation than when they have less close relationship, and have lesser belief in its reciprocity ability.

Study 1

73 (54.93% female; 81.43% Caucasian; $M_{age} = 21.07$ years) undergraduate students responded to measures in two study sessions separated by seven days. Participants were offered a chance to win $20 gift card in return for participation. In the first session, participants responded to a 16-item Machiavellian Personality Scale ($\alpha = .86$; MPS; Dahling et al. 2009) and demographics. During the second session, we manipulated respondents' closeness by asking them to think and write about an organization that was close to them (versus not close). To measure giving, we asked them to indicate the amount of money they would be willing to give to this organization.

H1 was tested by conducting a regression analyses with donation-spending as DV, and Machiavellianism as predictor. Results (β_{Mach} = -.35; p = .00) confirmed that Machiavellianism was negatively related to spending on donations.

To test H2, we conducted a moderated regression analyses with donation-spending as the outcome, Machiavellianism as the predictor, and closeness condition as the moderator. Results ($\beta_{Mach*closeness}$ = -.26; p = .02) showed that Machiavellianism inhibited spending on donations more in the high closeness group (β_{Mach} = -.60; p = .00) than in the low closeness group (β_{Mach} = -.08; p = .63). Results held after controlling for household income.

Study 2

To further investigate the effects of Machiavellianism and closeness, and to potentially uncover the reasons behind the contingencies observed in study 1, we recruited 134 non-student consumers (59.7% female; M age = 46.27 years; full time workers). As in study 1, the MPS (α = .89) measured Machiavellianism. Participants named any organization they have interacted with and were then indicated their closeness by using a single item measure that schematically represented the relationship between themselves and the organization as circles 1 = no overlap between circles (minimal closeness) to 7 = complete overlap (extreme closeness; Aron, Aron, and Smollan, 1992). Spending on donations was measured similar to study 1. Finally, to investigate whether the closeness-contingent effects of Machiavellianism on donation-spending was further dependent on the giver's beliefs of the ability of receiving organization to reciprocate, we measured reciprocity ability (2 items; α = .88).

H1 was further replicated in this study because Machiavellianism negatively affected spending on donations (β_{Mach} = -.17; p = .05). H2 was also replicated in this sample as our results ($\beta_{Mach*closeness}$ = -.29; p = .00) showed that Machiavellianism inhibited donation-spending more strongly when closeness was higher (β_{Mach} = -.48; p = .00) than when closeness was lower (β_{Mach} = .11; p = .38).

H3 was tested by a three-way moderated regression analyses with donation-spending as the dependent variable, Machiavellianism as the predictor, and both closeness and reciprocity ability as moderators. Our results ($\beta_{Mach*closeness*reciprocity\ ability}$ = -.20; p = .03) showed that the patterns by which Machiavellianism interacted with the reciprocity ability beliefs of the giver differed between the consumers who experienced lower closeness ($\beta_{Mach*reciprocity\ ability}$ = .18; p = .13) and higher closeness ($\beta_{Mach*reciprocity\ ability}$ = -.21; p = .14). A follow up analyses revealed that especially when consumers experienced higher closeness with the organization they noted, a higher belief in reciprocity ability further amplified the inhibitory effects of Machiavellianism on donation-spending compared to when they had lower reciprocity ability beliefs.

Discussion and Conclusions

In sum, our results show that Machiavellianism has generally inhibitory effect on prosocial giving. While this could be expected, our results also suggest that closeness can further exacerbate the inhibitory effect of Mach on donations. Further, we also showed that consumers belief of the organization's ability to reciprocate also exacerbates the effects of Mach and closeness. This paper highlights prosocial giving of Machiavellian consumers and the not-so altruistic conditions of their giving.

Broadening the Framework of Gift Giving

EXTENDED ABSTRACT

Gifts are tools for symbolic communication. Through gifts, givers try to reconfigure and reinforce their social relationships (Belk 1979; Camerer 1988) and status positions (Caplow 1982; Joy 2001). The foundational Dyadic Gift Giving Model, developed by Sherry (1983) almost four decades ago, details the gift giving process. It describes how givers first think about and select gifts during the Gestation stage. They then present them during Prestation, which is followed by the Reformulation stage where dyads reevaluate their relationships in the context of the gifts. While the Dyadic Gift Giving Model has a catch-all substage of disposal at the end of the process that includes everything from using the gifts to throwing them away, the model does not delve into the details of these essential recipient activities. Recipients' extended engagement with gifts after they receive them is crucial, yet this is not included as a conceptually important and distinct process in existing dyadic gift models.

In this conceptual paper, we argue that while the Dyadic Gift Giving Model established important steps in the gift-giving process, it is not complete. When someone receives a gift, their experience in the gift process often has just begun. Their role as a recipient is activated as they convert the gift into a usable experience -- redeeming the gift card, wearing the sweater, using the toy, or making plans to attend the concert -- which are consequential for the success of the gift and the social relationship that the gift is meant to reinforce. Yet most gifting theory neither conceptualizes these components of the recipient experience nor the important relationship reformulation work that occurs throughout the recipient's engagement with the gift, despite evidence that this is fundamentally important in the gift process. This project introduces the Extended Dyadic Gift Giving Model adding three new multidimensional stages, bringing important conceptual clarity to the dyadic gift process. It contributes to the literature by detailing the important role of recipients, who can be more involved with the gift than givers. In doing so, it opens up new conceptual terrain for future cultural and psychological research.

The Extended Gift Model

While the drama of the giver presenting the gift to the recipient and the initial reaction to the gift is important for reformulating the dyadic relationship (Wooten and Wood 2004), consumer research on dyadic gift process tends to stop around this point, even when the recipient's perspective is analyzed (Ruth, Otnes, and Brunel 1999). However, for the recipient, the journey with the gift has just started. We briefly summarize the new stages added by our model that capture this recipient experience.

Gift Realization

Gift Realization begins where the original Dyadic Gift Giving Model (Sherry 1983) tapers off: after relationship reformulation. It has three components: Secondary Gestation, Phenomenological Experience, and Dispossession. Recipients do not necessarily go through all of these substages, but they all go through at least one. Rather than following a unidirectional path from giver to recipient, the process is more dynamic.

Secondary Gestation. Some gifts such as gift cards, experiential gifts, and gifts needing assembly require transformation, a secondary stage of gestation after the gift is received but before the gift can be used; recipients must put in thought and effort to convert the gift into a usable form. For instance, a gift card recipient accepts a plastic

card in prestation, but the giver intends for it to be converted into a usable item or experience.

Phenomenological Experience. A centerpiece of our model is the phenomenological experience. This is the portion of recipient engagement where the gift is used. During this time, the recipient extracts value from the gift through engagement with it. For instance, a child who receives Legos as a gift builds a village on the table one week and then transforms it to a train station in their bedroom the next, constructing time and time again. Or, the recipient of a cookie making kit gathers their family to bake and then they eat the cookies together, the sweater recipient wears it through several seasons, a gifted painting is placed on the wall to be seen, the recipient of show tickets experiences the show.

Dispossession (with and without use). Gift dispossession occurs when the gift no longer belongs to the intended recipient in its intended form. Prototypically, dispossession occurs either without use and with use. Without use occurs at the beginning of the Gift Realization stage. They might dislike the gift or giver, it might be a duplicate, or it might be broken. The recipient might choose to return, exchange, donate, swap, sell, throw away, destroy, regift, or reject it. Dispossession can also occur with use when some value has been extracted or it is accidentally destroyed.

Storage

Some gifts are neither used immediately nor disposed of, instead they are put in a place where they are not engaged with. Storage can be a transition stage between engagement and dispossession, but an item might also remain in the stage indefinitely.

Secondary Reformulation

Initial reformulation typically occurs based on surface knowledge of the gift - unwrapping it and seeing it in its package, touching the fabric, or imagining how one might use the gift card. However, the secondary reformulation stage occurs after the gift has been experienced in some way. It is through this period that relationship realignment occurs as the affective reaction to the gift shifts or it simply reaffirms the relationship and status roles through use.

Factors Impacting the Process

Consumer research shows tremendous variation in people's enactment of the stages in the original Dyadic Gift Giving Model. How people experience the additional stages will also likely vary based on several variables. We focus on social and gift-related variables that likely influence recipients in each stage . Ultimately, this extended model opens up novel arenas for cultural and psychological research on gift giving.

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Black Consumers: Understanding Experiences of Race in the Marketplace

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Paper #1: Light vs. Dark: Understanding the Roles of Colorism through Advertisements in the Marketplace

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Paper #2: I Got Beef, But You Don't: Understanding the Difference in Stereotype Perceptions in Media amongst Targeted African Americans

Takisha Toler, Stevenson University, USA
Nakeisha Lewis, University of St. Thomas, USA
Eric Rhiney, Webster University, USA

Paper #3: Black 'Joy and Pain': Finding Solace and Resistance in Live Music During COVID-19

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SESSION OVERVIEW

Culture is an accepted factor in understanding and explaining consumer behaviors. Race, as one cultural component of the lived experience, is understood to be a factor in influencing consumer experiences, yet there remain opportunities to plomb the nuanced experiences of race in the marketplace. Recent scholarship explores some of the nuanced experiences and creates additional opportunities to examine how race influences consumption.

The theme of the conference, 'What the World Needs Now,' is addressed in this session examining Black consumers in the U.S. marketplace and their experiences with racism and discrimination. In the 1960s and 1970s, the examination of Black consumers was typically viewed relative to experiences of whites in the marketplace. More recently, scholars consider a range of positive and negative marketplace experiences had by Black consumers (Cowart, 2018; Foy & Ray, 2019; Green, 1999; Mitchell 2020). Building on prior scholarship, the three papers in this session consider the experience of Black consumers. Collectively, these papers contribute nuance to explanations of race and its impact on consumer experiences. Further, the increasing energy and focus to understand and address racism requires a broader understanding of the various ways that racism may be experienced by Black consumers in the marketplace as well as some mechanisms Black consumers may employ to manage experiences of racism.

Each of the three papers considers consumer interactions with the marketplace where the first two focus on print advertisements and messages within them, and the third considers the transformation of challenges into opportunities to experience joy. The first paper is based on an ethnography that examines colorism in market messages, and in particular print advertisements. In the paper 'Light vs. Dark: Understanding Roles of Colorism through Advertisements in the Marketplace' the phenomenon of 'Blackfishing' is examined. Though colorism is not new, 'Blackfishing' provides opportunities for direct (e.g., advertisements) and indirect (e.g., influencers) forms of racism and discrimination to propagate. In the second paper, 'I Got Beef, But You Don't: Understanding the Difference in Stereotype Perceptions in Media amongst Targeted African Americans,' stereotypical messages centering on single Black parent households is the focus. Through experimental studies examining the relationship between stereotyped Black female (e.g., subservient) or Black male (e.g., athletic) and pur-chase intentions. The third paper titled 'Black 'Joy and Pain': Finding Solace and Resistance in Live Music During COVID-19' is a critical analysis of the 'Verzuz' phenomenon using netnographic techniques. The study considers how in the midst of the global pandemic, an entertainment form was birthed that transformed experiences of denied humanity and associated pains into collective joy and resistance for Black consumers.

Each of these studies has a link to systemic racism that seeps into the lived experiences of Black consumers in the U.S. marketplace, and perhaps the world when considering the African diaspora. While the studies do not necessarily provide answers on how to address systemic racism, they do shed light on its impact. And collectively, these studies offer a bit of what is needed now: an understanding of humanity as experienced by others.

Light vs. Dark: Understanding the Roles of Colorism through Advertisements in the Marketplace

EXTENDED ABSTRACT

Advertisements communicate through symbols represented in images and text (Scott 1994). Those images include individuals, which may be assessed on various dimensions including skin tone. Colorism is a form of discrimination that results in privilege or lack thereof because of one's skin tone and is found in advertisements (Mitchell 2020; Walker 2005). The study examines the role of colorism in the marketplace.

Colorism may be found in advertisements where models of different skin tones are presented as representative product users. Actions that could be viewed as colorism are found in most cultures, and consumption is often found in support of such actions. For example, the preference for lighter skin in other communities has been apparent given the types of products used for skin lightening. Although products such as skin whitening creams have health risks, interest in these products increases due to the pressure of beauty standards (Adbi et al. 2021). The literature provides examples of how consumers depend on products to maintain a favorable status in society that impacts them emotionally.

Lighter skin tones have been favored by members of many ethnicities and cultures and have often been associated with positive connotations in society, while darker skin tones have been portrayed negatively (Cowart 2018; Foy & Ray 2019; Harrison 2005; Mitchell 2020). Conversations surrounding light and dark skin tones in the Black community can be traced to slavery. More specifically, enslaved people assigned work roles based on skin tone (lighter-skinned slaves as house workers and darker-skinned slaves in the fields), and enslaved women were often raped resulting in mixed race enslaved children who may receive preferential treatment based on skin tone (Reece 2018). Such colorism is found in marketing mediums and specifically in print advertisements. Prior research finds that the skin tone of models varies depending on if ads are targeting Black or White consumers, however most models in those ads have lighter complexions (Mitchell 2020). Similarly, the degree of a consumer's ethnic identification also influences receptivity to the skin tone of models. Research finds that the stronger a consumer's ethnic identification, the more positive the evaluations of advertisements featuring darker-skinned individuals (Green 1999, Cowart and Lehnert 2018).

Colorism is evident in advertisements, yet a phenomenon has emerged on social media that reflects colorism. This phenomenon, 'Blackfishing,' is derived from 'blackface' which encompasses a range of temporary visually transformative racist acts that were prevalent during the Jim Crow era (Brundage 2011). 'Blackfishing' is the use of market offerings (from cosmetics such as bronzers and tanning sprays to digital alteration, or even cosmetic surgery) to alter one's appearance to that of a Black or a mixed-race individual (Bell 2019). The preference for darker skin by lighter-skinned individuals has been found in literature (Veras 2016), and 'Blackfishing' encompasses the acts associated with this preference. The prevalence of 'Blackfishing' with models and celebrities in print advertisements and on social media (Kowalczyk & Pounders 2016; Osarogiagbon 2020), is likely to spur consumer outrage.

The present study aims to examine the prevalence of colorism in the form of 'Blackfishing' and how those roles influence consumption. More specifically, this study will examine: 1) How individuals perceive of their skin tone?, 2) How does self-perceptions of skin tone influences consumer behaviors?, 3) How has the existence of 'Blackfishing' influenced consumers' perceptions of print and social media advertisements?; and, 4) To what extent does ethnic identification extent to which 'Blackfishing' influences consumption?

This ethnographic study extends themes found in extant literature on colorism and focuses on understanding how consumers experience 'Blackfishing.' Various sources of data will be employed in this analysis. Data collected through interviews focuses on consumers' experiences of 'Blackfishing' and how those consumers may participate in 'Blackfishing.' As this phenomenon is evident from Asian cultures, American cities, to African villages, individuals from various backgrounds are included in the study. A content analysis of print magazines targeted to Black and White audiences will be included (Mitchell 2020) as will publications targeted across different classes of consumers. Further, to gain a broader range of experiences of 'Blackfishing,' a netnography will be conducted in online communities found on Facebook, Twitter, Tik Tok, and Instagram (Kozinets, 2020).

Preliminary themes emerging from the data suggests an extension on prior research. More specifically the themes include the introduction to colorism during childhood as a part of socialization, emotional impacts of colorism that influence the consumption experience, and how colorism impacts the symbols emerging from print advertisements the importance of the connection between ethnic identity and print advertisements. Prior research identifies roles for colorism in marketing. It is anticipated that the study will extend findings related to 'Blackfishing' in print advertisements and contributes an explanation of how consumers' perceptions and experiences of colorism in the marketplace have evolved over time.

I Got Beef, But You Don't: Understanding the Difference in Stereotype Perceptions in Media amongst Targeted African Americans

EXTENDED ABSTRACT

Fact: A majority of black children lived in single-parent homes (NCES, 1996). However, the stereotypical nature of the depiction of a single black mother and children in an advertisement leads to great debate within the black community. Several print and television advertisement produced in recent years have attempted to depict this phenomenon by utilizing single-parent images in targeted marketing campaigns (KFC, 2007). As a result of this and similarly targeted advertising, thousands of debates among consumers are being produced, with the concern that these images perpetuate stereotypes of minority consumers. While some participants of these debates feel that these depictions are accurate representations of the targeted populations, others feel that these images continue to reinforce negative stereotypes in the minority community.

The key to understanding these disagreements lies in the examination of consumer self-concept. Understanding the multidimensionality of self-concept (Sirgy, 1981, 1982; Heath and Scott, 1998) in the context of minority targeted advertising will increase ad effectiveness for practitioners and reduce the perceived perpetuation of stereotypes among minority consumers. As suggested by Hunt (2007), the discipline of marketing has a responsibility to practitioners, the discipline, society, and its students. A deeper consideration of negatively perceived advertising will not only reduce the separations that exist within society but will allow for an improved image of the discipline.

Several studies have examined the perpetuation of minority stereotypes in both print and television advertising (Paek and Shah, 2003; Donovan and Leivers, 1993; Taylor and Stern, 1997; Colfax and Sternberg, 1972), as well as the general portrayal of minorities in the media (Henderson and Baldasty, 2003; Mastro and Greenberg, 2000; Green, 1999; Mahtani, 2001; Mastro and Stern, 2003). However, none have examined the way in which self-concept can influence the likelihood that advertising is perceived as negative, or stereotypical. Therefore, this study will address the questions: Do some individuals consider an image stereotypical while others do not? Do perceptions of stereotypes vary by racial group? And, do perceptions of stereotypes within advertisements negatively influence consumer purchase intentions? We address these questions and attempt to determine if these perceptions can be used to understand purchase intentions. In addition, this study will utilize the Racial-Ethnic Self-Schema (RES) model (Oyserman, et al., 2003) and provide a quantitative analysis that explains the perceptions and purchase intentions of minority consumers following perceived negative self-relevant activations in advertisements.

An exploratory pilot was completed in order to assess the spokesperson characteristics of race, gender and role of the stereotypical scenarios prior to the creation of ads. The first vignette is female-specific and takes place at a cosmetic counter of a department store. The second is male-specific and takes place on a basketball court. The purpose of the scenarios was to describe an advertisement in which the characters are positioned in situations to prime for either high or low stereotypical profiles. We have developed the following pretest Hypothesis:

Hypothesis 1: *Blacks will view the female-specific ad in which the black woman is in a servitude position as more stereotypical than the ad in which she is being served.*

Hypothesis 2: *Blacks will view the male-specific ad in which the black man is dunking the basketball as more stereotypical than the other two ads.*

One-way ANOVAs were computed comparing the level of perceived stereotype of blacks in gender specific advertisements among African-American respondents. A significant difference was found in the ads ($F(5,26) = 3.85$, $p < 0.05$) when comparing the perceptions of stereotype among African-American females in advertisements featuring women. A significant difference was also found in the ads ($F(5,26) = 10.71$, $p < 0.05$) when comparing the perceptions of stereotype among African-American males in advertisements featuring men.

This analysis will contribute to the advertising and marketing literature by demonstrating that a multi-level approach is necessary to prevent the occurrence of perceived stereotypes and to predict product purchase intentions among targeted consumers. Additional-

ly, we examine how development of a Racial-Ethnic Self Schema is used to moderate the effects of stereotypes displayed in the marketplace, specifically advertising. RES Schema (developed in 4 structures) allow some consumers to reduce the anxiety associated with negative stereotype portrayals in advertising, thus allowing them to cope with the stresses of a marketplace inundated by colonially regurgitated tropes.

Black 'Joy and Pain': Finding Solace and Resistance in Live Music During COVID-19

EXTENDED ABSTRACT

In the African American community, the novel coronavirus and enduring racial discrimination has spawned a double pandemic (Blake 2020; Addo 2020). Statistics recently released by the Centers for Disease Control (CDC 2020) underscore how COVID-19 and racism are intersecting and further exacerbating the corporeal well-being of Black people in the United States. The CDC reports that the odds of a Black person contracting and dying from COVID-19 are more than double that of a White person, and their chance of hospitalization is nearly five times higher. The CDC links these significant discrepancies in health outcomes to discrimination and systemic racism. Explicitly discussing how the health of African Americans and other marginalized ethno-racial groups is adversely impacted by structural forms of racism found in healthcare, education, criminal justice, housing, and banking. Additionally, more than eighty municipalities across the United States, have officially declared racism a public health crisis, and many local hospital systems and school districts are starting to follow suit (Mock 2020). As such, society appears to be ready to acknowledge that while viruses (like SARS-CoV-2) may not discriminate based on race, they circulate within a culture that does, resulting in greater impacts on communities of color.

However, rather than focus on the despair that African Americans must contend with while living within a double pandemic, this study critically examines the ways in which Black joy materializes within the confines of a racialized global health crisis. We do so, because as Johnson (2015) notes, "… [B]lack joy allows us the space to stretch our imaginations beyond what we previously thought possible and allows us to theorize a world in which white supremacy does not dictate our everyday lives" (p. 180). Black joy has also been characterized as a site of resistance and self-care. Both Brooks (2020) and Packnett (2017) evince the way in which choosing joy while navigating the perils of racial oppression is a powerful form of self-preservation and resistance.

The myriad manifestations of denied humanity Black people endure daily is often conceptualized as all-consuming – leaving zero space for joy to manifest, but perhaps the framing of pain and joy requires an ontological shift when considering the lived Black experience. Perhaps, as West (2010) suggests, the two should be situated as coexisting rather than contradictory constructs. Such a reframing may allow us to (re)conceptualize Black joy as more than momentary reprieves from racial oppression to an ongoing and conscious practice of self-care and embodied resistance that emerges in the company of Black pain.

We attempt to develop such a conceptualization by directing our attention to what was once largely characterized as a quotidian aspect of social life – the consumption of live music. The global onset of COVID-19 in early 2020 and the extensive mitigation procedures that followed led to a near complete shutdown of the live music industry. In the U.S., lockdowns prohibited live music performances, leaving the industry decimated and millions of music lovers stuck at home without a key outlet of self-care and stress release (Blistein and Millman 2020). In response, Swizz Beatz and Timbaland, two veteran African American music producers launched Verzuz live battle sessions on Instagram Live in late March 2020. Verzuz battles consist of two comparable music artists from Black music traditions, primarily hip hop and R&B, who play approximately 90-seconds of 20 songs from their music catalog in an alternating fashion during a three-hour live virtual session. Each battle is streamed on Instagram TV, with Apple Music/TV simulcasting the events from July 2020 to March 2021. The start-up social media platform Triller replaced Apple Music/TV as a simulcast partner after Verzuz was acquired by the platform in March 2021.

Although the live digital series is referred to as a battle, Verzuz leans more toward a "friendly competition" largely rooted in nostalgia. Most artists eschew playing new material in favor of long-loved classics. A virtual space of shared intimacy emerges as artists play and offer behind-the-scenes accounts associated with cherished songs from their music catalog as viewers openly recollect and share fond memories that accompany each song. Timbaland identifies the series as a celebration (Leight 2020). While not explicitly stated as such, the fact that the series has only featured Black artists thus far and most viewers (which often reaches into the millions) appear to also be Black, indicates that the series is a celebration by and for Black people. Neither artists nor Verzuz producers are paid for participating and organizing the battles, choosing a more altruistic purpose for the digital franchise -- Timbaland states "the money is the love that we get from the people" (Cochrane, 2020).

In this study, we examine how the Verzuz series offers a virtual space wherein Black joy is collectively constructed. We conduct a netnographic inquiry, an ethnographic approach to gaining consumer insights when studying online communities (Kozinets 2002, 2010). We employ the technique of "lurking", which is an unobtrusive observation technique where researchers gather data without making themselves known to the community members (Kozinets 2010), potentially rendering richer and more authentic data. To date, the researchers have recorded several Verzuz live performances and collected Twitter and Instagram posts using relevant hashtags or replies to the performance posts on Instagram. Utilizing a critical visual reading and discourse analysis framework, data is currently being coded and interpreted using Dedoose, a web-based data analysis platform. While our analysis remains ongoing, preliminary findings suggest Verzuz's may indeed be viewed and utilized by its viewers as a trusted source of Black joy. During the height of the coronavirus, this notion was encapsulated in a viewer's posting to Instagram after the Teddy Riley versus Babyface event:

> *"Whether you're grooving with DJ DNice on #ClubQuarantine, jamming to a Teddy Riley #verzuz Babyface battle, expressing yourself on Tik Tok with #DontRushChallenge videos, or binge watching #BlackAF and #InsecureHBO, do what you gotta do to protect your peace and find your #Blackjoy during these uncertain times. Laughter is good for the soul, and self-care fuels the movement. ♡ ❤ ✋"* – *theequityalliance*

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Variations in Consumer Responses to Waste and Disposal

Paper #1: Waste Not: Paid Repair Services Decrease Product Replacement by Signaling Unused Utility
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Paper #2: When Waste Aversion Overcomes Impatience: The Impact of Product Quality on Consumption Deferral
    Grant E. Donnelly, The Ohio State University, USA
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Paper #3: It's Wasteful: When Talking about Product Disposal Hurts Product Evaluations
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Paper #4: Trashing Products to Signal Displeasure
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SESSION OVERVIEW

Waste and disposal have generated much interest across consumers, marketers, and public policy makers. Various brands are promoting ways in which consumers can dispose of their products with reduced environmental impact, and several countries have launched initiatives and campaigns on how to throw away products more responsibly and reduce waste (Allen 2020; Carrington 2020). Scholars have also found that consumers' waste aversion influences their purchase, usage, and disposal decisions (Alba and Bolton 2012; Bellezza, Ackerman, and Gino 2017; Sun and Trudel 2017). This session addresses this important topic by examining various meanings consumers derive from waste and disposal at different stages of the consumption cycle.

Allred and Winterich will start the session by examining how consumers' wasteful tendency to replace rather than repair their broken products can be mitigated. The authors find that paid repair services (especially when offered by the original equipment manufacturer vs. a third-party repair provider) lead consumers to repair their product as the service signals that there are unused utility left in the broken product. Therefore, sensitizing consumers to potential waste influences their decisions to dispose of their products.

Next, Donnelly and Brough demonstrate how waste aversion influences consumers' usage decisions in terms of consumption timing. They show that consumers are willing to wait longer to consume higher (vs. lower) quality products because higher-quality products are perceived to be overqualified for ordinary usage occasions. In doing so, this paper identifies perceived overqualification as a condition in which waste aversion delays product usage.

Chang and Agrawal then examine how people draw waste inferences from thinking about product disposal at the acquisition stage. Due to consumers' association between disposal and wastefulness, consumers evaluate a product to be more wasteful when they consider disposal in evaluating a product, and this wastefulness perception decreases their purchase likelihood. This occurs even though the disposal reference is irrelevant to the actual sustainability of the product, and the paper shows how the disposal-waste association can be mitigated.

Extending the discussion of how consumers derive meaning from disposal, Brough and Isaac explore how disposal can be used to signal displeasure. They find that when disposing of products with negative (vs. positive or neutral) sentimental value, consumers prefer trashing (vs. donating or selling) their products even for those with market value, and this is due to symbolic fit (the ability of a disposal

method to uniquely express sentimental value). Given that trashing products with remaining value is wasteful, this paper has implications for waste reduction.

Overall, the four papers provide insights on how consumers conceptualize waste and disposal, which influences their decision-making at various consumption stages. The first three papers tackle how meaning of waste and waste aversion impact consumers' disposal, consumption, and acquisition decisions, and the last paper addresses what disposal decisions signal to consumers. These findings not only contribute to the consumer literature by expanding our understanding of what waste and disposal mean to the consumers but also provide important implications for businesses, society, and the environment in reducing waste and promoting sustainability.

Waste Not: Paid Repair Services Decrease Product Replacement by Signaling Unused Utility

EXTENDED ABSTRACT

When a product breaks, consumers must decide whether to repair or replace the broken product. While repairing broken products is a better option for the environment, given it takes fewer resources than producing a new product, consumers tend to replace broken products (confirmed in a pilot study for headphones, shoes, toasters, and jackets). Such replacement tendencies likely increase consumption and thus resource use. Indeed, examining Google search data, we found states that have higher search on repair keywords (e.g., "repair", "repair shop") have lower consumption (per the US Bureau of Economic Analysis). Thus, initial evidence suggests promoting product repairs may lead to more sustainable consumption by decreasing product replacement.

The prominence of disposal over repair seemingly contradicts the notion that consumers are generally averse to waste (Bolton and Alba 2012). Past research suggests that some consumers are reluctant to replace products through upgrading because of the remaining utility in the products they own (Cripps and Meyer 1994; Okada 2001). In these cases, consumers seem to be aware of the unused utility in the possession, which makes it wasteful to replace. However, given consumers' perceptions of planned obsolescence in product design (Guiltinan 2009), consumers may no longer tend to infer that utility remains when a product is broken. As such, consumers may not perceive the decision to replace their product as wasteful, thereby allowing consumers to replace rather than repair products without experiencing any aversion to being wasteful. Yet, today, there a growing number of companies offering paid repair services for their products (Suntinger 2019). For example, Apple has paid repair services for their electronics, as does Patagonia for their clothing.

We suggest that when companies offer paid repair services, they signal that their broken products have unused utility in a similar manner that warranties have been shown to signal product quality (Boulding and Kirmani 1993). We hypothesize that company repair services decrease consumers' likelihood to replace broken products due to an increased perception of unused utility signaled by the original equipment manufacturer's (OEM) repair service. However, we theorize that the ability to signal unused utility in broken products is specific to the OEM's paid repair service; the local tailor or third-party computer repair shop does not indicate to customers that their specific product has remaining utility when it breaks. Thus, we predict that the provider of the repair service will moderate the effect such that OEM repair services will decrease replacement likelihood to a greater extent than third-party repair services.

In Study 1, Mturk participants were told about a fictional small kitchen appliance company that offered paid repair services or cooking course services (control) for their products. After imagining that they had purchased a toaster from the company, which broke after two years of use, participants reported their likelihood of replacing the toaster. As predicted, participants who were exposed to the repair service condition were less likely to replace their toaster than were those exposed to cooking courses in the control condition. This finding provides initial evidence that the presence of repair services decreases consumers' likelihood to replace broken products.

Study 2 investigates whether the repair service provider moderates the effect of repair services on consumers' replacement likelihood and also tests the mediating role of unused utility. Undergraduate students were randomly assigned to one of four conditions in a 2 (service: repair, music streaming[control]) x 2 (provider: OEM, third-party) between-subjects design. Participants read an article about a fictional headphone company that offered either repair or music streaming services. They imagined their headphones from the OEM had recently broken and indicated their likelihood of replacing their broken headphones as well as how much utility remained in their broken headphones. In the OEM provider condition, participants were less likely to replace their headphones when the OEM offered a repair (vs. music streaming) service. However, in the third-party condition, replacement likelihood was high and did not differ by services offered (repair vs. music streaming). Perceptions of unused utility were greater when the OEM offered a repair service but did not differ based on the service provided by the third party, mediating the effect of repair service on replacement likelihood only in the OEM condition. These findings indicate that OEM-provided repair services increase perceptions of unused utility in broken products, decreasing replacement likelihood.

Study 3 further supports the role of unused utility by manipulating length of use prior to breakage (i.e., unused utility). Undergraduate students imagined that they owned a pair of headphones that had broken after either 9 months (high unused utility) or 4 years (low unused utility) of use and read about a headphone repair service by either their headphone OEM or a third party. When unused utility was low (4 years of use), participants were less likely to replace their headphones when the OEM offered the repair service. However, when unused utility was high (only 9 months of use), participants had low replacement likelihood regardless of repair service provider.

Last, study 4 examines whether the effect of OEM repair services on replacement can occur through OEM-certification of third-party repair services (e.g., Dell-certified repair technicians at BestBuy). Dell laptop owners recruited through Mturk were randomly assigned to one of three conditions (provider: third-party, OEM-certified, OEM). Participants were asked to imagine that their laptop broke after two years of use and then viewed an advertisement for a laptop repair service offered by a third-party repair company, a Dell-certified repair company, or Dell. Replacement likelihood did not differ between the OEM and OEM-certified conditions, with both of these conditions significantly lower than the third-party condition. Unused utility mediated the negative effect of repair provider on replacement likelihood. Thus, OEM-certifications can enable a third-party repair service to signal unused utility and decrease replacement likelihood.

In sum, consumers' tendency to replace a broken product can be overcome when they perceive the broken product to have unused utility, which can be signaled by the OEM or OEM-certified paid repair services. This research has implications for reducing consumer waste, resulting in more sustainable consumption.

When Waste Aversion Overcomes Impatience: The Impact of Product Quality on Consumption Deferral

EXTENDED ABSTRACT

Consumers routinely decide when to consume products they already possess. For example, after purchasing a bottle of wine, consumers may choose to use it immediately or postpone consumption. Understanding how consumers make decisions about consumption timing is critical because of the effect usage has on other important behaviors such as waste, storage, and repurchase. Consumption timing decisions are a central issue in food waste (Block et al. 2016) contribute to the growth of the self-storage industry (Harris 2020) and can affect the timing of product replacement purchases (Bellezza, Ackerman, and Gino 2017). Despite the importance of decisions about consumption timing, they have been studied less extensively than purchase decisions within the marketing literature.

But how does product quality affect consumption timing? Based on the logic that higher-quality is desirable, one might expect higher-quality products to be consumed before lower-quality products. This prediction is consistent with research on temporal discounting, which suggests that consumers are generally impatient and tend to prefer desirable outcomes sooner even if the reward is smaller (Frederick, Loewenstein, and O'Donoghue 2002). In contrast, we argue that consumers often intentionally defer consumption of higher-quality products and instead prefer lower-quality products for more immediate consumption. We posit that higher-quality products may be perceived as overqualified for ordinary usage, and reserved for special occasions when their premium attributes will not be wasted. We define perceived overqualification as the perception that a particular level of product quality is unnecessary for a given consumption occasion.

Study 1 assigned participants (N=926; M_{age}=38.95, SD=12.34; 56.6% female) to consider a recent purchase (bath salts, champagne, dinnerware). Participants were told that this purchase was premium, or standard. Participants reported how many days they would wait to consume the item. The number of days participants would wait before consuming the product was significantly greater for a higher-quality (vs. lower-quality) product, $F(1,917) = 42.19$, $p < .001$. Participants were also asked to write a few sentences explaining their decision. These rationales were coded to identify whether participants spoke to the product being overqualified (i.e., too special, fancy). More participants expressed that the product was overqualified in the higher-quality (40.2%) vs. lower-quality condition (12.9%, $p < .001$), which mediated consumption deferral (95% CI: 1.68, 6.10).

Study 2 manipulated usage occasion (extraordinary vs. ordinary) and consumption timing: proximal vs. distal). Participants (N=401; M_{age}=41.22, SD=13.30; 52.8% female) were asked to select a wine to share with their partner during a homemade dinner that was a typical dinner or an anniversary dinner that was either taking place in 3 or 10 days. The higher-quality wine was described as costing $49.99 while the lower-quality wine was described as costing $19.99. Participants were asked to select their preference of wine, and then were assessed how overqualified the higher-quality wine would be for the usage occasion. Participants were less likely to select the higher-quality wine for a typical versus an anniversary dinner, $F(1,383) = 290.25$; $p < .001$ and no main effect for consumption timing was observed, ($p = .93$). There was also no significant interaction by usage occasion and consumption timing, ($p = .41$), suggesting that the consumption deferral effect is more sensitive to usage occasion than the duration of a delay. Usage decisions was mediated by perceptions that the premium wine was overqualified for a typical dinner (95% CI: 1.54, 2.45).

Study 3 assessed whether consumption deferral of a higher-quality product would be attenuated when the possibility of wasting it through non-use was made salient by bounded consumption (i.e., the product would expire). Participants (N=417; M_{age}=39.29, SD=11.98; 55.8% female) imagined having two gift cards: one card to a high-end restaurant and another to a standard restaurant. In the bounded condition, participants learned that the gift cards would expire in the next seven days, while expiration was not mentioned in the unbounded condition. Participants indicated the likelihood of using each gift card in the next seven days. When consumption was unbounded, the consumption deferral effect was replicated and participants were significantly less likely to use the gift card to the high-end versus standard restaurant; $t(129) = 4.57$, $p <. 001$, but this difference was attenuated when both cards expired in seven-days; $t(185) = .49$, $p = .62$.

Study 4 assessed real consumption behavior nd whether emphasizing quality differences moderated the consumption deferral effect. Students (N=245; M_{age}=20.31, SD=2.13; 52.2% female) completed two tasks: solving long-division math problems and writing a thank you letter to a professor. Two stacks of paper were placed on the student's desk: one stack of lower-quality paper and one stack of higher-quality paper. In the high-emphasis condition labels were present that labeled the paper as low and high quality, whereas in the low-emphasis condition no labels were present. The likelihood of deferring consumption of the premium paper was examined in a binary logistic regression with three independent variables: usage occasion (math vs. letter), quality emphasis (high vs. low) and their interaction. There were significant main effects of usage occasion (Wald = 55.69; $p < .001$) and quality emphasis (Wald = 5.50; $p = .019$) as well as a significant interaction between usage occasion and quality emphasis (Wald = 45.22; $p < .001$). When quality differences were emphasized, the consumption deferral effect observed in earlier studies was replicated such that significantly fewer participants used the higher-quality paper for the math task (16.7%) versus the thank-you letter task (55.0%). In contrast, when quality differences were not emphasized, the consumption deferral effect was attenuated and participants were equally likely to use the higher-quality paper for the math task (46.0%) versus thank-you letter task (50.0%).

This research finds evidence that consumers postpone consumption of higher-quality products because they are perceived to be overqualified for ordinary usage occasions and identifies important boundary conditions (bounded consumption, quality emphasis). While prior work suggests that waste aversion should promote product usage, we identify perceived overqualification as a condition in which waste aversion delays product usage. This distinction highlights the potential for wastefulness to occur during earlier stages of the products life and not only at the time of disposal.

It's Wasteful: When Talking about Product Disposal Hurts Product Evaluations

EXTENDED ABSTRACT

Current research advances the understanding of disposal and waste by investigating how referencing disposal in describing a product influences consumers' product evaluations. Extending past disposal research that focused on consumers' product disposal decisions as outcomes (Trudel and Argo 2013; Trudel, Argo, and Meng 2016), our research examines how talking about product disposal at acquisition influences consumers' willingness to purchase the product by way of affecting product's wastefulness perception.

We propose that consumers associate disposal with waste considerations, and therefore when they consider disposal in evaluating a product, they will perceive the product to be higher on wastefulness. This effect occurs even though descriptions of disposal are irrelevant to the actual wastefulness of the product. We also argue that this heightened wastefulness perception mediates the link between disposal reference and product evaluations. That is, references to product disposal at the time of acquisition will lead to a higher wastefulness perception, which in turn leads to a lower purchase likelihood. We further test how this heightened wasteful perception can be mitigated by examining conditions under which this disposal reference effect is likely to occur and how to mention disposal without hurting product evaluations. Adding to prior research that has examined how an attribute drives consumers' perception of greenness of a product (Gershoff and Frels 2015) or associations eco-friendliness of a product has (Brough et al. 2016; Luchs et al. 2010), we examine whether disposal as it relates to a product influence perceptions of how wasteful a product is.

Study 1 (disposal reference vs. control between-subjects design; N = 400) provided initial support for our prediction that descriptions of disposal lead to higher wastefulness perception. Participants were asked to view descriptions of a product (a computer mouse) and write about their thoughts related to the product. In addition to the product descriptions participants in the control condition saw, those in the disposal condition were reminded to remove the batteries when disposing the mouse, descriptions which do not bear any meaningful implications for sustainability of the focal product. Then participants were asked to rate how wasteful the product is (1 = not at all, 9 = very much). The results indicated a significant effect of condition on wastefulness perception, with those in the disposal condition ($M = 4.50$, SD = 2.36) more likely to perceive the mouse as wasteful compared to those in the control condition ($M = 3.59$, SD = 1.94), $F(1, 398) = 17.52$, $p < .001$.

Study 2 (disposal reference vs. control between-subjects design; N = 398) replicated study 1 findings with a different product category (a backpack) and demonstrated the downstream consequence of wastefulness perception on purchase likelihood (1 = not likely at all, 7 = very likely). Results indicated that compared to those in the control condition, participants in the disposal condition perceived the backpack to be more wasteful, $F(1, 396) = 15.32$, $p < .001$, and indicated a lower likelihood of purchasing the backpack, $F(1, 396) = 14.41$, $p < .001$. Additionally, wastefulness perception mediated the link between disposal and purchase likelihood, $B = -.20$, SE = .07, 95% CI: -.34, -.08 (Hayes 2017, model 4). That is, descriptions of product disposal led individuals to perceive the backpack as more wasteful, which in turn decreased their likelihood of purchasing it.

Study 3 (disposal reference vs. control between-subjects design; N = 400) examined when this association between disposal and wastefulness would likely occur. At the beginning of the study, participants were asked to indicate expected product usage length (i.e., how long they typically use a product) for various product categories including the focal category of the study, backpack. Then they evaluated the backpack in terms of how wasteful and eco-friendly the product is and their purchase likelihood. Results indicated a significant interaction effect of condition and expected usage length on eco-friendliness index, $B = -.01$, SE = .004, $t = -2.10$, $p < .05$. For individuals who expected to use the product for a longer period of time, descriptions of disposal in evaluating a backpack led them to view the product as less eco-friendly, replicating our disposal reference effect. But for individuals who expected to use the product shorter, referencing disposal in product descriptions did not have an effect on eco-friendliness perception of the backpack. Moderated mediation analysis using the condition as IV, expected usage length as moderator, eco-friendliness perception as mediator, and purchase likelihood as DV yielded significant results (Hayes 2017, model 8).

Study 4 (disposal reference vs. control vs. recycle reference between-subjects design; N = 601) demonstrated how to mitigate the negative effect of talking about disposal on product evaluations by increasing the eco-friendliness of the disposal method mentioned. In addition to the two conditions described in study 1, those in the recycle condition were presented with a similar piece of information as those in the disposal condition, but were instead instructed to remove and recycle the batteries. Again, there is no real implications about the actual eco-friendliness of the product, but there was a significant effect of condition on wastefulness perception, $F(1, 598) = 3.02$, $p < .05$. Post hoc analysis revealed that those in the disposal condition rated the product to be higher on wastefulness compared to those in the control condition, as well as those in the recycle condition, Fisher's LSD: both ps $< .05$. However, there was no difference between control and recycle conditions, Fisher's LSD: $p > .05$, indicating that whereas reference to general product disposal led to higher wastefulness perception, mentioning recycling attenuated this effect.

Across four studies, we document a novel effect of how referencing disposal as part of product information hurts product evaluations by increasing wastefulness perception. Our research makes theoretical and practical contributions; we extend the product disposal literature in demonstrating an instance of how disposal thoughts influence consumer decisions before the disposal phase, enrich work on sustainability by showing how consumers draw inferences about wastefulness of products, and sensitize marketers to be careful in talking about disposal due to its potential negative consequences on product evaluations.

Trashing Products to Signal Displeasure

EXTENDED ABSTRACT

When disposing of products, particularly those with market value, consumers often prefer to sell or donate them (Jacoby, Berning, and Dietvorst 1977). In this research, we argue that consumers sometimes deliberately select the disposal method of trashing (e.g., throwing away, burning, shredding) in order to provide an active and emphatic signal to oneself and/or others. Specifically, we argue that trashing symbolically conveys displeasure, particularly when the trashed product could have been sold or donated instead. Because it is costly, trashing products with remaining value (rather than disposing of them in a way that preserves their residual utility) can uniquely express displeasure by representing the symbolic destruction of the people, memories, or ideas associated with the trashed product. As such, we posit that the preference for trashing should be relatively stronger for products with negative (vs. positive or neutral) sentimental value.

We attribute this increased preference for trashing products with negative sentimental value to *symbolic fit*, which we define as a match between a specific disposal method and its ability to express a specific sentiment. We propose that because disposal methods differ in their ability to uniquely express sentimental value, consumers' preferred disposal method will be influenced by a product's sentimental value. To the extent that consumers desire to symbolically make a point to others or send a message to themselves through the disposal of a product with negative sentimental value, the unique ability of trashing to express displeasure provides the greatest symbolic fit, resulting in an active and emphatic signal that alternative disposal methods cannot convey as effectively.

We further argue that one downstream consequence of trashing (rather than selling or donating) an item with market value will be a change in perceived identity. Building on the notion that a particular disposal method is often chosen strategically, our claim is that the use of a particular disposal method may influence the way that one is perceived. We argue that consumers choose specific disposal methods to manage identity, and that perceived identity may be influenced by even a single act of disposal that is intentionally selected for its ability to signal displeasure.

Study 1 examined the extent to which a product's positive versus negative sentimental value affects disposal method preferences. A total of 380 participants were asked to think of a product that they had previously owned but decided to dispose of. Participants were either told that the product should have positive or negative sentimental value. After explaining why the item had positive/negative sentimental value, participants indicated how they disposed of it. As expected, participants were relatively more likely to trash a product with negative rather than positive sentimental value (43.4% vs. 27.6%; $\chi^2(1) = 10.27$; $p = .001$. In contrast, participants were relatively less likely to donate a product with negative rather than positive sentimental value (41.9% vs. 58.0%; $\chi^2(1) = 9.80$; $p = .002$. No significant difference was observed in the likelihood of selling (13.1% vs. 13.3%); $\chi^2(1) = .001$; $p = .97$.

Study 2 tested whether the effect of negative (vs. neutral) sentimental value on disposal method preferences would be mediated by symbolic fit. A total of 402 participants imagined owning a watch that was a gift from a friend whom they had not seen in a while. Those in the negative sentimental value condition learned that their last encounter with the friend involved a "heated argument." Participants indicated their likelihood to trash and to donate the watch. To measure symbolic fit, participants rated the extent that each disposal method served as a signal to themselves and others. To assess relative disposal method preference, we subtracted participants' likelihood to trash the watch from their likelihood to donate the watch. We observed a significant main effect of sentimental value ($F(1, 398) = 4.89$, $p = .028$) on disposal method preference, such that trashing was relatively more likely when the sentimental value of the watch was negative ($M = +1.73$, $SD = 53.31$) versus neutral ($M = +11.69$, $SD = 37.00$). Results of a mediation analysis (Hayes 2017, model 4) showed that the indirect effect of sentimental value (negative vs. neutral) was mediated by the symbolic fit from trashing ($B = -1.99$, $SE = 1.07$; 95% CI: -4.41, -.27) but not donating ($B = -1.61$, $SE = 1.36$; 95% CI: -4.57, .85).

Study 3 examined the consequences of disposal method on perceived identity. A total of 524 participants learned that a baseball player on their friend's favorite team had signed with another team. Participants were informed that their friend had either shredded, donated, or sold this player's baseball card. Subsequently, participants assessed the strength of their friend's perceived identity as a baseball fan. A one-way ANOVA confirmed that perceived identity differed by condition ($F(2, 521) = 5.04$, $p = .007$). Perceived identity as a baseball fan was greater after trashing ($M = 89.60$, $SD = 12.90$) versus selling ($M = 84.58$, $SD = 14.78$; $t(521) = 3.06$, $p = .002$) or donating ($M = 85.89$, $SD = 17.92$; $t(521) = 2.26$, $p = .024$) the card. There was no difference in perceived identity between the sell and donate conditions ($t(521) = .80$, $p = .43$).

This research identifies conditions under which consumers seek to trash identity-relevant possessions that could instead be sold or donated. We show consumers are not only *willing* to trash identity-related products that have market value, but sometimes actively *seek* to do so in order to communicate displeasure. Because trashing (vs. donating or selling) is a disposal method that uniquely expresses displeasure, trashing provides a symbolic fit with negative sentimental value that sends an active and emphatic signal of displeasure more effectively than alternative disposal methods. Additionally, whereas prior research has focused primarily on identity as an antecedent of disposal (Trudel et al. 2016; Trudel 2019; White et al. 2019; Dunn

et al. 2020), we investigate identity as a consequence of disposal and show how preferences for a specific disposal method can affect perceived identity.

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Lay Beliefs on Time and Timing

Chair: Libby Chun, Erasmus University Rotterdam, Netherlands
Discussant: Gal Zauberman, Yale University, USA

Paper #1: Time Will Fly During Future Fun (But Drag Until Then)

Gabriela N. Tonietto, Rutgers University, USA
Eric VanEpps, University of Utah, USA
Selin A. Malkoc, The Ohio State University, USA
Sam J. Maglio, University of Toronto, Canada

Paper #2: Prospective Duration Neglect: the Effect of Duration Information on Procrastination

Libby Chun, Erasmus University, Netherlands
Christophe Lembregts, Erasmus University, Netherlands
Bram Van den Bergh, Erasmus University, Netherlands

Paper #3: Hot Streak! Inferences and Predictions about Goal Adherence

Jackie Silverman, Lerner School of Business, University of Delaware, USA
Alexandra Barasch, Stern School of Business, New York University, USA
Deborah Small, The Wharton School, University of Pennsylvania, USA

Paper #4: The Real Momentum Effect

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Luxi Shen, The Chinese University of Hong Kong, Hong Kong

SESSION OVERVIEW

People perceive time subjectively. Time perception is nonlinearly scaled with respect to objective time (Read, 2001; Zauberman et al. 2009), and it is vulnerable to certain features of the event (e.g., the peak and the end; Fredrickson and Kahneman, 1993). When judging the continuation of a trend like winning, people are sensitive about the timing of the positive outcome (Gilovich, Vallone, and Tversky, 1985). Although there is much work documenting how time is perceived and how these perceptions affect consumer experiences, there are still many questions regarding how such experiences are adjusted in accordance with lay beliefs about time (e.g., length, speed) and timing (e.g., recency). The four papers in this session explore theoretical and practical questions regarding these lay beliefs about time and timing. For example, what is the role of valence in judging time before and during an event? What about attention? Will paying more attention to time information affect your task commitment? How does the recency of a streak affect people's perception of the self? Do people update their belief about the continuation of success when there is a pause?

The first paper by **Tonietto, VanEpps, Malkoc, and Maglio** demonstrates that event valence affects prospective expectations of how quickly or slowly time will pass during, until the onset, and until the offset of future events. They show that consumers hold the lay belief that time will drag until but fly by during positive future events, and vice versa for negative future events. While this belief about event valence may motivate people to postpone an aversive task, the second paper by **Chun, Lembregts, and Van den Bergh** proposes that explicit attention to duration information can affect procrastination. They show that irrespective of the origin of the information (i.e., externally provided or internally generated), having this numeric information leads people to predict a lower likelihood of procrastination and to increase task completion. The second set of papers then consider lay beliefs on the streak of success. In the third

paper, **Silverman, Barasch, and Small** demonstrate that people make more optimistic predictions about goal adherence following a recent streak of goal-consistent behaviors (versus other patterns with the same overall rate). This occurs because a recent streak signals a greater commitment to the goal. Lastly, **Weingarten and Shen** look to predicting streak continuation of others. They demonstrate that people predict a lower likelihood of streak continuation when an actor takes a break as people believe that the actor's skill does not grow over the break but can grow with continuous actions.

Altogether, this session speaks to the conference theme of self-care by deepening our understanding of how time is perceived or used in judgments and by providing insights on how consumers can better use the time to enrich their lives. The papers are all at an advanced stage of development, having completed at least four or more studies. This session should appeal to researchers and practitioners who are interested in time, intertemporal choice, judgment and decision-making, self-control, and goals.

Time Will Fly During Future Fun (But Drag Until Then)

EXTENDED ABSTRACT

Consumers commonly consider how long the time *during*, until the *onset*, and until the *offset* of future events feel. In the present research, we examine the role of event valence in each of these judgments and propose that consumers tend to perceive positive (vs. negative) future events as particularly short and distant.

Consumers want positive events to last and engage in tactics to prolong enjoyment (Chun, Diehl, and MacInnis, 2017). They also want good things to arrive soon (Balcetis and Dunning, 2010). Consistent with motivated reasoning (Kunda, 1990), these preferences could lead consumers to judge positive events as particularly long and near. However, consumers also hold the lay theory that "time flies when you're having fun" (Gable and Poole, 2012; Sackett et al., 2010), which could color prospective judgments to the extent that consumers expect for the future what they have experienced in the past. Thus, consumers may conclude that time *will* fly throughout future fun. Because lay theories can produce contrast effects when making relevant comparisons (Mukhopadhyay and Johar, 2005), consumers judging that time will fly during future positive events may contrastingly think time will drag during the time beforehand (and vice versa for negative events). Thus, an account based on lay theories predicts that positive future events will feel particularly short and distant.

Appraisals of the distance to the ends of events can be formed via a mental integration of the time prior to and during events. Our lay theory account predicts contrasting perceptions prior to and during future events, which could cancel each other out (based on relative effect sizes) such that the ends of positive and negative events could feel similarly distant. Further, the combination of subjectively distant onset and subjectively short duration could lead the beginnings and ends of positive events to feel equally distant from the present, thus eliminating the duration of future positive events in the mind's eye. Four studies test these propositions.

An initial Pilot Study investigated how long people perceived the duration until and during the Thanksgiving holiday. The more positively participants felt about Thanksgiving, the longer the time

until (r=.128, p=.041), but the shorter the time *during* Thanksgiving felt (r=-.141, p=.016).

Study 1 followed a 3(valence: positive, negative, neutral; between-subjects) x 2(time point: beginning, end; within-subjects) mixed design. Participants considered the upcoming weekend that was either expected to be positive, negative, or neutral and indicated how far away the beginning and the end of the weekend felt (0=very near, 100=very far). We found the predicted interaction. The beginning of the positive event felt significantly farther away than the negative event ($M_{positive}$=74.37, $M_{negative}$=52.31, p<.001). The neutral event fell in-between and significantly differed from both ($M_{neutral}$=66.32, both ps<.01). There were no differences in perceived distance to the ends of events ($M_{positive}$=73.34, $M_{negative}$=68.37, $M_{neutral}$=71.82, all ps>.11). To examine the perceived time *during* the event, we compared how far the end of the event felt to its beginning. As expected, the end of the negative (p<.001) and neutral event (p=.024) felt significantly farther away than its beginning. However, no such difference emerged for the positive event (p=.67). By participants' *own ratings*, the positive event seemed duration-less. Thus, relative to a neutral event, positive events feel farther and shorter, while negative events feel closer and longer.

Study 2 tested the mediating role of expected temporal progression in a 2(valence: positive, negative; between-subjects) x 2(time point: beginning, end; within-subjects) mixed design. Participants considered a scheduled weekend trip that was either expected to be positive or negative and indicated perceived distance to the beginning and to the end of the trip. Then, participants indicated how time would pass until and during the event (1=definitely drag on, 7=definitely fly by). Replicating Study 1, the beginning of the positive versus negative trip felt significantly farther away ($M_{positive}$=68.84, $M_{negative}$=39.60, p<.001), and there was no difference in perceived distance to the trips' ends ($M_{positive}$=63.84, $M_{negative}$=67.58). Once again, the end of the negative event felt significantly farther than its beginning (p<.001), but this was not the case for the positive event (p=.15). Looking next at expected temporal progression, time was expected to pass more slowly *prior to* the positive versus negative event ($M_{positive}$=2.82, $M_{negative}$=4.16, p<.001), but more quickly *during* the positive versus negative event ($M_{positive}$=6.51, $M_{negative}$=3.58, p<.001). Thus, participants expected time to drag before, but fly during positive events (and vice versa for negative events) and these expectations mediated the observed effects on time perception.

In the final study, we tested our process by directly measuring perceived duration and using a moderation approach, whereby our observed effects should be exaggerated for participants who chronically endorse the "time flies when you're having fun" lay theory. The study followed a 2(event valence: positive, negative; between-subjects) x 2(timeframe: until, during; within-subjects) x belief in the lay theory (measured) design. Participants read that they would watch two five-minute-long videos back-to-back. The second video was described as either positive or negative to serve as the valenced event, while the first video served as the preceding interval. Participants indicated how long both the first (until timeframe) and second (during timeframe) videos felt like they would last (0=very short, 100=very long). Lay beliefs were measured via agreement with four statements (e.g., "time flies when you're having fun," α=.73). Conceptually replicating prior studies, participants expected the first video to feel longer when it constituted the time until the beginning of a positive versus negative event ($M_{positive}$=58.27, $M_{negative}$=39.45, p<.001). Conversely, the time during the second video was expected to feel shorter when that event was positive versus negative ($M_{positive}$=39.78, $M_{negative}$=75.50, p<.001). The three-way interaction was also significant (p<.001) such that for both timeframes, greater

chronic endorsement of the lay theory exacerbated the observed effects of valence on perceived duration.

Investigating the role of event valence, we find that the beginning of positive events feels farther away, while the end of positive and negative events can feel similarly distant. Additionally, positive events feel prospectively shorter—so much so that their beginnings and ends can feel similarly distant from the present.

Prospective Duration Neglect - the Effect of Duration Information on Procrastination

EXTENDED ABSTRACT

Procrastination is widely recognized. Think about needing to reply to students' emails or calling a doctor for an appointment: these tasks are often and consistently delayed because the cost of completing them today appears larger than doing them later (Shu and Gneezy, 2010; Zauberman and Lynch Jr, 2005). In this present research, we investigate the role of task duration information (i.e., 5 minutes for a call) and propose that procrastination is, at least in part, caused by inattention to task duration.

It is well-documented that in a retrospective evaluation of an experience (e.g., colonoscopy), people inaccurately factor in the duration of the experience. Instead, the peak, at which one experiences most pain, and the end, when one is released from it, correlate more strongly with the global evaluation of the experience (Fredrickson and Kahneman, 1993; Redelmeier and Kahneman, 1996). While it was shown that increasing duration sensitivity decreases present bias (Read et al., 2005; Zauberman et al., 2009), it has not been documented that making task duration salient decreases procrastination.

To gain initial insight into whether people neglect duration in procrastination decisions, we ran a two-part preliminary study. In Part 1, we collected reasons (e.g., unpleasantness, internal motivation) for procrastinating from 100 Mturkers and had two independent judges (r=.75) rate how much each reason concerned task duration (-3: nothing to do with duration, +3: everything to do with duration). In Part 2, we asked another 100 MTurkers to rate how important task duration is in procrastination (1: not at all important, 7: very important). We found that people considered duration to be an important factor when asked explicitly (M_{dur}=5.22, SD=1.46, t(99)=8.35, p<.001) although naturally generated reasons for procrastination did not concern duration (M_{dur}= -2.36, SD=1.43, t(427)= -34.2, p<.001). This shows that people may not think of task duration when procrastinating despite valuing it highly.

We tested whether making task duration salient decreases procrastination in 5 studies. In Study 1 (N=451), participants were assigned to read one of three vignettes with (v. without) task duration information: writing an email, making a dentist appointment, or submitting a tax form. They were asked to predict procrastination likelihood using 3 items (e.g., "how likely are you to further delay calling the doctor": 1 – not at all, 7 – very much). We found that providing task duration information decreased people's own prediction of procrastination (M_{absent} = 4.10, $M_{present}$=3.51, F(1, 445)=10.22, p=0.001) irrespective of the context.

In Study 2, we tested the effect of duration salience on procrastination in a field study with participation in an online charity event as a behavioral measure. Of the 100 MTurkers who saw the event announcement, 85 committed to participate either on the same day as the registration or a week from the registration. We sent the link to the event on their chosen dates of participation. Those in the duration information (v. control) condition read (did not read) in the invitation email that the event would take about 3 minutes to complete. Running a binary logistic regression on event completion, we found that

those in the duration salient condition (v. control) procrastinated less on the event and completed it on the chosen date (*b*=1.19, *SE*=.55, *z*(83)=2.17, *p*=0.030).

Though Studies 1 and 2 document the effect of duration information on procrastination, we made the duration salient by providing the information. This design can raise a concern that people procrastinate less on a task because the provided estimate is lower than their expectation. Studies 3 to 5 address this concern by asking participants to estimate their own duration. In Study 3 (N=404), we assigned our participants to one of three conditions: control, estimating the duration of a focal task (calling a doctor), and estimating the duration of a similar task (calling a hairdresser). Then, people predicted their likelihood to procrastinate on calling the doctor, using items similar to Study 1. We observed that duration salience had a significant effect on procrastination likelihood (*F*(2,401)=13.23, *p*<0.001)). More importantly, compared to control (*M*$_{control}$=4.99), those in the focal task condition (*M*$_{focal}$=4.27, *t*(401)= -3.21, *p*=0.001) and those in the related task condition (*M*$_{related}$=3.85, *t*(401)= -5.09, *p*<0.001) predicted that they would procrastinate less. The results indicate that making duration salient with the same act but in a different context leads people to believe that they are less likely to procrastinate on a task. Study 3 rules out the alternative explanation of expectancy disconfirmation because it uses self-generated estimates for both the focal and similar tasks.

In Study 4 and 5, we tested whether duration information decreases procrastination when the task is more concrete (Study 4) and when there is an upcoming event (Study 5). Study 4 and 5 used the same experimental paradigm as Study 3. For Study 4, we manipulated task concreteness by asking people to list three actions at the start or end of the task (e.g., hanging up the phone). Results showed that duration salience decreases procrastination (*F*(1,416)=5.79, *p*=0.017) as well as concreteness (*F*(2,416)=3.08, *p*=0.047). However, there was no significant interaction effect (*F*(2,416)=0.85, *p*=0.426). For Study 5, we told our participants that there is an event scheduled to happen in an hour. We counter-balanced the order of the information so that participants learn about the calendar event after (before) learning about the task. We found that duration salience decreases procrastination (*F*(1,417)=9.81, *p*=.002) regardless of the presence of an upcoming event (Event: *F*(2, 417)=0.5, *p*=.473; Interaction: *F*(2,417)=.30, *p*=.745).

We argue that people do not naturally factor in task duration in their procrastination decisions. When attention is drawn to it explicitly, however, people are less likely to procrastinate. We believe this is because duration information leads people to focus less on the relative scarcity of the present temporal resource and more on the costliness of the task itself. Studies 5 hints at the possibility of this explanation as duration salience decreased the likelihood of procrastinating despite having an upcoming event, which can make time appear more bounded and shorter (Tonietto, Malkoc, and Nowlis, 2019).

Hot Streak! Inferences and Predictions about Goal Adherence

EXTENDED ABSTRACT

The rise of behavioral tracking (e.g., Fitbits; meal-logging apps) raises questions about how such data informs consumers' beliefs and future behavior. Specifically, this technology highlights sequences of behavior over time, which could affect inferences of commitment. Moreover, beliefs about the likelihood of staying "on track" with goal pursuit likely inform preferences for restricting choice freedom: If consumers believe they are unlikely to stick to an important goal, they will be more likely to employ restrictive goal pursuit strategies (i.e., commitment devices).

Here, we examine how streakiness of past behavior influences consumers' predictions of future behavior. For example, consider two consumers who have a goal of becoming healthier through regular exercise. Imagine that both of them exercised four days in the past week: Consumer A exercised on Days 1, 2, 5, and 7, whereas Consumer B exercised on Days 1, 5, 6, and 7. While both exercised the same amount, only Consumer B exhibits a *recent streak*: A pattern of behavior with a specific action for three or more recent, consecutive opportunities (Carlson and Shu, 2007). Our key prediction is that a recent streak is a signal of goal commitment, which leads to more optimistic predictions regarding goal adherence. We demonstrate this effect in six studies (four preregistered) comparing a recent streak to several different control conditions, across a variety of goal-directed behaviors.

In Study 1, 461 participants read about an individual with a goal of eating healthy. This individual chose between eating fruit or ice cream every evening. All participants were told that the individual had adhered to the goal on three of the last six days and given in to temptation on the other three days, but saw different patterns: the individual either ate fruit on Days 4, 5, and 6 (*recent streak* condition), on Days 3, 4, and 5 (*old streak* condition), or on Days 1, 4, and 5 (*scattered* condition). Participants then predicted whether the individual would eat fruit or ice cream for dessert tomorrow (*r*=-.87) and reported how committed they perceived the individual to be to their goal of eating healthy (4 items, *α*=.89) on 7-point scales.

Participants predicted the individual with a recent streak was more likely to stick to their goal (*M*=3.84) than an individual with an old streak (*M*=3.31; *p*=.002) or scattered pattern (*M*=3.17; *p*<.001). Participants also perceived the individual with a recent streak as more committed to eating healthy (*M*=3.86) than an individual with an old streak (*M*=3.47; *p*=.005) or scattered pattern (*M*=3.34; *p*<.001). Perceived commitment to the goal mediated the relationship between a recent streak (vs. other patterns) and predicted behavior (*old streak:* Indirect effect=.11, 95% CI [.03, .22]; *scattered:* Indirect effect=.17, 95% CI [.07, .29]).

Study 2 (N=376) replicated these effects when participants forecasted their *own* behaviors regarding a different goal: being productive in the morning by waking up on time (versus sleeping in). Specifically, participants who imagined having a recent streak of waking up on time thought they would be more likely to do so (*M*=4.58) than participants who imagined having an old streak or scattered pattern of waking up on time (*Ms*<3.45, *ps*<.001). Participants with a recent streak also thought they were more committed to their goal than participants with other patterns (*ps*<.02).

Study 3 (N=226) examined this effect using another goal (reducing internet use) and a within-subjects design, and explored an important consequence of inferences of commitment: the willingness to recommend a commitment device. Again, participants predicted that an individual with a recent streak was more likely to avoid online activities and perceived them to be more committed to their goal, relative to an individual with an old streak or a scattered pattern (*ps*<.001). Participants were also less likely to recommend the use of a commitment device for an individual with a recent streak (*M*=4.04), relative to an individual with an old streak (*M*=4.36; *p*<.001) or a scattered pattern (*M*=4.46; *p*<.001).

In Study 4, 602 participants read about an individual choosing to stick to their healthy eating goal or not, and that the individual chose to eat healthy on either the last three days (*recent streak* condition) or yesterday (*no streak* condition). To examine the commitment signal mechanism further, we also varied whether the individual's

rate of choosing to eat healthy over the past several weeks was 20%, 50%, or 80%. We predicted that the less frequently an individual has stuck to their goal in the past, the more a recent streak will signal commitment. That is, we expected the effect of a recent streak on predicted likelihood of sticking to a goal would be strongest in cases where the individual has a low overall rate of goal adherence. As predicted, results showed a significant interaction ($F(2, 596)=27.24$, $p<.001$), such that the effect was strongest when the rate was 20% ($M_{recent\ streak}=3.72$ vs. $M_{no\ streak}=2.47$; $p<.001$), followed by 50% ($M_{recent\ streak}=3.82$ vs. $M_{no\ streak}=3.29$; $p=.007$), and reversed for 80% ($M_{recent\ streak}=4.97$ vs. $M_{no\ streak}=5.64$; $p<.001$). Similar effects were found for perceived commitment ($F(2, 596)=10.36$, $p<.001$).

Two additional studies showed that the effect is strongest for predictions regarding self-control dilemmas than for other behavioral predictions. This suggests that perceived commitment impacts inferences beyond more general beliefs about statistics and streaky patterns (e.g., the hot hand fallacy: Gilovich, Vallone, and Tversky 1985). In Study 5 (N=302), participants again predicted an individual with a recent streak was more likely to eat fruit and more committed to their goal than an individual without a recent streak ($ps<.004$). However, these effects persisted to a lesser degree for inferences about a basketball player shooting free throws (*interactions: Fs>3.50, ps<.03*). In Study 6 (N=402), we found this same attenuation when examining inferences within self-control dilemmas (eating fruit or ice cream) versus choices between leisure activities (watching TV or playing video games; *interactions: Fs>7.75, ps<.001*).

In summary, a recent streak signals commitment to a goal, and thus affects predictions that a person will work harder towards their goal. Together, these results shed new light on the significance of streaky behavior for judgment and prediction.

The Real Momentum Effect

EXTENDED ABSTRACT

When do people predict a streak will continue? That is, when do people believe a basketball player continue to make shots, a hockey pro will continue to score goals, and a bridge champion will continue to win hands, and when do people believe the streak will end? Past research suggests that such factors as streak length (i.e., how many shots; Rabin and Vayanos 2010), agency (i.e., control; Oskarsson et al. 2009), felt momentum (Markman and Guenther, 2007), and whether people are winning or losing influence streak perceptions (Briki et al., 2014).

We examine how people predict the likelihood of streak continuation depending on whether actors increase the interevent times between their actions. That is, if actors take a break in the middle of a streak, do people believe they are more or less likely to continue the streak (for similar ideas for the gambler's fallacy, see Gold 1997)? Contrary to an account in which a break might help refocus, refresh, or relax an actor, we find that people believe breaks have a negative impact on perceived likelihood of streak continuation.

We argue that a break might diminish the perceived likelihood of streak continuation by lowering an actor's perceived skill relative to a control condition. That is, when an actor takes a break, they are perceived to not be as skilled as they were had they continued their actions without a break.

In the first preregistered study (https://aspredicted.org/blind.php?x=8r8uy2, N = 247), we demonstrated the basic phenomenon and suggestive evidence of the process. Participants read about a character named Anuj who had thus far made five shots in a row. Participants also completed practice predictions for shots 3, 4, and 5 in which they guessed whether Anuj continued the streak or not (starting a "streak" around three shots in line with prior literature; Carlson and Shu 2007). On the sixth shot, the key dependent measure, participants were randomly assigned to learn Anuj continued shooting (Control) or first took a break (Break). Relative to participants' estimates of whether Anuj would continue the streak on the sixth shot in the control (67.48%), participants in the break condition thought Anuj was less likely to continue his streak (53.23%; $z = -2.28$, $p = .028$). This result operated through beliefs about Anuj's skill on the final shot (95% CI [-.923, -.295]). An earlier preregistered replication (https://aspredicted.org/blind.php?x=vv77af, N = 320) without the measures for mediation found similar results ($z = -4.75$, $p < .001$).

In a second preregistered study (https://aspredicted.org/blind.php?x=ew7e3x, N = 373), we examined whether this pattern was relative to the actions of others. That is, is a break from an actor harmful if others around him or her also take a break? In this study, participants read about a character named Reid who played Shanghai Mahjong who was on a streak of five wins. Participants were randomly assigned to one of three conditions: Reid continued playing (Control), everyone took a break (Everyone Break), or only Reid took a break (Only Reid); all participants predicted whether Reid would win his sixth hand. Whereas everyone taking a break had a negligible impact on Reid's predicted streak continuation relative to control (63.9% in Control vs. 57.02%), when only Reid took a break (31.09%), he did worse relative to Control ($z = -5.10$, $p < .001$) and when everyone took a break ($z = -3.99$, $p < .001$). This result operated through Reid's perceived skill. Another study without mediation evidence replicated the pattern of results (N = 488).

In a third preregistered study (https://aspredicted.org/blind.php?x=6ga7vs, N = 488), we tested whether, instead of "slowing down" with a break, whether "speeding up" would bolster predictive performance with a more continuous performance measure. In this study, participants read about a character named David who sells rainbow cotton candy every other day. After David's most recent day (Day #7), participants are randomly assigned to read that David returned to run his shop on Day #8 (Speed Up), returned on his usual Day #9 (Control), returned a day later than usual on Day #10 (Slow Down), or returned two days later than usual on Day #11. Participants predicted how much money David would make, in $, instead of the binary measures from the previous studies. We find that people predicted David to do worse when returning later than usual on Days 10 ($t = 2.29$, $p = .023$) or 11 ($t = 2.72$, $p = .0068$), but that David only performed directionally worse when returning a day earlier than usual ($t = 1.49$, $p = .137$). This result operated through David's perceived skill as a function of when he came back to run his shop. Another preregistered replication found the same pattern of results without mediation measures (https://aspredicted.org/blind.php?x=mb6f94, N = 437).

Another study (N = 200) examined whether the aforementioned results applied when an actor was doing poorly instead of winning. In this context, David was described to be paying $100 per day of operation but earning less money (Loss), or to be paying $50 per day of operation but earning more money (Gain). We observed a marginal interaction: the aforementioned break effect was found when David was in the gain domain but not in the loss domain.

Finally, we rule out several other alternatives that could also account for the results. First, we ruled out that the break operates through bracketing. That is, one possibility is that a break segments the actor's efforts into multiple sets and resets their performance for the next set (see Yang and Urminsky 2015). To address this concern, we ran a pilot study (N = 280) in which we observed the usual break effect regardless of how Anuj's shots were bracketed in the descrip-

tion. Second, we addressed whether breaks would help when actors are fatigued. In a pilot study (N = 303), when an actor named Yuval was described as fatigued, whether or not he took a break does not help their performance.

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Order Matters: Exploring How Sequential Decision Making Affects Spending

Chairs: Alison Jing Xu, University of Minnesota, USA

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Paper #1: Rating Service Professionals First Reduces Tip Amount in Sequential Decisions

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Alison Jing Xu, University of Minnesota, USA

Maria A. Rodas, University of Illinois at Urbana-Champaign), USA

Paper #2: Brand Loyalty in Response to Stockouts: Sequential Decision Making during COIVD-19

Uzma Khan, University of Miami, USA

Alexander DePaoli, Northeastern University, USA

Paper #3: Procedure Dependence: The Effect of Sequential Resource Allocation Procedures on Variety-Seeking Behavior

Leilei Gao, Chinese University of Hong Kong, Hong Kong

Yan Zhang, National University of Singapore, Singapore

Paper #4: The Deferral Momentum Effect: Choice Deferral in Sequential Decision Making

Tanya Singh, Concordia University, Canada

Caroline Roux, Concordia University, Canada

SESSION OVERVIEW

Literature on sequential decision making shows that when consumers make several decisions in a row, an earlier decision can influence the outcome of the following ones (Dhar, Huber, and Khan 2007; Xu and Wyer 2007; Gao and Simonson 2016; Goldsmith, Roux, and Ma 2017). Much of this research applies a mindset perspective and suggests that making a prior decision may activate a cognitive procedure that carries over to influence how consumers make subsequent decisions (for a review, see Xu and Wyer 2010; Xu and Schwarz 2018). The current session brings together four papers that investigate the effects of sequential decision making on spending in contemporary marketing contexts and document novel processes beyond the mindset explanation.

The first paper, by Chen, Xu, and Rodas, presents the novel finding that rating a service professional first reduces the subsequent tip amount. Drawing from the literature on mental accounting and pain of payment, they suggest that when consumers categorize rating and tipping as different types of rewards in the same mental account, rating first may justify tipping a smaller amount. Therefore, even high ratings can surprisingly lead to smaller tips.

The second paper, by Khan and DePaoli, shows that when facing a stockout of the desired product that consumers planned to purchase, they prefer spending more money to buy an expensive substitute from the same brand as the stockout product rather than switching to a different brand. The authors account for this phenomenon by proposing a model of how disruption affects sequential decision making. When an initial decision to purchase an option is disrupted by an unexpected stockout, consumers exhibit greater brand loyalty, even at the cost of spending more, to repair the disruption-induced negative feeling. The studies were conducted in the novel contexts relating to COVID-19 stockouts.

The third paper, by Gao and Zhang, demonstrates that when people allocate resources unit by unit (e.g., spend the first $1,000, then the second $1,000, … the fifth $1,000, etc.) sequentially to acquire products in different categories, they tend to seek variety and invest in a broader variety of product categories. In contrast, when they focus on deciding how much resources to be allocated to each

product category, they tend to invest in a small number of categories and spend more on each category.

The final paper, by Singh and Roux, identifies a novel deferral momentum effect that curbs spending. They find that engaging in one choice deferral prompts greater deferral on subsequent choices in sequential decision-making contexts. It turns out that putting off an initial choice undermines consumer self-confidence, which casts doubt on their decision-making abilities and causes additional deferrals. This tendency is particularly evident among consumers who have low chronic self-confidence.

In addition to documenting novel phenomena and providing compelling explanations, all four papers provide pragmatic and innovative solutions to business practices in the domain of investigation. Given the important role of sequential decision making in people's daily lives and the variety of novel findings uncovered by leading scholars in this research area, we expect this session will be of interest to a broad audience at ACR. Not only should it appeal to researchers working on judgment and decision making, choice, cognition, branding, and service marketing, but also to marketing practitioners and policymakers more broadly.

Rating Service Professionals First Reduces Tip Amount in Sequential Decisions

EXTENDED ABSTRACT

Tips account for a significant portion of the U.S. economy. In restaurants alone, $47 billion are tipped annually (Azar 2011). Tipping is also an important source of income for many service professionals, often representing half the income of those working in the food-service business (PayScale 2015). Given the importance of tipping, a significant amount of research has explored the factors impacting tipping behavior (McCall and Belmont 1996; Lynn and McCall 2000; Lynn 2004; Liu 2008; Lynn 2011; Van Vaerenbergh and Holmqvist 2013). However, new technological advances pose new questions to be answered. For example, requesting ratings of service professionals has become ubiquitous in several contexts, such as ridesharing, restaurants, and delivery apps, yet little is known about the effects of this practice on subsequent behaviors, such as tipping. In this research, we ask: "Can asking for service ratings affect tipping behavior?"

We investigate whether and why the order of rating and tipping impacts consumer psychology and consequently the tip amount. We propose that rating a service professional first decreases the amount that customers subsequently tip. Our prediction is grounded in two assumptions. The first assumption is that tipping is costly, both economically and psychologically. Because tipping means parting with money, it is aversive in nature (Prelec and Loewenstein 1998), even when customers may have the intrinsic desire to reward a service professional or when they are motivated to conform to a social norm and avoid embarrassment (Lynn and Graves 1996; Becker, Bradley, and Zantow 2012). When customers have the opportunity to rate a service, they may perceive their feedback as another, less costly and less painful, way to reward a service professional. The second assumption is grounded in the fungibility characteristic of mental accounting. Although customers generally put ratings and tips into different mental accounts because they are qualitatively different, they may categorize them into the same mental account when there

are economical and psychological benefits. Specifically, customers may be motivated to construe ratings and tips as different formats of rewards given to a service professional, categorizing them into the same mental account of awarding the service professional. When they perceive that providing a rating may partially fulfill the obligation to economically reward the service professional, customers give themselves a legitimate reason to justify a smaller amount of tip. However, because the cost associated with providing a rating is much less, we do not expect that tipping first would decrease the rating that customers subsequently provide.

Five studies, including two field studies and three lab experiments, were conducted to test our Hypothesis. Study 1 was designed as a quasi-experiment, leveraging the design difference between the Uber app (rating first) and the Lyft app (tip first). To conduct the study, we hired a driver who was blind to the study purposes. He was instructed to alternate between the two ridesharing platforms and record the amounts of the ride fare and the tip received from each ride, as well as the duration and distance of each trip. As predicted, we found that after controlling for base fare, customers tipped a smaller amount when the app asked for a rating first before soliciting a tip rather than vice versa ($M_{Tipping\_First}$=$1.35, M_{Rating_First}=$.42; p=.01).

Studies 2a and 2b used a lab scenario design in a more controlled setting to replicate the findings of Study 1 and to provide evidence that tipping does not impact subsequent rating scores. Study 2a manipulated two levels of service quality (high vs. average) within a rideshare app scenario and showed that hypothesized effects occurred regardless of service quality ($M_{Tipping\_First}$=$2.89, M_{Rating_First}=$2.09; p=.05). Study 2b extended the generalizability of the results by changing the context from ridesharing to homestay rentals ($M_{Tipping\_First}$=$17.77, M_{Rating_First}=$12.46; p=.04).

One assumption underlying this proposed effect is that tipping, which involves parting with money, is inherently painful and costly. However, the pain of payment may be reduced if people do not have to part with their own money, in which case the decision order would not affect the tip amount. Study 3 explored this boundary condition with Prolific participants, by adding a factor in which someone else (i.e., an employer) pays for a ride in the scenario. Planned contrasts revealed that rating first led to a smaller amount of tip given ($M_{Tipping\_First\_Self\_Pay}$=$6.47, $M_{Rating\_First\_Self\_Pay}$=$5.45; p=.01). However, when the employer was paying for the trip, the order of rating and tipping did not influence how much people tipped ($M_{Tipping\_First\_Employer\_Pay}$=$8.17, $M_{Rating\_First\_Self\_Pay}$=$8.48; p=.45).

Study 4 was a field experiment with a random assignment of conditions and a consequential measure (i.e., real tipping behavior in a restaurant). It also identified a theoretically and practically important boundary condition. Our proposed mechanism stipulates that rating first can lead to a smaller tip amount because customers perceive providing a good rating as having already benefited the service professional. The results supported this expectation ($M_{Tipping\_First}$=$6.93, $M_{Rating\_Service\_Professional\_First}$=$6.01; p=.02) and also showed that when a rating cannot directly be perceived as beneficial to the service professional, it did not affect the tip amount ($M_{Tipping\_First}$=$6.93, $M_{Irrelevant\_Rating\_First}$=$6.99; p=.88).

Our work also contributes to several literature streams. It enriches tipping literature by identifying whether and how decision sequence can influence the amount people tip. The examination of this effect and its underlying mechanism contributes to the literature on the fungibility of mental accounting. Overall, our work highlights the importance of designing a good consumer decision architecture when both ratings and tips are solicited.

Our research is of value to service-sector firms and managers. Tips are of strategic importance to managers. Higher tips result in

better service, help attract and retain quality workers, and alleviate pressure to increase salaries. We recommend that managers solicit tips before ratings when designing a consumer decision architecture.

Brand Loyalty in Response to Stockouts: Sequential Decision-Making during COIVD-19

EXTENDED ABSTRACT

COVID-19 confronted modern consumers with unprecedented product stockouts. Some data show that consumers demonstrated increased loyalty to trusted brands during this time, while other data show increased brand switching and price sensitivity (Becdach et al. 2020; Klein 2020). We help to predict when product stockouts may promote brand loyalty versus price sensitivity.

When faced with a stockout of a desired product, consumers often choose substitutes that most closely resemble the out-of-stock option (Arens and Hamilton 2016; Huh, Vosgerau, and Morewidge 2016). This is attributed to the negative experience of being denied the desired product, which may engender reactance (Fitzsimons 2000) and emotional jilting (Litt, Khan, and Shiv 2010), thus increasing the appeal of the out-of-stock product and substitutes similar to it.

Shifting from prior research, we propose to model product substitution as a disruption of two sequential decisions: a choice about "what to buy" occurring prior to arrival at the point-of-purchase (e.g., while making a shopping list) and a choice "to buy" occurring at the point-of-purchase (e.g., at the store). In this model, stockouts engender negative reactions through the thwarting of the expected decision sequence rather than through the simple denial of a desired product. This distinction generates new predictions about the importance of the foreseeability of the choice disruption as a driver of consumers' negative reactions. We propose that consumers faced with unexpected (expected) stockouts, and thus faced with stronger (weaker) negative experiences of a disrupted sequential decision-making process, are more likely to exhibit brand loyalty (price sensitivity) in their choice of a substitute. We thus examine substitution decisions in which consumers must allocate additional resources to the purchase to remain brand-loyal by choosing a more expensive upgrade from the same brand over a lower priced substitute from a different brand. Three studies test our prediction.

Study 1 (N=303 MTurk workers): This study tested our prediction that brand loyalty, operationalized as preference for upgrade substitutes, is less (more) likely to arise when consumers anticipate (do not anticipate) a stockout, and was conducted in May 2020 following the initial shortages caused by COVID-19. Participants made choices in three product categories drawn from a pool of categories discussed in media stories about COVID-19 stockouts. For each category, participants imagined a shopping trip in which the product they intended to buy was out of stock. They rated how frustrated such a stockout would be (on a 1–7 scale), then chose from three substitutes: a similarly priced product from a different brand (*D*), a higher priced upgrade from a different brand (*D+*), and a higher priced upgrade from the same brand (*S+*). Participants also indicated whether they had personally experienced a stockout in the category. Results showed that when participants had not (had) experienced shortages, and hence were less (more) likely to expect a stockout, they preferred the *S+* option 23.71% of the time (17.82% of the time). A mixed-model logistic regression controlling for within-participant variance confirmed that lower expectations of stockouts indeed predicted increased choice of *S+* (b=0.70, z(889)=3.35, p<.001). Moreover, participants reported greater frustration when they did not expect a stockout (M=4.88) relative to when they did

(M=3.72, t(904=9.11, p<.0001). A mediation analysis confirmed that stockout expectations impacted upgrade behaviors through frustration (95% CI[0.47, 1.56]). The results support the proposition that consumers faced with an unexpected (expected) stockout have more (less) negative reactions to the disruption of their choices, and are thus more likely to show brand loyalty (price sensitivity).

Study 2 (N=674 MTurk workers): This study replicated the results of study 1 using consumers' predicted likelihoods of stockouts as a direct measure of their expectations. Again, less expected stockouts engendered greater frustration, which drove brand loyalty over price sensitivity (95% CI[-1.72, -0.81]). Moreover, we predicted a managerially important moderator that consumers are more likely to expect shortages in consumable (vs. durable) categories. We propose that demand-side stockouts (arising from increased consumption) are more cognitively available to consumers (e.g., Schwarz et al. 1991) and thus more easily anticipated relative to supply-side stockouts (arising from supply-chain disruptions). Consistent with this notion, during the pandemic, demand-side explanations were commonly accepted causes for consumable stockouts (e.g., toilet paper hoarding narratives) while supply-side explanations were oft-overlooked causes for durable stockouts. As predicted, stockouts in durable (consumable) categories were associated with lower (higher) expectations of a stockout, leading to stronger (weaker) brand loyalty (95% CI[-62.26, -24.15]).

Study 3 (N=298 MTurk workers): Participants purchased a product of their choice from a menu of options by spending points earned via boring tasks. After this choice, participants were confronted with a stockout and given a choice between two substitutes. Substitutes were either the same brand as the original choice (*S*) or different (*D*), and one substitute was the same quality/price level as the original (*S* or *D*) while the other was a more expensive upgrade (*S*+ or *D*+). As participants had no reasons to expect stockouts, we predicted that they would show brand loyalty in their substitute choice, even if this meant selecting a more expensive upgrade option. As predicted, participants in both mixed-brand conditions tended to choose same-brand substitutes: participants in *SD*+ chose *S* over *D*+ 78.38% of the time (significantly greater than chance: z(73)=3.61, p<.001) and participants in *DS*+ chose *S*+ over *D* 75.68% of the time (z(73)=3.23, p<.001). Thus, even when brand loyalty meant paying more, preference for the same brand did not differ (χ^2(1, N=144)=0.15, p=.696). Given there was no overall preference for upgrades (χ^2(1, N=144)=43.27, p<.001), these results suggest that preferences for upgraded options were not driven by preference for quality but by brand loyalty strong enough to overcome price sensitivity.

Our findings contribute to research on sequential decision making, product scarcity, substitution, and brand loyalty. We recommend that when product stockouts loom, managers should use consumer expectations to guide decisions about when to compete on price versus to leverage brand loyalty to upsell. These insights are particularly timely because markets are expected to experience another bout of product shortages as the economy reopens post-pandemic, and our results provide guidance for these impending managerial challenges.

Procedure Dependence: The Effect of Sequential Resource Allocation Procedures on Variety-Seeking Behavior

EXTENDED ABSTRACT

Individuals and organizations often need to allocate resources among multiple target options. For example, an investor may allocate his savings among a list of stocks, a company may assign skilled employees to different tasks, and a government may allocate funding to various infrastructure projects. In many cases, the resource allocation task can be viewed as a sequential task of assigning multiple small units of a resource among a set of individual targets.

Imagine a decision-maker faced with the task of allocating $5,000 to five bonds that are each sold in $1,000 increments. One option is to go down the list of stocks and to determine, for each stock, how much money the stock should receive. An alternative approach is to go down the list of resource units ($1,000) and to determine which stock should receive the first $1,000, the second $1,000, until the fifth $1,000. We refer to the former procedure (focusing on individual targets and deciding how many resource-units each target should receive) as the *allocation-by-target* procedure and the latter (focusing on individual resource-units and deciding which target each unit should be assigned to) as the *allocation-by-unit* procedure.

We propose that an allocation-by-target method leads a decision-maker to focus on the available targets, with the primary task of ensuring that the final distribution of resources reflects her assessment of the relative extent to which the various targets are "deserving" of resources. This process often results in the concentration of resources in the more deserving options. In contrast, under the allocation-by-unit method, the decision-maker's focus is on the individual resource-unit, such that the final distribution of resources across targets is de-emphasized. Since resource units are similar to each other, and humans have inherent tendency to diversify choices (Benartzi and Thaler 2001; Messick 1993; Kahn and Lehmann 1991; Pessemier 1978; Simonson 1990), the decision maker is more likely to assign a given resource-unit to a target that has not received resource allocation in the previous round. As a result, the allocation-by-unit method will lead decision-makers to allocate resources to a broader variety of targets. We demonstrate the procedure dependence effect in four studies.

In the Study 1, we asked participants to allocate an imagined lucky draw prize of $3,000 among six personal expense categories, in units of $500. They followed either the allocation-by-target procedure or the allocation-by-unit procedure. Participants in both conditions were reminded that they could choose any level of variety. On average, participants in the allocation-by-target condition selected fewer categories (M = 3.95) than participants in the allocation-by-unit condition (M = 5.63), t(243) = 12.807, p < .0001, d = 1.636.

Study 2 involved real charitable donations. An experimenter gave each participant $50 and asked them to allocate the money among five charity projects in units of $10. Participants were randomly assigned to one of two allocation procedure conditions. As expected, participants in the allocation-by-unit condition donated to more charity projects (M = 4.25) than did participants in the allocation-by-target condition (M = 3.22), t(92) = 5.07, p < .0001, d = 1.05.

Study 3 tested the mechanism. We held constant the total resources and varied unit size and number of targets. Participants were asked to invest $10,000 in stocks following one of two allocation procedures. Each participant was randomly presented with 2, 5, or 10 stocks. The allocation units were $5,000 in the 2-stock condition, $2,000 in the 5-stock condition, and $1,000 in the 10-stock condition. The study adopted a 2 (allocation procedure: allocation-by-target vs. allocation-by-unit) × 3 (target set size: 2 vs. 5. vs. 10 stocks) between-participants design. We found that when only two stocks were available, participants' preference for variety did not differ between the allocation procedures ($M_{by\text{-}target}$ = 1.69 vs. $M_{by\text{-}unit}$ = 1.53), F(1, 638) = 0.49, p = .482. When the choice set increased to five stocks, the allocation-by-unit lead to greater variety-seeking (M = 3.95) than the allocation-by-target procedure (M = 3.42), F(1, 638) = 4.95, p = .026, η^2 = .01. This difference became even more pronounced when

the choice set increased to 10 stocks. These results suggest that participants in the allocation-by-unit condition were more responsive to the size of choice set, such that they naively diversified resources among available stocks, whereas those in the allocation-by-target condition were less susceptible to the naive diversification bias. This finding is consistent with our conceptualization.

Study 4 manipulated the presence or absence of information pointing to a specific option as deserving more resource than other options. We expected that participants following the allocation-by-target method would show greater sensitivity to the presence of such information. In a 2 (allocation procedure: allocation-by-target vs. allocation-by-unit) × 2 (superior option: present vs. absent) between-participants design, participants were asked to allocate $5,000, in units of $1,000, across the seven stocks. One of the stocks was taken from the semiconductor industry. To manipulate the presence of superior option information, we told half participants that one of the stock was expected to outperform the market. The other half of participants were not shown this information. The allocation results showed that among participants who were not informed of the superior option, the allocation-by-unit procedure led to a greater variety-seeking ($M = 4.13$) than the allocation-by-target procedure ($M = 3.84$), $F(1, 800) = 6.62$, $p = 0.010$, $\eta^2 = .01$. This difference was more pronounced among participants who were informed of the superior option ($M_{by-unit} = 4.01$ vs. $M_{by-target} = 3.34$), $F(1, 800) = 33.75$, $p < .0001$, $\eta^2 = .04$.

In summary, our studies provided converging evidence to a procedure dependence effect in resource allocations. Our research contributes to the literature on sequential decision making, resource allocation, and variety seeking. Practically, organizations and policymakers can strategically choose the allocation procedure to induce more or less variety-seeking. Individual decision-makers should also remind themselves of their allocation criteria, and, if necessary, compare the resource allocation outcomes by following different procedures to avoid the unintended procedure dependence effect in resource allocations.

The Deferral Momentum Effect: Choice Deferral in Sequential Decision Making

EXTENDED ABSTRACT

Imagine you are at the supermarket to buy pasta sauce. You find two brands of pasta sauce that are appealing, but cannot decide between the two, and decide not to choose either of these brands. Would the decision to not choose either pasta brand impact subsequent decisions? Our research aims to answer this question. Choice deferral is a form of decision avoidance that occurs when consumers decide not to choose from the alternatives presented to them, which can also be described as "choosing the no-choice option" (Dhar 1997). Although prior research has examined various antecedents of choice deferral (e.g., Dhar 1997; Dhar and Nowlis 1999; Etkin and Ghosh 2018; Novemsky et al. 2007), the psychological and behavioral consequences of choice deferral remain largely unexplored. To our knowledge, there is limited prior research on the consequences of choice deferral, which examined consumers' likelihood of accepting a less attractive version of an initially deferred opportunity.

Prior research has demonstrated that procrastination can offer short-term benefits (vs. long-term costs), such as a temporary relief from the pressures experienced and reduced stress (e.g., Ferrari 2001; Tice and Baumeister 1997; Van Eerde 2003). Building on these findings, we argue that initial choice deferral (vs. no deferral) will increase consumers' confidence in their decision, as it provides them with a short-term relief from having to make a choice. Building

on this, we further predict a *deferral momentum* effect, whereby initial choice deferral will prompt greater choice deferral on subsequent decisions.

In addition, we build on prior research showing that procrastination and other types of decision avoidance are generally aversive (Anderson 2003) to predict that the relatedness of the sequential decision domains will moderate the deferral momentum effect. When subsequent decisions are in a related (vs. unrelated) domain, consumers who already deferred making a choice will be less (more) likely to defer again, as deferring similar (different) decisions makes one's decision avoidance tendency more (less) salient, thus hindering their decision confidence of deferring subsequent choices in related (vs. unrelated) domains.

Study 1 tested whether initial choice deferral increased subsequent choice deferral. Participants ($N = 275$, 44% male, $M_{age} = 21.6$, $SD = 3.7$) were first asked to choose between two equally attractive digital cameras or choose neither and keep looking for more options (i.e., choice deferral; adapted from Dhar and Nowlis, 1999), as well as to rate their confidence in their decision. Thereafter, participants were sequentially presented with four similar choice tasks (i.e., cars, laptops, apartments, and vacation; adapted from Dhar & Nowlis, 1999) and were again asked to rate their confidence in each decision. The dependent variables were the number of subsequent choices participants deferred (0-4) and average decision confidence. Participants who deferred the first choice (vs. not) also deferred more subsequent choices ($M_{Deferral} = 1.89$, $SD = 1.07$, $M_{NoDeferral} = 1.18$, $SD = 1.07$, $F(1, 274) = 29.57$, $p < 0.001$) and reported higher average decision confidence ($M_{Deferral} = 7.92$, $SD = .74$, $M_{NoDeferral} = 7.44$, $SD = .92$, $F(1, 274) = 8.31$, $p < 0.01$). Decision confidence also moderated the effect of choice deferral on subsequent deferral (95%CI .02; .21]. These results provide preliminary evidence for the predicted deferral momentum and the role of decision confidence in this effect. We acknowledge that participants in this study self-selected into the deferral and no deferral conditions. Study 2 and 3 address this self-selection concern by manipulating deferral.

Study 2 ($N = 115$, 35% male, $M_{age} = 21.34$, $SD = 3.36$) manipulated choice deferral using a scenario about deciding to defer (vs. not) repairing one's cracked smartphone screen. Next, participants were presented with the Consumer Self-Confidence scale (Bearden et al., 2001). Of interest to this research was the Personal Outcomes dimension, which is related to one's confidence in one's decision-making abilities. Results showed that deferral significantly increased participants' decision confidence ($M_{Deferral} = 3.61$, $SD = 0.76$, $M_{NoDeferral} = 3.27$, $SD = 0.82$, $F(1, 114) = 5.38$, $p < 0.05$).

Study 3 ($N = 208$, 45% male, $M_{age} = 21.54$, $SD = 3.45$) explored whether decision domain moderates the deferral momentum effect using a 2 (control vs. deferral) x 2 (related vs. unrelated domain) design. Choice deferral (vs. control) was manipulated using the same scenario as in study 2. Decision domain was manipulated by subsequently presenting participants with a decision involving two pairs of headphones (related domain) or two carry-on luggage (unrelated domain). A binary logistic regression showed a significant interaction between choice deferral and domain relatedness ($\beta = -1.95$, $SE = 0.43$, Wald's $= 6.88$, $p < 0.01$), such that initial deferral reduced subsequent deferral in a related domain ($P_{Control} = 31.9\%$, $P_{Deferral} = 14.8\%$, $\chi^2(1) = 4.18$, $p = 0.04$), but marginally increased subsequent deferral in an unrelated domain ($P_{Control} = 11.3\%$, $P_{Deferral} = 25.0\%$, $\chi^2(1) = 3.11$, $p = 0.08$) thus providing a boundary condition for the deferral momentum effect.

In summary, across three experiments, we provide evidence that initial choice deferral increases consumers' propensity to defer subsequent decisions, and that this effect is moderated by the relat-

edness of the decisions' domains. In addition, we provide evidence that choice deferral increases consumers' decision confidence, which underlies the deferral momentum effect. Although further research is necessary to fully understand the boundaries of these effects, and we are currently conducting follow-up experiments to do so, this research provides an important step toward a better understanding of the psychological and behavioral consequences of choice deferral in a sequential decision-making context, which has important implications for academics, practitioners, and consumers.

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Motivating Consumers in Goal Pursuit

Chair: Alexander Park, Washington University in St. Louis, USA
Discussant: Rachel Gerson, UC, San Diego, USA

Paper #1: How Incentives Help Us Do Hard Things
> Matthew Healey, Washington University in St. Louis, USA
> Robyn LeBoeuf, Washington University in St. Louis, USA

Paper #2: Increasing Prosocial Behavior Through Incentive Salience
> Y. Rin Yoon, Cornell University, USA
> Kaitlin Woolley, Cornell University, USA

Paper #3: The Struggle is Real: Motivating Goal Pursuit by Highlighting Process Difficulty
> Alexander Park, Washington University in St. Louis, USA
> Rachel Gershon, University of California, San Diego, USA
> Marissa Sharif, University of Pennsylvania, USA

SESSION OVERVIEW

Consumers often struggle to reach their long-term goals, such as striving to become healthier or saving money. As a result, consumers often seek out companies with products and services that can help them reach these goals. How can these companies motivate their consumers in goal pursuit? Prior research has found that marketers can effectively motivate consumers by offering rewards for completing goal-consistent actions (e.g., Charness and Gneezy 2009) or sending goal-relevant messages (Goldstein, Cialdini, and Griskevicius 2008). Building on this prior research, this session offers three ways to improve these current strategies for motivating consumers by highlighting: 1) the presence of incentives, 2) the salience of incentives, and 3) the salience of goal-pursuit difficulty.

How can marketers better motivate consumers through incentives? In the first paper, Healey and LeBoeuf demonstrate how incentives affect the order in which consumers complete tasks. The authors find that when incentives are present (vs. absent), consumers are more likely to complete difficult tasks before easier ones because 1) consumers are more motivated by the incentives, and 2) they believe that doing the difficult tasks first will be more likely to lead to overall success.

While incentives may motivate consumers, are they *always* effective? If not, how can marketers make incentives more effective? The second paper by Yoon and Woolley shows that incentive salience has differing effects on prosocial behavior. The authors demonstrate that increasing the salience of a reward can motivate people to donate when initial prosocial motivation is low, or perception of the importance of the charity is low, with no undermining effect on motivation for those who are more prosocially motivated or when the cause is perceived as more important.

Aside from monetary incentives, how else can marketers motivate consumers? The last paper by Park, Gershon, and Sharif examines an intervention for consumers who are struggling to reach their goals. The authors study the effects of highlighting goal pursuit difficulty (vs. ease) within marketing messaging on motivation and goal re-engagement. The authors show that companies that describe the goal pursuit as a difficult process increase consumers' perceived achievability of their goal, which in turn increases 1) consumers' likelihood of re-engaging with the companies' products and 2) motivation to continue their goals.

Taken together, this special session examines novel factors and mechanisms that influence consumer motivation, while also highlighting important practical implications that marketers can adopt.

We believe the session fits well with the conference theme, "Self-care," by emphasizing how marketers and organizations can help consumers accomplish desirable outcomes aligned with their goals. We expect the proposed session to appeal to researchers interested in consumer motivation and well-being, incentives, prosocial behavior, and goal pursuit.

How Incentives Help Us Do Hard Things

EXTENDED ABSTRACT

Imagine that you and your partner are planning a birthday party for your partner's mother. Your partner asks if you can pick up cups for the party (which you consider easier) and also pick out a gift (which you find much harder) by Friday. Which task would you start with? Now imagine that your partner also promises to buy you a fancy dinner if you accomplish both tasks by Friday. Would this change the order in which you approach the tasks?

Previous findings show that when faced with easy and hard tasks, people prefer to start with easier tasks (Habbert & Schroeder, 2020) even though starting with the difficult task is more likely to enhance self-efficacy. Starting with the easier task also results in reduced efficiency (Rusou et al., 2020) and long-term learning (KC et al., 2020). We propose that this preference for the easy task may be attenuated when people have incentives for task completion.

We predict that, when faced with a hard task and an easy task, people may tend to prefer to do the easy task first -- but that an incentive to complete both tasks will increase people's preference to tackle the hard task first. We further predict that this pattern occurs because incentives increase the motivation to complete the tasks successfully and because people have a lay belief that the difficult-first order is more likely to lead to success than the easy-first order. Thus, people's increased motivation when incentivized leads them to choose the difficult-first order because they believe it will help them successfully complete both tasks.

In study 1 (N = 382, pre-registered), participants were assigned to either the *incentive* or the *no-incentive* condition. Participants were asked to imagine that a family member had asked them to complete two tasks: one more difficult (finding a very cheap oil change) and one easier (taking out the trash). Participants in the *no-incentive* condition simply read about the tasks. Participants in the *incentive* condition also read that their family member would give them $50 if they completed both tasks successfully. All participants then indicated which task they would complete first. In the *incentive* condition, 52% of participants chose to complete the difficult task first, compared to only 32% in the *no-incentive* condition (X^2(1, N=382) = 16.37, p = 0.0005).

In study 2 (N = 252, pre-registered), participants were assigned to either the *incentive* or the *no-incentive* condition. Participants were asked to imagine their boss asked them to complete a harder task (renegotiate a contract) and an easier task (compile a list of travel agents). Participants in the *no-incentive* condition simply read about the two tasks. Participants in the *incentive* condition also read that their boss would give them a bonus if they completed both tasks successfully. In the *incentive* condition, 57% of participants chose to complete the difficult task first, compared to only 38% in the *no-incentive* condition (X^2(1, N=252) = 8.94, p = 0.003).

In study 3 (N = 297, pre-registered), we investigated the role of motivation as a mediator, using materials adapted from Study 1. In the *incentive* condition, 58% of participants chose to complete the difficult task first, compared to only 36% in the *no-incentive* condition (X^2(1, N=297) = 16.37, p = 0.0001). Participants also reported, on a 7-point scale, their motivation to complete a) both tasks, b) the difficult task, and c) the easy task. The motivation to complete both tasks (M=6.1>M=5.7, p=.007) and the difficult task (M=5.76>M=4.95, p<.0001) was higher in the *incentive* condition than the *no-incentive* condition. This difference was only marginally reliable for motivation to complete the easy task (M=6.23>M=5.97, p=.07). Further analyses revealed that motivation to complete both tasks and motivation to complete the difficult task each mediated the effect of incentive on task-order choice. Motivation to complete the easy task was not a reliable mediator. Thus, increased motivation may underlie the desire to complete harder tasks first (instead of easier tasks first) when people are incentivized.

Studies 4 and 5 investigate why motivation affects the preferred ordering of tasks. Study 4 (N=200) presented participants with the work situation from Study 2 in a single no-incentive condition. We asked participants to select which task they would start with to a) successfully complete both tasks, b) create the most enjoyable experience, and c) create an overall easier experience. A chi-square analysis revealed that people's choices differed among the three dependent variables (X^2 (1, N=200) = 27.8, p = 0.0001). Most participants (78%) indicated that doing the difficult task first would most likely lead to success, but only 48% indicated that this order would be more enjoyable and 45% viewed it as easier. Thus, participants view the difficult-first path as more likely to lead to success, even though it may not be a very enjoyable path, suggesting why incentivized (motivated) participants select this order.

To complement the results of Study 4, Study 5 used the same scenario and assigned participants (N = 323) to either the *incentive* or the *no-incentive* condition. We asked participants whether prioritizing success or enjoyment seemed more important. Those in the incentive condition were more likely to indicate that prioritizing success was more important (94%) than those in the no-incentive condition (85%, X^2 (1, N=323) = 7.3, p = 0.007). Together, studies 4 and 5 suggest that people are more likely to prioritize success when they are incentivized, and that they feel that doing the difficult task first is the more successful order.

In summary, we find that an incentive causes people to be more likely to choose to do a difficult task before an easier one. This is in part because incentives increase motivation, but it seems to be more specifically due to the fact that doing the difficult task first is seen as the more successful path, and success is prioritized when people are incentivized.

Increasing Prosocial Behavior Through Incentive Salience

EXTENDED ABSTRACT

Consumers are frequently incentivized to engage in prosocial behavior. Organizations provide movie tickets to encourage blood donations (Lacetera and Macis 2010a), cash incentives to encourage recycling (Oskamp, 2000), and thank-you gifts for donating to charity (Newman and Shen 2012). Notably, the provision of incentives to motivate prosocial behavior is in stark contrast to research demonstrating incentives undermine motivation (Deci 1971; Benabou and Tirole 2006; Gneezy and Rustichini 2000a). Indeed, some findings suggest incentivizing prosocial behavior can backfire (Newman and Shen 2012; Schwartz et al. 2015).

Why do charities continue to provide incentives if incentives undermine motivation? Whereas having multiple motives for pursuing an action can be demotivating (Kruglanski et al. 2002, 2018; Zhang et al. 2007; Bélanger et al. 2015), the present research suggests that incentives can motivate prosocial action as a function of their salience. In particular, we predict that when an incentive is more (vs. less) salient, it increases motivation for 1) individuals low on prosocial motivation and 2) charities with causes perceived as less important. Further, manipulating reward salience helps maintain motivation for those high on prosocial motivation or those engaging in a prosocial action for a more important cause, by allowing them to attribute their behavior either to the incentive or to the cause (i.e., to either extrinsic or prosocial motivation). Five studies (three pre-registered) involving real behavior test these predictions.

Studies 1-3a utilized an online fundraiser wherein participants' "clicks" provided both a donation to a charity and an incentive for themselves (adapted from Ariely et al. 2009; Exley 2018; Koo et al. 2020). Participants had 90 seconds to click as many times as they desired to donate to the cause and earn money for themselves. During the click marathon, we displayed a tally tracking the number of clicks as our measure of prosocial engagement, which was log-transformed before analysis.

In Study 1 (N=296), we held the salience of the reward constant and measured participants' extrinsic and prosocial motivation to participate in the click marathon. Regressing extrinsic motivation × prosocial motivation on persistence revealed the predicted interaction, B=-.04, p=.002. When prosocial motivation was low, having higher (vs. lower) extrinsic motivation significantly predicted persistence, B=.07, p =.006, which significantly attenuated when prosocial motivation was high, B=-.04, p=.151. This suggests that extrinsic incentives can motivate prosocial behavior for those less inclined to donate.

We pre-registered Study 2 (N=295) and manipulated the salience of incentives for donating. We expected that when incentives were more (vs. less) salient, people would report greater (vs. lower) extrinsic motivation, which would affect their persistence. In the low (vs. high) salience condition, we framed the click tally as the number of "donated clicks" (vs. "bonus earned"). We also measured perceived importance of the cause as a measure of individual difference in prosocial motivation. Regressing reward salience × prosocial motivation on persistence revealed a significant interaction, B=-.07, p=.007. A more (vs. less) salient reward increased persistence among those low in prosocial motivation, B=.09, p=.040, which attenuated when prosocial motivation was high, B=-.08, p=.101. Moderated mediation analyses demonstrated that the salience of the reward differentially interacted with prosocial motivation by changing people's extrinsic motivation to donate, Bindex=.01, 95% CI=[.001, .021].

In Study 3a (N=512; pre-registered), we manipulated both the salience of the reward and prosocial motivation to donate to provide a causal test of our prediction. We manipulated reward salience as in Study 2. We further manipulated prosocial motivation via charity importance by assigning participants to donate to a particular charity; although both charities were important, one was relatively more important than the other. An ANOVA of reward salience × cause importance revealed a significant effect, F(1, 508)=4.00, p=.047. A more (vs. less) salient reward increased persistence for a charity perceived as less important, p=.037, with no effect when the charity was perceived as more important, p=.462.

Study 3b (N=766; pre-registered) conceptually replicated Study 3a using a new paradigm. Instead of a click marathon, we created a typathon fundraiser wherein participants needed to press keys on the computer keyboard to move an icon across the screen; each key

they pressed counted as an actual donation to the charity and a bonus for themselves. In the low-salience condition, the icon was a heart to symbolize donation to the charity; in the high-salience condition, the icon was a coin to symbolize bonus to the self. We manipulated cause importance as in Study 3a. Consistent with previous results, we found a significant interaction between reward salience and charity importance on persistence, F(1, 762)=5.50, p=.019. A more (vs. less) salient reward increased persistence for a charity perceived as less important, p=.003, which attenuated for a more important charity, p=.744.

Demonstrating a practical implication of this effect, Study 4 (N=207) recruited participants from states offering piecemeal cash-back incentives for recycling bottles. We measured persistence in a prosocial behavior as reported frequency of engaging in cash-in recycling for aluminum, glass, and plastic containers. We further measured two key motivations for recycling: extrinsic (i.e., to gain money) and prosocial (i.e., for environmental concerns). Regressing extrinsic × prosocial motivation on cash-in recycling behavior revealed a significant interaction, B=-.11, p=.015. As predicted, when prosocial motivation was low (-1SD), extrinsic motivation had a greater effect on recycling behavior, B=.96, p<.001, than when prosocial motivation was high (+1SD), B=.66, p<.001.

This research provides insight into the question of when incentives are more (vs. less) effective at motivating prosocial behavior and challenges existing research demonstrating incentives undermine prosociality. We find that increasing the salience of a reward can motivate people to donate when initial prosocial motivation is low, or perception of the importance of the charity is low, with no undermining effect on motivation for those who are more prosocially motivated or when the cause is perceived as more important.

The Struggle is Real: Motivating Goal Pursuit by Highlighting Process Difficulty

EXTENDED ABSTRACT

Whether trying to eat healthier, learn a new language, or lose weight, consumers often struggle to reach their goals. Small setbacks are inevitable. Consumers occasionally splurge on a dessert, procrastinate studying, or gain a few pounds. Unfortunately, when consumers experience setbacks, they may disengage from goals and discontinue using goal-relevant products (e.g., nutrition tracking app or Fitbit). How can marketers help consumers persist after these disappointments?

When consumers stop engaging in goal pursuit, marketers may want to reduce the perceived difficulty of reaching the goal. Consumers are less motivated by goals that appear difficult to achieve (Zhang and Huang 2010), and consequently, marketers often stress that goal pursuit can be an easy process. However, in the current research, we show that highlighting the difficulties of goal pursuit by normalizing struggles and setbacks can significantly influence goal re-engagement.

We hypothesize that when consumers are struggling to reach their goals, companies that describe goal pursuit as a difficult process (vs. easy or no process description), 1) increase consumers' likelihood of re-engaging with the companies' products and, 2) motivate consumers to continue pursuing their goals. We propose that this is driven by the perceived self-achievability of the goal. When companies describe goal pursuit as a difficult (vs. easy) process, consumers believe the goal is more achievable for themselves, increasing their interest in goal re-engagement. We test our Hypothesis across five pre-registered experiments.

Study 1a (N = 903), was a 3-cell between-subjects design: control (no process description), easy, or hard. Participants imagined that they are struggling to reach their health goals and previously used an app called Cronometer that tracks their diet and health; however, they stopped using the app temporarily. Then, they received an email from Cronometer. In the [easy/hard] condition, the email stated that maintaining a healthy diet was an [easy/hard] process; no information about the process was described in the control condition. Participants then answered the following: 1) how likely would you be to start using the Cronometer app again? and 2) how motivated would you be to continue pursuing your health goal? When the process was described as difficult (vs. easy or control), participants were more likely to re-use the app (ps < .001) and more motivated to continue pursuing their goal (p < .001, p = .002, respectively). Study 1b (N = 900) replicated these findings with an easier goal (walking 3,000 steps a day) to test for generalizability (app re-usage: p = .024, p = .015; motivation: p = .002, p < .001, respectively). This provides initial support for our hypothesis: describing goal pursuit as a difficult process improves goal re-engagement.

Study 2 (N = 896) replicated our basic effect and tested the proposed mechanism: perceived self-achievability. Replicating Study 1, describing the goal as a difficult (vs. easy or control) process increased participants' likelihood of re-using the app (ps < .001) and increased reported motivation to continue pursuing their goal (ps < .001). Moreover, participants reported that health goal appeared more achievable for themselves when the process was described as difficult (vs. easy) (p < .001); perceived achievability for others showed no significant difference (p =.61). Mediation results showed an indirect effect of perceived self-achievability (app re-usage: β = .32; 95% CI [.17, .49]; motivation: β = .36; 95% CI [.19, .54]). Describing the goal as a hard process increased participant's belief that they could achieve the goal, increasing the likelihood of re-using the app and motivation to continue pursuing their goal.

Study 3a (N = 1795) tested the proposed mechanism via moderation. When consumers struggle to reach their goals, we find that describing goal pursuit as a difficult process increases their perceived self-achievability. We believe this messaging effectively frames the struggle as part of the goal pursuit process (rather than a personal deficiency), increasing perceived goal achievability. If consumers are instead *succeeding* at reaching their goal, we propose that process descriptions should not affect perceived self-achievability. We tested this prediction with a 2 (goal description: hard vs. easy) X 2 (goal experience: struggling vs. succeeding) between-subjects experiment. Similar to Study 1, participants in the [struggling/succeeding] conditions read that they are currently [struggling/succeeding] in reaching their health goal and have received an email from Cronometer. Results showed an interaction between goal description and goal experience on app re-usage and motivation (p = .004, p = .017, respectively). When struggling to reach their goal, participants were more likely to re-use the app and more motivated to continue pursuing their goal when reading the hard (vs. easy) email (ps < .001). When succeeding in their goal pursuit, however, the effect on app re-usage and motivation was attenuated (p = .018, p = .015, respectively). Study 3a provides additional evidence for the role of perceived self-achievability on goal re-engagement. Study 3b (N = 1812) ruled out an alternative explanation of company effectiveness. If the effect is driven by participants' perceptions of company effectiveness (i.e., the company is more attuned to the participants' struggles), then acknowledging that the customer has stopped using the app might moderate the effect. However, in a 2(goal description: hard vs. easy) X 2(control vs. acknowledge) between-subjects study, we found no interaction between goal description and acknowledgement on app

re-usage (*p* = .78) or motivation (*p* = .64), and only main effects of goal description (*ps* < .001).

We find that when companies describe goal pursuit as a difficult (vs. easy) process, consumers are more likely to re-engage with a company's products and are more motivated to continue pursuing their goals. Mechanism evidence reveals that describing goal pursuit as a difficult process increases perceived self-achievability of the goal, which in turn increases goal re-engagement behaviors. These results are particularly important given that maintaining existing customers is typically more valuable for companies than attracting new customers (Wertz 2018). When re-activating struggling customers, companies must adopt effective messaging. Despite the intuitive appeal of making the goal appear easy to re-engage customers, we show that normalizing the struggle of goal pursuit is more effective.

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What Makes Us "Us": Finding and Expressing the Self through Identity-Driven Consumption in Uncertain Times

Chairs: Ekin Ok, University of British Columbia, Canada
Aylin Cakanlar, Stockholm University, Sweden

Paper #1: Disrespectful Promotions: How Discounts on Identity-Linked Products Hurt Brands

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Kobe Millet, Vrije Universiteit Amsterdam, The Netherlands
Aylin Aydinli, Vrije Universiteit Amsterdam, The Netherlands
Jennifer Argo, University of Alberta, Canada

Paper #2: Charging the Self: Consumer Use of Identity-Relevant Credit Cards

Gergana Y. Nenkov, Boston College, USA
Linda Court Salisbury, Boston College, USA
Hristina Nikolova, Boston College, USA
Karen Page Winterich, Pennsylvania State University, USA

Paper #3: The Effect of Self-Variety on Choice Difficulty When Choosing Between Identity-Linked Goods

Sara Loughran Dommer, Pennsylvania State University, USA
Karen Page Winterich, Pennsylvania State University, USA

Paper #4: When I Lose You, I Lose Me: The Impact of Relationship Dissolution on Switching Behavior

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Aylin Cakanlar, Stockholm University, Sweden
Hristina Nikolova, Boston College, USA

SESSION OVERVIEW

Every so often we wonder who we are and what makes us "us". Our consumption behaviors are both influenced by, and help shape our answers to these fundamental questions (Belk 1998; Berger and Health 2007). Amidst the chaotic times we are going through with the global pandemic, political turmoil, social unrest and polarization, which have all brought drastic changes to our daily routines and uncertainty about the future, the construction, maintenance, and expression of our identities have become even more relevant.

Identity is a multifaceted and dynamic construct, and individuals claim distinct and overlapping identities at different stages of their lives, which are also impacted by the dynamics of the social context surrounding them. (Ryan and Deci 2012). As we shuffle through multiple identities, we behave in ways that allow us to signal our desired identities (Chan, Berger and van Boven 2012). From wearing masks that reflect our identity to spending with our identity-linked credit cards, we regularly purchase and use self-identifying products. The papers in this special session examine the novel implications of owning, using, and choosing between identity-linked products, and the identity-driven effects of life transitions on our consumption behavior. Together, they provide further evidence of the inherent link between our self-concepts and consumption preferences.

In the first paper, Du and colleagues investigate the downstream consequences of price promotions on identity-linked products. Using diverse social identity groups such as LGBT consumers, black consumers and Asian consumers, they show that when identity-linked products are offered at a discounted price, this can lead to an identity threat, as consumers may infer that their identity is devalued and feel disrespected. In turn, the perceived disrespect results in unfavorable brand attitudes and lowered purchase intentions.

In the second paper, Nenkov and colleagues reveal interesting effects of using identity-relevant credit cards on consumer spending.

Across four experiments and field data from a money management app, they show that even though consumers enjoy using identity-relevant credit cards, they are less willing to charge items and accumulate debt on them.

Reflecting the notion that individuals embrace multiple identities, the third paper by Dommer and Winterich explores what happens when individuals are choosing between multiple identity-congruent products. They show that individuals with high self-variety, whose selves are composed of many (vs. fewer) identities, experience greater decision difficulty and take longer to choose.

Lastly, the fourth paper by Ok and colleagues examines the effects of identity loss experienced after a romantic breakup on consumers' relationships with service providers. In four studies, they show that following the dissolution of a romantic relationship and the ensuing identity loss, consumers become less willing to continue existing subscriptions and more likely to switch to alternative providers, and that this effect is stronger for those with an anxious attachment style in their interpersonal relationships.

Overall, these papers demonstrate the important implications of identity in the consumer behavior domain. We believe this special session appeals to a wide audience, including those who are interested in identity, branding, relationships, and consumer behavior.

Disrespectful Promotions: How Discounts on Identity-Linked Products Hurt Brands

EXTENDED ABSTRACT

Marketers frequently link branded products with consumers' social identities, as this can make the brand more appealing to these consumers (Bolton & Reed, 2004; Forehand & Deshpandé, 2001, Stayman & Deshpandé, 1989). Brands also often offer price promotions (e.g., price discounts) on identity-linked products. Based on prior research on targeted price promotions (Krishna, Keinberg, & Zhang, 2007), one might expect that consumers would react positively when they see a price promotion on a product targeted to them (i.e., linked to their identity). However, we argue that under certain circumstances this popular practice may backfire and hurt the brand. Specifically, when the identity that is linked to a product on sale is from a marginalized group, a reduced price will convey an impression of a devalued identity among members of the targeted group. As judgements that devalue one's social identity are usually construed as a social identity threat (Belmi et al., 2015), we further expect that these consumers will derogate the source of the threat (Petriglieri, 2011). Thus, we expect that targeted price promotions on marginalized identity-linked products will decrease brand attitudes by these targeted consumers, because of perceived disrespect. We test this prediction across four studies that include various marginalized groups and product categories.

Study 1 employed a between subject design (identity-linked product: not on sale vs. on sale) with Asian participants (N=275) residing in the U.S. The study was conducted amidst the Asian Lives Matter movement that has erupted in response to discrimination against Asians during the COVID-19 pandemic. Participants imagined shopping in a store called NIVO, where there were five identity-neutral water bottles and a water bottle with the slogan "Asian Lives Matter." In the on-sale condition, the identity-linked product was

40% off. NIVO brand attitude (α=.98; very negative / very positive, very bad / very good, very unfavorable / very favorable) was lower for participants whose identity-linked product was on sale as compared to not on sale (*M*=4.37 vs. 4.92, *p*=.002, d=.37).

In Study 2, we manipulated the degree to which the price promotion is tied to the identity. A promotion is more strongly tied to an identity when the promotion is only applied to the identity-linked product. When price promotions appear for all of the products, then the promotion is weakly tied to the identity. We expected that the promotion would have a more negative impact on brand attitude when it is strongly (vs. weakly) tied to the identity. The study used a between-subject design (no price promotion vs. weak promotion link vs. strong promotion link). LGBT participants (N=150) imagined shopping at NIVO, an electronics brand, where they were shown a large assortment of cellphone cases, two of which were related to the LGBT identity. In the weak promotion link condition, all NIVO cellphone cases were 50% off; in the strong promotion link condition, only the LGBT cellphone cases were 50% off. Participants in the strong promotion link condition had less favorable brand attitudes compared to those in either the weak promotion (*M*=5.26 vs. 5.65, *p*<.01, d=.59) or the no price promotion (*M*=4.45 vs. 5.65, *p*<.001, d=.89) condition.

In Study 3, we examined the mediating role of perceived disrespect and how it affects consumers' real-world choices. We recruited LGBT participants and employed the same design and scenario as in Study 1, but this time the focal identity-linked product was a LGBT rainbow water bottle. After answering five questions that measured perceived disrespect (α=.90; e.g. "To what extent do you think NIVO would make LGBT consumers feel disrespected?"), participants were told that they could enter a raffle and asked to choose between two prizes: a $55 gift card from NIVO and a $50 gift card from RINAI, a direct competitor of NIVO. Participants in the promotion condition perceived more disrespect (*M*=1.89 vs. 3.03, *p*<.001, d=1.00) and were more likely to forgo five dollars and support NIVO's competitor (2% vs. 14%, *p*=.01). A mediation analysis revealed that disrespect fully mediated the effect of promotion on the choice of gift cards (95% CI = [.39, 2.66]).

Study 4 further explored the role of disrespect. If disrespect drives the effects, then a price promotion on an identity-linked product would not backfire when the brand is an in-group member (i.e., an in-group member's actions would not be perceived as disrespectful towards the group). Black Americans (N=280) participated in a 2 (brand identity: in-group vs. out-group) by 2 (identity-linked product: not on sale vs. on sale) between-subject design. To manipulate brand identity participants saw a photo of the NIVO's employees who were either a group of black employees (in-group) or white employees (out-group). Participants then saw an assortment of nine face masks sold by NIVO, one of which was a Black Lives Matter mask. In the on-sale condition the Black Lives Matter mask was 50% off, in the not on sale condition none of the masks were on sale. Participants indicated their brand attitudes and whether they would purchase a product from NIVO in the future. A two-way ANOVA on brand attitude (Figure 2) revealed significant main effects of price promotion (p<.05, η_p^2=.02) and brand identity (p<.001, η_p^2=.28), and a significant interaction (p<.05, η_p^2=.02). A similar analysis for future purchase intention (Figure 3) revealed a significant main effect of brand identity (p<.001, η_p^2=.22), and a significant interaction (p<.01, η_p^2=.03). Planned contrasts revealed that only when the brand was an out-group member discounting the identity-linked product reduced brand attitudes (M=3.56 vs. 4.32, p<.01, d=.50) and future purchase intentions (M=3.03 vs. 4.22, p<.01, d=.52).

In sum, we show that offering price discounts on products linked to marginalized identities may backfire, reducing brand attitudes and leading to consumer revenge behaviors due to higher perceived disrespect. Accordingly, the effect dissipates when the brand is perceived as an in-group member whose actions presumably would not be perceived as disrespectful. We offer the first academic investigation into the interplay of pricing strategy and social identity and provide implications for marketers on how to better reach out to marginalized consumer groups.

Charging the Self: Consumer Use of Identity-Relevant Credit Cards

EXTENDED ABSTRACT

It is well established that credit cards encourage consumers to spend more, an effect referred to as the credit card premium (Feinberg 1986; Prelec and Simester 2001). The current research shows that all credit cards are not created equal when it comes to the credit card premium effect; specifically, it is weakened when a credit card is relevant to consumers' identity. Credit cards are often linked to consumers' identity in various ways. For example, universities, sports teams, and non-profit organizations issue affinity credit cards carrying the name, logo, and imaging of the organization (e.g., Barclays offers 33 different NFL team and logo choices). Credit cards affiliated with consumers' favorite brands also abound in the marketplace. Most retailers offer branded credit cards, and other brands are starting to do the same: Apple launched their first branded credit card in 2019. Most credit card companies also allow consumers to customize their cards by choosing from a selection of designs or uploading their own images.

Despite the prevalence of such identity-relevant credit cards in the marketplace, research has not considered the effects of consumers using credit cards linked to an aspect of their identity. This is surprising given that prior consumer research has established important effects of identity on decision making and consumption, such that consumers tend to prefer purchasing identity-relevant products (Belk 1988; Reed 2004). Though identity goods are preferred, consumers strategically slow satiation for identity goods (Chugani, Irwin, and Redden 2015) and conserve their usage of nondurable identity products (Sheehan and Dommer 2020). Mandel (2003) found that interdependent (versus independent) consumers seek greater risk in their financial choices. More recently, Han et al. (2019) found that political identity influences individual's financial risk taking. Given consumers prefer identity-relevant goods, but recognizing credit cards pose some financial risk, how will consumers use identity-relevant credit cards relative to traditional credit cards? The current research aims to shed some light on this question. Across four studies and field data from a money management mobile app, we find a paradoxical effect of identity-relevant credit cards on consumers' credit card use: consumers enjoy using identity-relevant credit cards, yet are less willing to charge items and accumulate debt on those cards.

In Study 1, we asked Mturk participants to indicate whether they currently owned credit cards affiliated with: universities, sports organizations, retailers, airlines, or non-profit organizations (identity-relevant); and banks (non-identity-relevant). For each credit card type, we asked participants to indicate: the extent to which their identity overlaps with the identity they associate with each card (Identity Overlap scale; Aron et al. 1992); how often they use each type of credit card; how much they enjoy using each type of card; and whether they use each card primarily for utilitarian purchases, hedonic purchases, or a mix of both. A series of regressions revealed that the more consumers' identity overlapped with a credit card iden-

tity, the more they enjoyed using the card ($p < .001$), the more frequently they used it ($p < .001$), and the more likely they were to use it for hedonic purchases ($p < .001$).

In Study 2, we manipulated credit card identity relevance and examined its effects on a hedonic purchase decision. We recruited Mturk workers living in the New England area who identify as fans of the Patriots and Red Sox sports teams. We randomly assigned participants to an identity-relevant (Patriots/Red Sox) credit card or a control credit card with no affiliation. Participants imagined shopping in a local mall where they see a great looking beach shirt and are trying to decide whether to charge the shirt on their credit card. They indicated how much debt they are willing to incur on their credit card to purchase the shirt, their expected enjoyment of using the card, and the extent to which they expect that using this card will "make a positive impression on others." Results revealed that participants were willing to incur less debt on their identity-relevant card versus the control card ($p < .05$). Participants also expected to enjoy using the identity relevant credit card more and make a more positive impression using it versus the control card (p's $< .001$).

In Study 3, we replicated these results with a utilitarian purchase (work shirt). We presented Boston College students with either a Boston College credit card or a control card. Students were again willing to incur less debt to purchase the work shirt with the Boston College credit card versus the control card ($p = .04$).

Study 4 participants were Penn State students in a mixed design that manipulated payment method between subjects (Penn State credit card, control credit card, cash) and four purchases (headphones, camping chair, backpack, water bottle) within subjects. Compared to charging the items on the control credit card, participants were willing to pay less for the items when charging them on their Penn State card ($p = .05$) or paying cash ($p = .08$),[1] and consumers' willingness to pay with an identity-relevant credit card was similar to that when paying cash.

Finally, we analyzed money management mobile app field data containing nearly 4,000 credit cards. An RA coded whether app users had given each credit card account their own personal name (e.g., Brian's Chase Freedom; identity-linked credit card) or not (generic credit card). In line with prior results, we found that app users carried a significantly lower average credit card balance on the identity-linked than generic credit cards ($p = .06$).

In summary, we identify a robust novel effect of using identity-relevant credit cards on consumer credit card spending: consumers are less willing to charge purchases on an identity-relevant versus a control card. Our results suggest that identity-relevant credit cards might reduce consumer credit card spending and weaken the well-established credit card premium effect (Prelec and Simester 2001). In next steps, we will conduct studies to explicate the process underlying these effects.

The Effect of Self-Variety on Choice Difficulty When Choosing Between Identity-Linked Goods

EXTENDED ABSTRACT

Individuals have a readiness to engage in actions congruent with their identities, a concept known as identity-based motivation (Oyserman 2009). Subsequently, consumers prefer brands and products that express one of their identities to goods that do not (Escalas and Bettman 2005; LeBoeuf, Shafir, and Bayuk 2010; Reed 2004). But these paradigms have traditionally pitted identity goods with

either neutral (no identity) goods or goods congruent with the consumer's outgroup, stemming the question – what happens when an individual must choose between two goods, each of which expresses one of his multiple identities?

We argue that the difficulty of deciding between two identity-congruent products will depend on the individual's self-variety, defined as the extent to which the self is composed of many distinct identities. We theorize that choosing between two identity goods should be difficult for individuals with high self-variety. Because these individuals hold many distinct identities, when asked to choose between identity goods they will feel like the adequacy of information is insufficient (Nagpal et al. 2011), making it more difficult to choose (Hilbig 2008). On the other hand, individuals with low self-variety have fewer distinct identities, making it difficult for them to think of themselves as one identity without also thinking of themselves as another identity. As such, identity goods are seen as very similar to one another and the number of identity options in the set should not impact their perceived information adequacy nor their decision difficulty. In sum, we predict that individuals with high self-variety take longer to make a choice (experience greater difficulty) when the choice set contains two identity goods, compared to when only one identity good is present. This effect does not emerge for individuals with low self-variety.

We assessed self-variety in all of our studies with a task adapted from Linville (1987) that involved sorting traits into identity groups. Participants were given a list of 28 traits (e.g., outgoing, emotional, lazy, assertive). They were instructed to groups traits together based on their various identities by dragging and dropping traits into boxes. Importantly, each trait was listed multiple times for use in multiple boxes.

In the marketing literature, variety is often captured via entropy (Young and Wasserman 2001); entropy has been used to assess both the dispersion of attribute levels across products (Van Herpen and Pieters 2002) as well as assortment variety (Kahn and Wansink 2004). Following this prior work, we assess self-variety as where p_j is the proportion of identities in the self with trait level j. Consistent with entropy as a measure of assortment variety, higher scores indicate greater self-variety.

Study 1 was a real choice task in which we asked participants to either choose between two bags, each of which expressed an identity that they held (gender and American identity), or choose between one of the identity bags and a plain bag. We measured the time they took to make their decision as our measure of decision difficulty (Park and Lessig 1981), as well as their self-variety. In support of our predictions, at high self-variety (Johnson-Neyman point = 3.92; -.57 SD), participants took longer to make their choice when there were two identity options present compared to when there was only one identity option available. There was no significant Johnson-Neyman point at low self-variety. Study 2 replicated this effect using a manipulation of self-variety.

In study 3, we asked participants to choose between two identity candles and a plain candle. By adding the third option of a non-identity good to the choice set, we assessed whether greater decision difficulty would lead those with high self-variety to be more likely to "opt-out" of the decision by choosing this option (Luce 1998), which was indeed the case ($b = .28$, Wald $\chi^2 = 4.81$, $p = .028$).

In study 4 we allowed participants to select two important identities (from a list) and then asked them to choose either between two stress balls consistent with those identities, or between one identity stress ball and a plain stress ball. We measured the time they took to make their decision, their perceptions of information adequacy, and self-variety. Once again at high self-variety (Johnson-Neyman point

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1   Willingness to pay for the four items was standardized and averaged. We obtained similar results estimating a two-level model with four purchases nested within subjects.

= 4.19; .14 SD), participants took longer to make their choice when there were two identity options present compared to when there was only one identity option available. Moreover, at high levels of self-variety choice time was mediated by perceptions of information adequacy.

Study 5 demonstrates that self-variety only affects decision time and does not affect the length of time it takes participants to evaluate two identity products, suggesting that decision time is not measuring information processing or involvement. Study 6 supports our theoretical framework by examining mindset as a moderator. A satisficing mindset reduced decision difficulty among individuals with high self-variety, suggesting that these individuals have a tendency to engage in greater comparison of identity options because they perceive less information adequacy. Priming a satisficing mindset, which reduces reliance on comparisons in favor of choosing a "good enough" option, therefore reduces decision difficulty among individuals with high self-variety. On the other hand, a maximizing mindset increased decision difficulty among individuals with low self-variety. These individuals see two identity options as similar, and thus have a weaker tendency to compare across options. Priming a maximizing mindset, however, encourages such comparison and thus increases decision difficulty among those with low self-variety.

The identity literature has established that consumers prefer identity goods by studying choice between one identity good and one neutral good. However, with the amount of product customization in the marketplace today, consumers frequently have multiple identity options from which they can choose. The present research examines such choice by being the first paper, to our knowledge, to look at choice between two identity goods without a priori activating one of the identities, which is likely to be more representative of consumer decisions in the marketplace when no one identity is salient at the time of a purchase decision.

When I Lose You, I Lose Me: The Impact of Relationship Dissolution on Switching Behavior

EXTENDED ABSTRACT

Many of us start romantic relationships with the hope that they will last for a lifetime. Yet, such longevity is rarely the outcome. A typical adult in the UK has two serious relationships before getting married (Daily Mail 2014), while half of the marriages in the US result in divorce (APA 2020). Although a romantic breakup is a familiar experience for most, surprisingly, research on the impact of romantic relationship dissolutions on consumer behavior is scant. Romantic breakups can have profound effects on individuals' self-identities, as many consider their relationship an integral part of themselves (Slotter et al. 2010). This research examines one outcome of the change individuals experience in their self-concept following a romantic breakup: willingness to switch service providers.

During romantic relationships, partners' sense of selves become intertwined, as they engage in mutual activities, share social circles, and pursue joint goals (Aron et al. 1995). Upon relationship dissolution, they experience a sense of loss in the aspects of the self that were previously linked to their partner and/or were defined through their role in the relationship (Haber 1990; Mattingly et al. 2020). Given the inherent link between consumers' self-identities and their consumption behaviors (Reed et al. 2012), we propose that the change in one's self-concept ensuing a romantic breakup will also be reflected in their decisions to switch to new providers (vs. stay with the existing ones). We predict that after a romantic breakup, consumers will display higher willingness to discontinue their current subscriptions and greater interest in switching to alternative providers,

and that this effect will be driven by the identity loss experienced after the breakup, as well as the desire to redefine their self-concept and open up a new chapter in life.

We test these predictions in four studies. In Study 1 (n=396) we recruited an equal number of participants who had or had not gone through a breakup within the last three years. Participants who went through a breakup were asked to reflect on their relationship dissolution in a writing task, while those in the control condition wrote about the last book they read. Next, all participants imagined themselves in a scenario depicting a customer who was satisfied with their current cellphone carrier, but had recently seen the ads of two other companies with comparable plans to the incumbent. Participants then answered two questions about their intentions to stay with their current provider and the attractiveness of switching to other providers. We found that participants who reflected on their breakup experience had higher switching intentions compared to those in the control condition ($M_{breakup}$=4.04, $M_{control}$=3.61, p=.022).

In Study 2 (n=380), we manipulated participants' experience of a breakup by using a procedure from Lewandwoski et al. (2006). We recruited participants who were currently involved in a romantic relationship, and they were randomly assigned to imagine either the end of their relationship or their plans for the upcoming weekend (control condition). In the breakup condition, participants listed three attributes they would lose upon relationship dissolution, while control condition participants listed three activities they would do with their partner. Next, participants reported their intentions to switch to new providers across various service categories (e.g., hair salon, restaurant), which were combined into a willingness-to-switch index. Participants in the breakup condition reported higher switching intentions than those in the control condition (p<.001).

Study 3 (n=396) tested the generalizability of the effect in another context and provided preliminary evidence of our hypothesized mechanism. After completing the same writing task as in Study 1, participants imagined that they moved to a new apartment and were deciding between two internet providers—the same provider that they previously used vs. a new one (Jiang, Zhan, and Rucker 2011). In this study, participants in the breakup condition answered three additional questions measuring the level of identity loss experienced after the relationship dissolution (e.g., "*When we broke up, I lost many aspects of my life that were linked to my partner*"). Results reveal that participants in the breakup condition (vs. control) reported higher willingness to switch to the new provider (p=.009), and that the level of identity loss was a positive predictor of switching intentions (p<.001). Also included in this study was a 12-item measure of interpersonal attachment (Wei et al. 2008) assessing individuals' attachment style along the dimensions of anxiety and avoidance. Individuals with an anxious attachment style rely heavily on their partner to confirm their self-worth and experience a greater sense of identity loss after relationship dissolution (Davis et al., 2003). Thus, we predicted that our effect would be stronger for individuals high in anxiety attachment. Indeed, the effect of breakup on switching was significant for participants high in anxiety attachment (+1SD) (β=.65, p=.009), but not for those who were low (-1SD) (p>.90). These results provide additional evidence for our mechanism by showing that individuals who experience a greater loss in their self-identity are more likely to switch providers.

Using the same manipulation from Study 1 and the same DV from Study 3, Study 4 (n=390) showed that the effect of breakup on switching was mediated by lower self-continuity and desire to redefine one's self. Self-continuity was measured by using a modified version of Aron et al.'s (1992) overlapping circles depicting past vs. current self, whereas desire to redefine the self was measured

with 4 items (e.g., "I want to rediscover who I am"). A serial mediation model (PROCESS Model 6, with condition coded as 0=control, 1=breakup) showed that there was a significant indirect effect on switching intentions through self-continuity and desire to redefine one's self (CI$_{95}$ [.03, .13]).

To our knowledge, this is the first work to examine the consumer behavior consequences of the experience of an identity loss resulting from a romantic relationship dissolution, showing that it increases consumers' switching intentions. We also provide evidence that this effect is driven by the desire to redefine one's "self" and open a new life chapter – a process-driven explanation that captures the psychological benefits of switching beyond the outcome utility (Su et al. 2017).

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The Algorithmization of Consumer Research: How Algorithms Impact Mindsets, Markets, and Money Management

Chair: Christian Hildebrand, University of St.Gallen, Switzerland

Paper #1: Diversity Signaling to Algorithmic versus Human Recommenders
>   Phyliss Gai, Peking University, China
>   Eugina Leung, Tulane University, USA
>   Anne-Kathrin Klesse, Erasmus University Rotterdam, Netherlands

Paper #2: Algorithm Transparency: How Unveiling Algorithms Influences Product Perception and Adoption
>   Melanie Clegg, University of Lucerne, Switzerland
>   Reto Hofstetter, University of Lucerne, Switzerland
>   Emanuel de BellisUniversity of Lausanne, Switzerland
>   Bernd Schmitt, Columbia University, USA

Paper #3: Bots at the Frontline: How Consumers Perceive Firms that Employ Service Robots
>   Noah Castelo, University of Alberta, Canada
>   Johannes Boegershausen, Erasmus University Rotterdam, Netherlands
>   Christian Hildebrand, University of St.Gallen, Switzerland
>   Alexander Henkel, Open University, Netherlands, Netherlands

Paper #4: Conversational Bots Reduce Financial Planning Stress
>   Meike Zehnle, University of St.Gallen, Switzerland
>   Christian Hildebrand, University of St.Gallen, Switzerland

SESSION OVERVIEW

The use of algorithmic consumer assistance has fundamentally changed how humans search, shop, and express their preferences. From receiving product recommendations (Gai and Klesse 2019) to algorithmic decision support by financial robo advisors (Hildebrand and Bergner 2020; Lourenço, Dellaert, and Donkers 2020). Despite the widespread adoption of algorithmic assistance across industries and the emerging research on how algorithmic assistance impacts human decision making (Dietvorst, Simmons, and Massey 2018; Logg, Minson, and Moore 2019), research on both the underlying lay beliefs that consumers possess and how they impact marketing relevant downstream consequences is scarce. The goal of this special session is to shed light on this burgeoning field of algorithmic consumer assistance and how consumers perceive products, services, and also firms that employ such algorithmic assistance. The session will be comprised of four papers that explore two central research streams:

1. Lay Beliefs & Psychological Mechanisms of Algorithmic Consumer Assistance
2. Downstream Consequences of Algorithmic Consumer Assistance for Firms & Consumers

The first two papers in this session explore the first stream. Gai, Leung, and Klesse demonstrate that consumers are less likely to signal diverse preferences when the recommender is algorithmic versus human. They show that this occurs because consumers hold the lay belief that algorithms are less able to understand diverse consumer input than humans and therefore signaling diversity may undermine the accuracy of recommendations. Next, Clegg, Hofstetter, de Bellis, and Schmitt examine how algorithmic transparency affects consumer product adoption. They demonstrate that consumers hold the lay belief that adaptive (vs. pre-programmed) algorithms are more creative

and capable to handle tasks with high variability of outcomes. They further show that enhancing the transparency of adaptive (vs. pre-programmed) algorithms can promote product adoption in high as opposed to low variability contexts (i.e., contexts that require following a narrowly defined procedure, such as a recipe when baking a cake, are considered as low versus high outcome variability settings).

The third and fourth papers explore the second research stream, focusing on the downstream consequences of algorithmic consumer assistance for consumers and firms. Castelo, Boegershausen, Hildebrand, and Henkel show that consumers perceive firms that rely on robotic customer assistance as less customer centric and more cost-cutting oriented, leading to lower service satisfaction and willingness to recommend the firm to others. Finally, Hildebrand and Zehnle show in a financial decision-making context, that the use of conversational bots (i.e., chatbots) leads to lower financial planning stress compared to spreadsheet-like interfaces and that the effectiveness of conversational bots is further amplified for consumers with chronic money management issues.

Taken together, this special session contributes to the conference by showcasing research that addresses fundamental questions about consumers' lay beliefs and attributions toward algorithmic consumer assistance and their downstream effects on consumer choice, firm perception, and financial decision making. The papers in this session span multiple disciplines from diversity signaling in psychology, adaptive user interfaces in human-computer interaction, and explainable AI in computer science. We hope that this session ultimately inspires more interdisciplinary research on the technology-augmented consumer.

Diversity Signaling to Algorithmic Versus Human Recommenders

EXTENDED ABSTRACT

Consumers frequently receive personalized product recommendations from automated algorithms, such as when using Netflix, Spotify, or Amazon. When using such services, consumers typically browse available options and indicate their preferences through the items that they select. The recommender systems then utilize this input about consumers' preferences to generate recommendations of other products that consumers may like. Notably, the recommender systems are built in a way that consumers can receive any recommendation as long as they show interest in diverse products (Datta, Knox, & Bronnenberg, 2018). The question that arises, however, is whether consumers indeed signal diverse preferences to algorithmic recommenders.

While we know that consumers tend to seek variety and signal uniqueness to other humans (Ariely & Levav, 2000; Ratner & Kahn, 2002), it is less clear whether consumers are equally likely to engage in diversity signaling when interacting with algorithmic recommender systems. Thus, in this research, we compare consumers' tendency to engage in diversity signaling (here, defined as selecting items from a diverse set of categories) when consumers indicate their taste to algorithmic versus human recommenders.

In eight studies, we show that consumers are less likely to signal diverse preferences when the recommender is algorithmic versus human. We document that this occurs, because of the lay belief that algorithms are less able to understand diverse input than humans and,

thus, signaling diversity may undermine the accuracy of recommendations. This belief may be driven by two reasons. First, consumers see algorithms as processing product features independently, instead of holistically (Newman, Fast, and Harmon 2020). That is, while humans may find commonality between products with divergent features and understand the tastes of people who like these products, algorithms may be unable to extract a consumer's taste if it is diverse. Second, consumers may see algorithms as prioritizing the accuracy of the output over its diversity, such that it would be futile for them to signal diversity to algorithmic recommenders. Table 1 provides an overview of all our eight studies in different domains (e.g., music, recipes, paintings, tasks) using different approaches (correlational, experimental).

Study 1 measures to what extent consumers hold the lay belief that diverse input would undermine the accuracy of the output (i.e., recommendation). We utilize a 2 (algorithm vs. DJ as the recommender) × 10 (low to high levels of input diversity) between-subject design. Participants (N = 709 on MTurk) read a scenario about music recommendations for a person whose initials are M. F. Participants read that M.F. had to tell the recommender what s/he likes and saw that M. F. selected 1 to 19 (with an interval of 2, thus all odd numbers) music genres out of 20 depending on condition. The more genres selected, the more diverse is M. F.'s input. Participants were asked to rate the accuracy of the output (*"The algorithm [experts] will be able to recommend songs that M. F. likes."*). As the number of selected genres increased, the output was perceived as less accurate, when it is generated by an algorithm ($t(705) = -4.98, p < .001$). However, when participants read that human experts generated recommendations, the relation remained negative but to a lesser extent ($t(705) = -2.75, p = .006$; interaction $t(705) = 1.78, p = .075$). Studies 2 and 3 replicated the finding that an algorithmic (versus human) recommender makes consumers more likely to believe that diverse input would harm the accuracy of the output (e.g., "understanding what I truly like).

Whereas the first studies, explored participants' lay belief, studies 4 to 7 demonstrate that algorithmic versus human recommenders decreases diversity signaling. In study 5, participants (N = 201 from MTurk) were asked to imagine that Amazon's algorithm (versus staff) would recommend HITS based on their topics of interest. They were asked to select their interests from a list of 19 different topics. In line with our prediction, participants in the algorithm (versus staff) condition selected fewer topics (M = 6.84 versus 4.70, t(199) = -3.14, p = .002). Study 6 replicates the effect in the domain of novels. Participants (N = 100 native Chinese) read a scenario about a person named N who has subscribed to a novel recommendation service; depending on condition, the service employed a data-driven algorithm (algorithm condition) or professional editors (human condition) as recommenders. N has favorite novels in three genres (fantasy 99%, adventure 0.9%, and thriller 0.1%) out of eight genres. Participants had to imagine that they were N and indicated which genres they like so that the recommender can understand their tastes. We deliberately made N's primary preference fall within one category (fantasy) to impose a trade-off between accuracy (i.e. fewer categories => more accurate recommendation) and diversity (i.e. more categories => more diverse recommendation). To prevent participants from choosing only the genre "fantasy", we required participants to select at least two genres. We found that participants selected fewer genres when the recommender was algorithmic as compared to human (M = 2.58 vs. 3.10), t(98) = 2.59, p = .008. Study 7 replicates these results in the domain of paintings with European participants. Study 8 uses a causal-chain design and shows that the lay belief that algorithms are worse at understanding diverse tastes underlies the effect that we demonstrate here.

While prior research has investigated the diversity of *output* (Haim, Graefe, & Brosius, 2018) of recommender systems, this research is (to the best of our knowledge), the first to explore whether consumers are less likely to provide diverse *input* when interacting with algorithmic recommender systems (as compared to human recommenders). Our finding that consumers signal less diverse tastes to algorithmic recommenders is important because less diverse input can be self-handicapping when consumers actually desire diverse output. Thus, companies which utilize recommender systems should be aware that consumers hold the lay belief that algorithms cannot understand diverse input; if companies want customers to exploit all that the service has to offer because that increases customer satisfaction (Puntoni, Reczek, Giesler, & Botti, 2020), they need to encourage consumers to provide diverse input.

Algorithm Transparency: How Unveiling Algorithms Influences Product Perception and Adoption

EXTENDED ABSTRACT

Many algorithms are considered "black boxes" that consumers mistrust, view as biased, or as making immoral and harmful predictions or decisions (Awad et al 2018; Davenport and Kirby 2016; Lambrecht and Tucker 2019). However, technically it is increasingly possible to better explain algorithms (Lundberg and Lee 2017; Sundarajan et al. 2017), and public officials increasingly demand that firms provide details about the algorithms steering products and services (Carmon et al. 2019). As a result, algorithm transparency has become a widely-discussed topic in artificial intelligence (AI) and algorithm communication (Rai 2020). Yet, while prior consumer research has compared algorithm to human performance (e.g., Castelo et al. 2019; Longoni et al. 2019), little research has focused on algorithms themselves.

How do consumers perceive information about algorithms? In this research, we investigate how transparency about an algorithm influences product adoption. Specifically, we increase transparency about the type of algorithm of a product and how the algorithm works. Based on computer science literature, we distinguish between two major types of algorithms: adaptive (such as machine learning algorithms; Jordan and Mitchell 2015) and pre-programmed algorithms (i.e., with parameters fixed by a programmer; Schmidhuber 2010).

We base our Hypothesis on prior research on algorithm perception and creative stereotypes (Haslam 2006; Runco 2004). We predict that adaptive (vs. pre-programmed) algorithms are perceived as more creative but less predictable. Consequently, for products performing tasks requiring a high variation in their output (i.e., high output variability, such as providing various answers to user requests from a voice assistant), increasing transparency about adaptive algorithms should increase adoption. Conversely, we hypothesize that increasing transparency about adaptive algorithms reduces adoption of products that perform tasks that require low variation in their output (i.e., tasks with a low output variability), for which predictability may be more valued than creativity. However, this harmful influence of adaptive algorithms can be mitigated by increasing their explainability, which increases how predictable they are perceived. Five experiments test our Hypothesis.

Study 1A and 1B tests the main effect of adaptive algorithms on product adoption in consequential contexts. In study 1A, participants from Prolific ($N=200$, $M_{age}=27.74$, 40.50% female) were randomly assigned to one of two conditions in a two-cell

between-subjects design: They received an advertisement about a real application that generates cooking recipes from scratch (a high output variability task). The ad conveyed information about either the adaptive or the pre-programmed algorithm. Participants could choose between actually using the recipe generator or taking part in a raffle for a monetary reward of £1 (five participants could win). Significantly more participants chose to use the recipe generator in the adaptive (55.56%) versus the pre-programmed condition (38.61%; $\chi^2(1)$=5.76, p=.016).

In study 1B, we measured participants' willingness to pay (WTP) for a beer, whose recipe was generated by an algorithm. Participants received information about either the adaptive or the pre-programmed component of the algorithm (2-cell between-subjects). Participants in the adaptive condition reported higher WTP than in the pre-programmed condition ($M_{adaptive}$=1.96, $M_{pre-programmed}$=1.56; $F(1, 200)$=6.64, p=.011).

Study 2 tests if perceived creativity and predictability mediate how algorithm type influences product adoption. Students of a major US-American University (N=207, M_{age}=24.55, 57.0% female) were informed about the algorithm of a voice assistant (adaptive vs. pre-programmed), and indicated their algorithm perceptions and usage intention. Usage intention significantly increased in the adaptive condition ($M_{adaptive}$=4.70, $M_{pre-programmed}$=4.05; $F(1,205)$=6.50, p=.01). This effect was significantly mediated by an increase in perceived creativity of the algorithm (b=.61, 95%CI=[.34;.94]). There was no mediation via predictability (b=-.02, CI=[-.20;.14]), which we explain with the rather high output variability of voice assistants.

Study 3 tests the moderating effect of output variability. Participants (N=395 US-MTurkers, M_{age}=35.71, 48.61% female) were randomly assigned to one condition in a 2×2 between-subjects design. Participants reported their intention to use a cooking app after being informed about its algorithm (adaptive vs. pre-programmed). Output variability was manipulated by framing the task of the cooking app (i.e., high: baking a completely novel cake vs. low: baking a cake exactly by recipe). We found a significant interaction ($F(1,394)$=14.61, p<.001): When output variability was high, usage intention increased in the adaptive condition ($M_{adaptive}$=5.15, $M_{pre-programmed}$=4.48; $F(1,391)$=8.67, p=.003). When output variability was low, we found the reverse ($M_{adaptive}$=4.37, $M_{pre-programmed}$=5.16; $F(1,391)$=6.11, p=.013). Parallel moderated mediation analysis revealed that the mediation via perceived algorithm creativity was moderated by output variability (index of moderated mediation: .40, CI=[.17;.67]), such that the indirect effect via creativity was stronger in the high output variability condition. The mediation via perceived predictability was moderated in that the indirect effect via perceived predictability was significant only for the low output variability condition (index of moderated mediation: .59, CI=[.30;.93]).

Study 4 tests the moderating effect of explainability of the algorithms. Participants (N=327 car owners from Prolific, M_{age}=41.19, 25.69% female) were randomly assigned to one condition in a 2×2 between-subjects design. They indicated their purchase intention for a driving assistance system after being informed about its algorithm (adaptive vs. pre-programmed), which was either more or less explainable (i.e., details about how the algorithm predicts the driving direction were provided vs. not provided). The interaction between both factors was significant ($F(1,323)$=5.15, p=.024): Purchase intention increased in the adaptive condition, but only if the algorithm was highly explainable ($M_{adaptive}$=3.5, $M_{pre-programmed}$=2.38; $F(1,323)$=7.68, p=.006). No significant difference revealed if the adaptive algorithm was not explainable (M_{adap-}

$_{tive}$=2.79, $M_{pre-programmed}$=3.00; $F(1,323)$=.24, p=.624). Parallel moderated mediation analysis showed that a negative indirect effect of the adaptive algorithm on purchase intention via perceived predictability was significant only in the low but not in the high explainability condition (index of moderated mediation: .20, CI=[.01;.48]). This shows that being transparent about how adaptive algorithms arrive at their predictions can increase purchase intention.

In sum, our findings show that not all algorithms are perceived the same. Making an adaptive algorithm transparent may backfire if the product is expected to provide one specific output. However, increasing explainability of adaptive algorithms makes them less unpredictable, increasing adoption even for products, which consumers feel uncomfortable about, if they lack predictability (e.g., autonomous driving vehicles). Our findings advise managers to carefully consider how to disclose information about algorithms.

Bots at the Frontline: How Consumers Perceive Firms that Employ Service Robots

EXTENDED ABSTRACT

Robots are used to provide customer service online and in stores. However, only 15% of firms that currently use the market-leading Pepper service robot plan to renew their contracts (Whitton 2018). We use real customer-bot interactions to shed light on the challenges facing the use of service robots. We propose that encountering service robots activates a lay theory that automation is motivated by profit maximization at the expense of the customer experience. Since firms have finite resources, consumers rely on a "zero-sum heuristic" (Chernev 2007), such that investments into service robots may be perceived as coming at the expense of a worse customer experience. Firms using service robots should therefore be seen as less customer centric than firms that do not, which should in turn decrease consumers' service satisfaction and willingness to recommend the firm to others. These effects should be attenuated when the firm's perceived motivation for using the automation is to overcome current shortcomings in customer service.

Study 1. In a field study over four days, we varied whether 109 customers in a café placed their order with a Pepper robot or with a human. After ordering, customers rated their agreement with the statements "I would recommend this coffee bar to a friend or colleague" and "I am satisfied with my service experience today" (α = .92). These firm outcomes were worse in the robot condition (M = 5.34) than in the human condition (M = 5.81, $F(1,107)$ = 4.89, p = .029). The difference remained significant controlling for technology affinity, age, gender, and frequency of visiting the café.

Study 2. 238 Prolific participants engaged in an online chat with a chatbot but were told that they were interacting either with a bot or with a human. This keeps the interaction identical across conditions. Participants were told that we were testing new customer service platforms for a telecommunications company and that they interact with one of the company's representatives. After the interaction, we measured participants' service satisfaction and recommendation willingness as in Study 1. We also measured perceived customer centricity of the firm (Habel et al. 2019). The firm was perceived as less customer centric when participants believed they were chatting with a bot than with a human ($M_{Chatbot}$ = 4.75, M_{Human} = 5.28; $t(236)$ = 2.66, p = .008), and consumers had lower satisfaction and willingness to recommend the firm ($M_{Chatbot}$ = 4.87, M_{Human} = 5.38; $t(236)$ = 2.47, p = .014). A mediation model with bootstrapped estimates (5000 iterations) confirmed the positive effect of customer centricity on firm outcomes (β = .79, p < .001), switching off the main effect

of condition (β = -.09, *p* = .49), and an indirect effect excluding zero (-.42, 95% CI = -.71, -.11), indicating full mediation.

Study 3. This study directly tested our proposed customer centricity mechanism by asking half of the participants to read a brief manipulation of customer centricity before interacting with a chatbot. Some companies that introduce automated customer service communicate an explicitly customer-centric motivation behind the automation. We therefore tested whether this approach could be effective at not only boosting the company's perceived customer centricity but also increasing customer satisfaction after interacting with a bot-based service provider. A total of 369 participants (34% female, M_{Age} = 24) from Prolific Academic participated in the experiment. All participants were asked to chat with the same chatbot used in the previous study (a study in which they would evaluate the customer service of a mobile phone company). Half the participants were first asked to read a 210-word "letter from the company's CEO" explaining why they had started using chatbots. This letter was based on a real LinkedIn post from the CEO of a customer service chatbot company and explained that chatbots were intended to improve the customer experience by reducing wait times and increasing personalization. Our findings revealed that reading the customer-centric motivation prior to chatting with the bot made the company seem marginally more customer-centric (M = 3.99, SD = .71) relative to not reading the letter (M = 3.86, SD = .73, t(367) = 1.71, p = .089). Similarly, satisfaction was marginally higher after reading the letter (M = 4.24, SD = .76) relative to not reading it (M = 4.10, SD = .69, t(367) = 1.87, p = .062). Thus, a company introducing automated customer service may be able to slightly improve its customers' perceptions of this change by explicitly communicating a customer-centric motivation behind this change.

Study 4. The COVID-19 pandemic has presented a compelling real-world justification for the use of service bots to benefit customers. We therefore tested whether this justification (i.e., using service bots to protect consumers' health) for the use of service bots in place of human employees would be effective at increasing consumers' satisfaction with bot-provided services. A total of 601 participants were recruited via Prolific and randomly assigned to either a human, robot without, or robot with justification condition. Participants watched a short video of the actual coffee ordering process of Study 1 and the two robot conditions differed in the presence or absence of a justification (using robots during COVID-19 to protect consumers' health). Our findings revealed that satisfaction was highest in the human condition (*M* = 5.48, *SD* = 1.31), significantly reduced in the COVID bot condition (*M* = 5.03, *SD* = 1.72, *t* = 2.64, *Tukey-adjusted p* = .023), and lowest in the regular bot condition (*M* = 4.54, *SD* = 1.84, *t* = 2.79, *Tukey-adjusted p* = .015 vs. the COVID bot condition). Thus, providing a COVID-19-related motivation for the use of service bots results in significantly higher customer satisfaction and perceived customer-centricity than providing no justification, but both outcomes remain worse than human-provided service.

Taken together, the findings of this research help explain why initial rollouts of service robots have been lackluster and have clear implications for how firms can improve outcomes while continuing to pursue the use of this technology.

Conversational Bots Reduce Financial Planning Stress

EXTENDED ABSTRACT

Managing one's personal finances is major source of stress for the majority of American adults and consumers around the world (American Psychological Association 2019; Financial Health Network 2019). Healthy financial planning practices, such as setting a budget and tracking income and expenses, are vital to elevate consumers' long-term financial health. Developing a detailed financial plan is essential to maximize consumer financial well-being in the long-run (Netemeyer et al. 2018), positively affects consumers' FICO credit scores (Lynch et al. 2010), is a major source to drive the creation of long-term wealth (Ameriks, Caplin, and Leahy 2003), and affects the prosperity and economic stability of entire nations (Financial Health Network 2018). Despite the psychological and economic importance of financial planning for consumers, recent survey results reveal that more than 40% of Americans do not agree with the statement "My household plans ahead financially" (Financial Health Network 2019) and over 60% of consumers perceive financial planning as a major source of personal stress in their daily lives (American Psychological Association 2019). To make matters worse, recent research demonstrates that an increase in financial planning stress can cause generalized forms of anxiety and long-term mental health issues (Gamst-Klaussen, Steel, and Svartdal 2019; Harkin 2017; Moschis 2007; Shapiro and Burchell 2012). The primal strategy to improve consumers' financial planning behavior by financial institutions and governmental agencies has been focused on enhancing financial education, from providing educational guides to downloadable spreadsheets to setup a household budget (Consumer Financial Protection Bureau 2020; see also www.consumerfinance.gov). Unfortunately, recent research suggests that these educational approaches are largely ineffective (Fernandes, Lynch, and Netemeyer 2014) and consumers often abandon the use of spreadsheets to engage in a more systematic financial planning (Lusardi and Mitchel 2011; Sardone 2008).

The current work examines a novel intervention using an AI-based conversational interface (or chatbot) to complete a financial planning task, demonstrating substantial reductions in financial planning stress. In three experiments we show that conversational financial planning interfaces reduce financial planning stress compared to traditional, spreadsheet-like financial planning tools and further show that conversational interfaces are most effective for consumers with low levels of current financial well-being. We provide initial evidence on the underlying mechanism, showing that the reduction of financial planning stress is driven by creating a more positive and playful as opposed to negative and arduous financial planning experience. These findings have important implications for the future of consumer financial decision making in technology-augmented environments and the role of conversational interfaces as a novel modality to stimulate positive financial planning experiences.

In Study 1, participants (n=240) were randomly assigned to either a conversational or a non-conversational interface condition to complete a financial planning task. As in typical financial planning tasks, participants had to list a range income and expense categories (e.g., salary, rent, groceries). The non-conversational interface resembled a spreadsheet-like format typically provided by financial institutions whereas the conversational interface condition used a native, interactive chatbot developed for the purpose of this research (to ensure maximum experimental control). We find that using a conversational as opposed to a non-conversational financial planning interface significantly reduced consumers' level of financial planning stress ($M_{NonConv}$ = 2.67, M_{Conv} = 1.82; t(199) = 4.01, p < .001), and these effects were robust across demographics and prior experience with chat technologies. Study 2 (n=258) further explored to which extent the observed effect varies as a function of consumers' chronic money management issues. As shown in Figure 1A and replicating the finding of Study 1, participants experienced significantly lower levels of financial planning stress when using a conversational compared to non-conversational financial planning interface

($M_{NonConv}$ = 3.08, M_{Conv} = 2.69; t(255) = 2.22, p < .05). As shown in Figure 1B, the effect of interface type on financial planning stress was further reduced at higher levels of chronic money management stress ($\beta_{ConvInt \times MoneyMgmt}$ = -.36, t(253) = 2.80, p < .01). Calculating the Johnson-Neyman point revealed a significant interval outside of [.60; 4.08], suggesting that consumers above the mid-point of the scale significantly benefit using a conversational as opposed to non-conversational financial planning interface to reduce financial planning stress. Finally, Study 3 replicated these findings and further found that the reduction in financial planning stress was explained by significantly enhancing consumers' experienced level of playfulness from using the interface. These effects were robust across demographics and consistent across different avatar implementations (from robotic to human-like avatars), and most importantly, enhanced for consumers with lower levels of financial well-being.

Taken together, these findings provide evidence that the type of interface to complete a financial planning task is an unexplored means to reduce consumers' financial planning stress and to create more playful and engaging financial planning experiences.

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Smart Agents at Your Service: Potential and Pitfalls

Chairs: Yegyu Han, IE Business School, Spain
Haribabu Ravella, Virginia Tech, USA

Paper #1: Friendly and Reliable: Antecedents of Interactive Agent Personality

Na Kyong Hyun, Georgia Tech, USA
Samuel D. Bond, Georgia Tech, USA

Paper #2: Smart Recommendation Agents: Voice Tone and Self-Relevance as Keys to Persuasion

Yegyu Han, IE Business School, Spain
Dipankar Chakravarti, Virginia Tech, USA

Paper #3: Consumer Responses to Human-Robot Teams

Ilana Shanks, Stony Brook University, USA
Martin Mende, Florida State University, USA
Maura Scott, Florida State University, USA
Jenny Van Doorn, University of Groningen, Netherlands
Dhruv Grewal, Babson College, USA

Paper #4: AI-Supported Physician-Patient Interactions: The Physician's Avatar May Need No Introduction.

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SESSION OVERVIEW

The rapid evolution of natural language processing and speech recognition technologies has developed AI-driven smart agents that can think on their own, make predictions, adopt humanlike persona, and communicate fluently with humans. Such "smart agents" are rapidly penetrating consumer households and service environments. Smart devices like Amazon Alexa and Google Home can manage household chores, provide information and even make customized purchase recommendations. Deployed in a variety of service contexts, these devices provide intelligent customer support interfaces. In medical contexts, such devices can support physicians in tasks ranging from simple dictation of medical notes to the provision of more advanced healthcare services and patient counseling (IBIS World 2019).

Notwithstanding the enormous potential, our understanding of how to best deploy AI technology in consumer contexts remains fairly rudimentary. Even as we become more familiar with such devices, there are many unknowns and implementation pitfalls. How should the design of such devices reflect appropriate levels of human characteristics (e.g., facial features, voice tones and personalities)? How might such features facilitate or inhibit human-machine communication? If AI devices are to support human professionals, how should their roles be organized and juxtaposed with those of the humans they support? How will their communication styles influence customers given their expectations about the interaction experience and service delivery? To what extent will customers anthropomorphize and respond to AI agents, particularly in medical service contexts where patient compliance is founded on high levels of trust?

This special session brings together four multiple author teams to present four research papers addressing these questions. The first two papers focus on emotionality and customizability of smart agents and how these may influence consumer perceptions and contingent behaviors. First, Hyun and Bond suggest that consumers infer two major personality dimensions from conversations with smart agents: friendliness and reliability. These inferences are based on the service customizability and emotionality embedded in the conversational expressions. Second, Han and Chakravarti present four studies exam-

ining how dynamic versus monotonous vocal tones of smart agents influence consumer persuasion and the moderating role of customer perceptions of the agent's self-relevance.

The remaining two papers provide insights on the deployment of smart agents in medical contexts. Shanks et al. investigate how consumers evaluate human-robot medical teams that are led by a robot or a human. Their results show that behavioral intention ratings are lower towards a team led by a robot versus a human. The effect is mediated by decreased ratings of perceived team leader power and increased consumer anxiety. Finally, Ravella and Chakravarti examine how smart agent avatars can enhance the effectiveness of physician-patient interactions in a healthcare context. They find that a human physician introducing the avatar creates a contrast that lowers the avatar's evaluation. Avoiding such contrasts makes patients more receptive by lowering expectations of empathy from the avatar versus the human physician.

Taken together, these four papers should attract significant interest in the consumer research community. They provide a range of conceptual insights on the mechanisms underlying consumer receptivity to AI agents in service contexts. The findings also shed light on how AI-based smart agents may be designed and deployed more effectively in both general consumer service and medical interaction contexts.

Friendly and Reliable: Antecedents of Interactive Agent Personality

EXTENDED ABSTRACT

Artificially intelligent devices are becoming rapidly established in the lives of ordinary consumers. Our research focuses on a subset of these devices, "interactive agents" (IAs), which we define as "modern technological tools that perform one or more tasks and interface with their users in mutual and dynamic ways" (Gray et al. 2011; Hildebrand et al. 2003). Popular examples include Amazon Alexa, Apple Siri, and Roomba. Although consumers interact with, form relationships with, and often humanize such devices, little is known about how the devices are socially perceived (Schmitt 2019).

Early research on social perception of technology produced social response theory (Reeves and Nass 1996). Its major proposal was that though people recognize machines do not possess feelings, intentions, or motivations, we nonetheless perceive them as "social actors" and interact with them in a reflexive, personal manner (Moon 2000). More recent research explores how consumers endow robots and other advanced machines with humanlike traits including "warmth" and "mindfulness" (Waytz, Heafner, and Epley 2014; Kim, Chen, and Zhang 2016; Kim, Schmitt, and Thalmann 2019). In robotics, a small body of work demonstrates that specific interaction patterns lead to attribution of specific personality traits (e.g., introversion-extraversion; Tapus, Tapus, and Mataric 2007). However, research in this area focuses on a narrow subset of traits adopted from human personality theories, which may or may not be applicable to technological devices.

In prior work (Hyun and Bond 2019), we developed a parsimonious and psychometrically valid instrument to capture perceptions of IA personality. The instrument includes two overarching dimensions ("friendly" and "reliable") with seven underlying facets. In the current research, we examined the nomological validity of a two-

dimensional model. First, we investigated how the two dimensions relate to established constructs in psychology and marketing. Next, we identified theoretical antecedents of each dimension and tested their influence experimentally.

To investigate convergent and discriminant validity of the IA personality constructs, we recruited 243 participants from Mechanical Turk (130 females, *M* Age=35). Participants evaluated one of six popular IA devices (Siri, Alexa, etc., chosen at random). They completed the IA personality measure along with 16 other measures covering anthropomorphism, human and brand personality, product attitudes, and social cognition. Analyses confirmed good fit of the two proposed dimensions ("friendliness" and "reliability") with theoretically overlapping constructs. For example, perceptions of IA friendliness were positively associated with brand sincerity (*r*=.716, *p*< .01) and extraversion (*r*=608, *p* < .01), while perceptions of IA reliability were associated with brand competence (*r*=753, *p* < .01). Analyses also confirmed adequate discriminant validity for all scale comparisons.

Next, we experimentally tested the emotional expressiveness ("emotionality") of an IA device as an antecedent to its perceived friendliness. The expression of emotion provides useful social information about traits of the expresser (Van Kleef 2009), and the mental capacity for refined emotion is considered a uniquely human characteristic (Haslam et al. 2008). To test the prediction that emotionality uniquely influences the friendliness dimension, we recruited 249 US Prolific workers for an experiment involving an audio-based "interactive agent" ("Eva"), in which they interacted with the agent to obtain a restaurant recommendation. Participants were randomly assigned to a *high-emotion* or *low-emotion* condition. We manipulated emotionality by varying the audio script so that the *high-emotion* but not the *low-emotion* script contained positively-valenced, emotionally expressive words (e.g., I am *happy* to assist you…, I am *thrilled* to suggest…, I feel so *proud* to be your assistant; the scripts were otherwise identical.) After interacting with the device, participants completed the 22-item IA personality measure, manipulation check items, and a variety of exploratory attitudinal measures regarding downstream consequences. Analyses supported the role of emotional expressiveness as a unique antecedent to friendliness: compared to participants in the *low-emotion* condition, those in the *high-emotion* condition rated "Eva" substantially more friendly (*M*=3.60, *SD*=1.15 vs. *M*=2.86, *SD*=1.23, *p* < .001; η_p^2=.089), but ratings of reliability did not significantly differ (*M*=5.04, *SD*=1.29 vs. *M*=4.98, *SD*=1.19; *ns;* η_p^2 < .001). Examination of exploratory downstream measures revealed that perceived friendliness was positively and significantly associated with both liking of the device (*b*=.58, *t*=10.65, *p* < .001) and willingness to interact with it (*b*=.45, *t*=7.61, *p* < .001).

Finally, we investigated the ability to customize an IA device ("customization") as an antecedent to perceived reliability. Our logic was based on the principle that customization increases trust and dependability by serving as an implicit reminder of autonomy and control (Ariely and Bitran 2013), and by increasing attention through self-relevant information (Tam and Ho 2005). To test the prediction that customization uniquely influences the reliability dimension, we recruited 195 US Prolific workers for an experiment involving an "interactive assistant," with a procedure similar to the prior study. Participants were randomly assigned to either a *high-customization* or *low-customization* condition. In the *high-customization* condition only, participants were first given the opportunity to select the name, location, and color of the device, and their selections were reflected in the subsequent interaction screens. Otherwise, the two conditions were identical. Analyses supported the role of customization as a unique antecedent to reliability: compared to participants

in the *low-customization* condition, those in the *high-customization* condition rated the device higher in reliability (*M*=5.19, *SD*=1.04 vs. *M*=4.89, *SD*=1.10, *p* < .05; η_p^2=.020), but ratings of friendliness did not significantly differ (*M*=3.03, *SD*=1.34 vs. *M*=2.91, *SD*=1.13; *ns*; η_p^2=.002). Examination of exploratory measures revealed that perceived reliability was positively associated with perceptions of recommendation quality (*b*=.58, *t*=9.90, *p* < .001), and negatively associated with skepticism (*b*=-.55, *t*=-9.33, *p* < .001).

For researchers interested in modern interactive technologies, our work represents a step towards better understanding of personality perception and attribution. For marketers of IA products, our findings suggest that careful construction of product "personalities" may provide a means of differentiation, diversification, and targeting to specific segments. Moving forward, we encourage research that explores how IA personality perceptions influence transactional and relationship variables (performance expectations, willingness to disclose, self-product congruence, etc.).

Smart Recommendation Agents: Voice Tone and Self-Relevance as Keys to Persuasion

EXTENDED ABSTRACT

With recent advances in natural language processing and voice synthesis technologies, voice-controlled artificial intelligence devices are now better able to understand human speech and interact more fluently with human users. Although these so-called "smart agents" can talk and communicate with humans, more research is needed on the role played by the smart agent's voice in human-machine interactions. Our research examines how vocal tone and personalization features designed into such devices influence consumer trust and persuasion in purchase contexts.

As a "carrier of speech" (Belin et al. 2004, p. 129), voice not only delivers semantic content but also transmits feelings and emotions in verbal communications via prosodic cues such as tone, speed, and pause (DeFleur et al. 1993; Nass and Brave 2005). Whereas a modal, or monotonous voice with "overall moderate laryngeal tension" (Gobl and Chasaide 2003, p. 195) does not signal emotion, a dynamic voice pitch communicates emotion (Chasaide and Gobl 2004; Whiteside 1999) and can influence perceptions and evaluations of the speaker's personality and attractiveness (Brown et al. 1973; Tigue et al. 2012).

Recent research (Van Zant and Berger 2020) has shown that "*para*language" (i.e., the acoustic properties of speech such as pitch and volume) influences people's attitudes and choices, and sometimes even more so than linguistic cues. Such modulated speech communicates the speaker's confidence, often without compromising sincerity perceptions. Extrapolating from these *interpersonal* communication contexts, one might expect that a smart agent's recommendation may be more persuasive if delivered in a dynamic versus monotonous (machine-like) tone. Yet, if for a smart agent, such modulation is unexpected, a monotonous voice may be seen as less contrived, cue an inference of objectivity, and raise compliance.

Study 1 manipulated voice of a machine agent to dynamic versus monotonous and tested the effect of voice on persuasion. Participants listened to the agent's voice and responded to the agent by checking answers on a webpage. In Study 1A, 99 UK residents (Prolific panelists) ordered a burger of their choice by interacting with a smart agent (Alexa) speaking in a dynamic or a monotonous tone. At the end of the interaction, Alexa suggested that participants add ice cream for an additional £1. As predicted, participants were more likely to add ice cream when Alexa's recommendation was made

in a dynamic (vs. monotonous) tone ($F(1, 94)$=3.97, p=.049; $M_{Dynamic}$=4.10, SD=2.21; $M_{Monotonous}$=3.21, SD=2.21).

Study 1B replicated the effect with 93 US participants (CloudResearch panelists) who ordered an iPad in similar interactions with a smart agent. Here, the smart agent recommended adding an insurance policy for the iPad at the end of the interaction. Participants were more likely to add the policy when the agent spoke in a dynamic (vs. monotonous) voice tone ($F(1, 91)$=4.19, p=.043; $M_{Dynamic}$=3.67, SD=2.07; $M_{Monotonous}$=2.84, SD=1.83). Moreover, the agent speaking in a dynamic (vs. monotonous) tone evoked more affectively (empathy/sincerity/warmth, α=.94) rooted trust ($F(1, 91)$=4.19, p=.044; $M_{Dynamic}$=3.64, SD=1.79; $M_{Monotonous}$=2.91, SD=1.63). Affective trust mediated the voice tone effect on persuasion (Indirect effect=.23, SE=.13, 95% CI [.0141, .5019]). Interestingly, cognitively rooted (intelligence/competence/efficiency, α=.96) trust measures did not differ across the voice conditions (p=.19).

Study 2 examined how the voice effect is moderated by the extent to which the participant perceives the smart agent as self-relevant. Since self-relevance heightens attachment (Park et al. 2006), smart agents that are perceived as more self-relevant may naturally elicit higher trust. This should attenuate the voice tone effect. We conducted two lab experiments to test this prediction. Each experiment used a 2 (voice: dynamic vs. monotonous) x 2 (self-relevance: high vs. low) between-subjects design.

In Study 2A (N=233), participants purchased an iPad through an interaction with Alexa as in Study 1B. Following the iPad purchase interaction, Alexa recommended the purchase of a product insurance policy. However, prior to the purchase task, Alexa's self-relevance was manipulated. Participants in the high self-relevance condition read an article that described Alexa's functions as highly customizable to their personal preferences. They then interacted with Alexa by talking about their family, friends, and shopping preferences, with Alexa sharing similar self-disclosures. In the low self-relevance condition, participants read an article describing Alexa's functionality in general terms, followed by an audio clip that introduced Alexa's skills and functions. The conversations and the purchase interaction were conducted using Alexa's voice tone, manipulated to be dynamic or monotonous.

As predicted, the data showed a significant interaction between voice and self-relevance on persuasion ($F(1, 229)$=5.12, p=.023). When self-relevance was low, the results were consistent with those in Study 1. Persuasion was higher for the dynamic voice tone ($F(1, 229)$=5.16, p=.024; $M_{Dynamic}$=4.31, SD=1.74; $M_{Monotonous}$=3.57, SD=1.84). However, when participants saw Alexa as self-relevant, voice tone had no significant effect ($F(1, 229)$=.91, p=.34; $M_{Dynamic}$=3.84, SD=1.53; $M_{Monotonous}$=4.15, SD=1.82).

Study 2B (N=185) used a similar procedure, except that Alexa suggested purchasing additional iCloud storage. In this study, we also measured behavioral consequences with a choice measure. Our purchase intention measures showed similar patterns as in Study 2A. There was a significant voice tone x self-relevance interaction ($F(1, 181)$=5.01, p=.026). For low self-relevance, persuasion was higher for the dynamic voice ($F(1, 181)$=7.63, p=.006; $M_{Dynamic}$=3.83, SD=1.75; $M_{Monotonous}$=2.88, SD=1.61). The difference was not significant in the high self-relevance condition ($F(1, 181)$=.14, p=.71; $M_{Dynamic}$=3.21, SD=1.40; $M_{Monotonous}$=3.34, SD=1.76).

Moreover, a binary logistic regression analysis showed a significant interaction of voice and self-relevance on choice (b=-1.38, SE=.67, p=.039). When Alexa was less self-relevant, the proportion of participants who purchased the additional iCloud storage was higher for the dynamic versus monotonous voice tone ($\chi^2(1)$=5.00, p=.025; Dynamic=39.0%, Monotonous=18.0%). There was no sig-

nificant voice effect when Alexa was perceived as more self-relevant ($\chi^2(1)$=.47, p=.49; Dynamic=25.5%; Monotonous=31.9%).

The four studies reported above show a robust pattern of persuasion effects of the voice tone used by a smart agent in purchase interaction contexts. When the smart agent is less self-relevant for the consumer (general skill sets), the dynamic voice is more persuasive than a monotonous (machine-like) voice. However, this voice effect disappears when the smart agent's skills are seen as highly self-relevant. Voice tone plays a smaller role in persuasion when the recommendation agent is more personalized.

Consumer Response to Human-Robot Teams

EXTENDED ABSTRACT

Robots such as the Moxi nurse aide and da Vinci surgical robot work with humans in an assistant capacity in the medical industry. However, advances in technology have changed the possible human-robot team configurations. Robots such as the STAR surgical robot can perform surgeries autonomously, suggesting that we may see robot-led human-robot teams in the near future. Such human-robot team configurations are seen in other industries, namely, the military and manufacturing industries, resulting in increased productivity. We would expect to see similar increases in efficiency when human-robot teams are used in the medical industry, as studies demonstrate that the increased use of technology in healthcare leads to lower hospital stays and lower medical costs (Kalis, Collier, and Fu 2018; Marr 2018).

The possibility for robots to shift from an assistant to a lead role in a human-robot team leads to an important question: How will consumers respond to human-robot teams as a function of the roles shared by the human employees and robots? The literature suggests that consumers will evaluate the robot and human differently, leading to a negative response to the robot leader. Robot exercise coaches are evaluated as less warm and competent (Čaić et al. 2020), while consumers believe that technology is less able than humans to account for their individual characteristics (Longoni, Bonezzi, and Morewedge 2019). We propose that the disparity in human and robot evaluations influences consumers' perceptions of power that the robot-team leader and the human team leader have. This is supported by findings that consumers are more comfortable with robots in less powerful roles and robots that demonstrate lower autonomy levels (Dautenhahn et al. 2005). Consumers hold concerns about robots and artificial intelligence in healthcare (Longoni et al. 2019). Lower ratings of team leader power to a robot leader can intensify these concerns. We hypothesize that the lower ratings of perceived team leader power leading to increase consumer anxiety serially mediate a decrease in behavioral intentions to a robot-led team.

A series of studies examines the effect of a robot (vs. human) led human-robot medical team. The pilot study examines the effectiveness of a human-robot team. Patients at an elderly care facility participated in exercise sessions with either a robot assisted by a human physical therapist or a human physical therapist alone. Participants had an unfavorable reaction to the human-robot team (vs. human), rating the exercises as less favorable ($p < .01$) and reported lower behavioral responses ($p = .04$).

Study 1 examines the effect of a human-robot team on a consumer's response to a robot-led team. Participants received a nutritional counseling session from a live, in-person human-robot team with either the human or the robot as the team leader. The results revealed lower ratings of behavioral intentions ($p < .001$) and team leader power ($p = .002$), and greater consumer anxiety ($p < .001$) when the team was led by a robot (vs. a human). Further, there is

serial mediation (Hayes 2015, Model 6) for the path team leader → power → anxiety → behavioral intentions (a × b = -.1238, 90% CI: [-.2856, -.0060]). A follow-up study, extending these findings to a different robot and human, replicates these results.

Study 2 adds a co-human team as a control condition, providing further support that a robot-led team results in decreased behavioral intentions. There are lower behavioral intentions to the robot-led team as compared to both the human-led and co-human teams. A serial mediation analysis (Hayes 2015, Model 6) is significant when comparing the robot-led and human-led team. However, the serial mediation is non-significant for the human-led as compared to the co-human team.

Studies 3A and 3B examine the role of perceived choice on response to a human-robot team. In Study 3A, participants chose the robot used in the medical team in the choice condition and could not choose the robot used in the control condition. In the control condition, participants had lower behavioral intentions to the robot-led (vs. human-led) team. This was attenuated in the choice condition. Study 3B examined the role of choice on upgrading behavior, finding greater interest in paying to upgrade to a human-human team when the initial team was led by a robot.

The current research adds to our understanding of how consumers respond to robots as they work with humans in new team configurations. Our findings have implications for marketing strategy as we demonstrate that this shift from tool to team leader results in a decrease in behavioral intentions consumer response and strategies to mitigate this negative response.

Ai Supported Physician-Patient Interactions: The Physician's Avatar May Need No Introduction.

EXTENDED ABSTRACT

Physicians are often insufficiently skilled at delivering bad news to patients (Eggly et al. 1997; Monden et al. 2016). Some adopt an impassive communication style to avoid emotional involvement with patients. Others are overly empathetic and may even be perceived as inauthentic (Mast et al. 2005). These deficiencies persist despite an emphasis on developing physician communication skills (Monden et al. 2016).

As in other service domains (Wirtz et al. 2018, Wood and Shulman 2019), a new generation of humanoid service robots (HSRs) offer potential for supporting physician-patient interactions. However, research suggests that patients may display low receptivity to AI-supported healthcare (Longoni et al. 2019) due to concerns such as "uniqueness neglect." However, such resistance may be mitigated when the robot is personalized, plays support versus replacement/ leadership roles (Longoni et al. 2019; Mende et al. 2019; Shanks et al. 2020) or is known to outperform humans (Pezzo and Beckstead 2019).

We argue that an HSR's communication style (CS: empathetic vs. impassive), implemented via facial expression and speech, may drive different patient responses to an HSR (the physician's avatar) versus the physician in-person. A patient interacting with the physician's avatar may have different affective expectations (Tates et al. 2017), assess different cognitive capabilities, and make different motivational and socio-cultural appraisals relative to interactions with the human physician. Our studies are set in the context of treating early-stage breast cancer. Our core physician-patient interaction reflects the first phase of a three-phase procedure used at a leading US breast cancer facility. Here, the oncologist provides the patient with the diagnosis and information about the disease and treatment options.

We developed six videos depicting this physician-patient interaction. A trained male actor played the human physician. The first two videos featured the human physician and embedded the CS manipulation (empathetic vs. impassive) by varying the actor's facial expressions and voice tone, with interaction content held fixed. In two other videos, the human oncologist was replaced by an HSR (the physician's avatar) bearing a superficial resemblance to the human physician. The remaining two videos also featured an HSR, but with less resemblance to the human physician. We created the avatars using commercially available software. To avoid the "uncanny valley" effect, neither avatar was a close likeness to the human. The CS manipulation was embedded in both sets of the avatar videos.

These six videos formed the stimuli in a 2 (CS: impassive vs. empathetic) x 3 (physician: human/similar avatar/dissimilar avatar) between-participants design. The study also included a 2-level manipulation (Hope/Fear) of the prognosis for a breast cancer diagnosis. In Study 1, all three sets of videos included a preamble by the human physician indicating that the diagnosis and the related treatment information would be provided on the next visit (depending on the condition by the human physician or the physician's avatar, and introduced the similar or dissimilar HSR). Participants were 905 women (age range 21-60) recruited from the Prolific web panel. They were randomly assigned to the study conditions, asked to observe the video and then respond to a set of multi-item scales measuring persuasion (likelihood of following the physician's recommendation), trust (overall, cognitive and affective), liking and anthropomorphism (avatars only) in that order.

Whereas the hope/fear manipulation had no main effects on persuasion, trust, and liking, the empathetic (versus impassive) CS produced higher scores on each measure (all p's< .0001). Interestingly, the human physician scored *higher* than either the similar or dissimilar avatar on persuasion, trust, and liking (Means Human: 5.26; 5.08, and 4.14; Similar: 4.09, 4.26, and 3.23; Dissimilar: 4.36, 4.43, and 3.64, respectively all p's<.0001). The dissimilar and similar avatars were rated similarly on trust (4.43 and 4.26; p=.14) and anthropomorphism (3.36 vs. 3.17; p=.14). However, the dissimilar avatar did better on liking and persuasion (p's=.012 and .038, respectively). No two- or three-way omnibus interactions were significant (all p's>.10). Notably, the absence of a physician type by CS interaction suggests that although the human physician was preferred to the avatars, the CS change (empathetic to impassive) lowered evaluations equally for the physician and the avatars.

Study 2 used the same six videos and an identical three-factor design and procedure. The key difference was that the human physician's preamble was replaced by a verbal script stating that the diagnosis and the related treatment information would be provided on the next visit (depending on the condition by the human physician or the physician's avatar—similar or dissimilar HSR). Thus, the avatar was not visually "introduced" by the human physician. The participants were 928 women (age range 21-60) from the Prolific panel. Following random assignment, they observed the videos and completed a set of multi-item scales as in study 1.

The hope/fear manipulation had no main effects and the empathetic (vs. impassive) CS scored higher on each measure (p's< .0001). However, in contrast to Study 1, the dissimilar and similar avatars scored *higher* than the human physician on persuasion, trust, and liking (Means Human: 5.24; 5.00, and 4.00; Similar: 5.81, 5.66, and 4.59; Dissimilar: 5.75, 5.62, and 4.86, respectively, all p's<.0001). The two avatars were rated similarly on each measure. Importantly, the physician by CS interaction was significant for trust (p=.006) and liking (p=.004) and approached significance for persuasion (p=.07). Moreover, the human physician's evaluations dropped significantly

as CS changed from empathetic to impassive (e.g., persuasion: 5.57 vs. 4.90, $p<.0001$). In contrast, persuasion was attenuated less for the dissimilar (5.85 vs. 5.62, $p=.08$) and similar avatars (5.98 vs. 5.62, $p=.007$), with similar effects for liking and trust.

Our results suggest that, if carefully deployed, smart agents acting as physicians' avatars may effectively support physician-patient interactions. The contrast created when the human physician introduces the avatar may have unintended consequences that lower the avatar's evaluation. Without a direct contrast, patients may be more receptive to avatar interactions (particularly as they become common). Indeed, patients may have lower expectations of empathy from an avatar versus the human physician. This could facilitate more effective interactions with positive downstream effects on patient compliance and satisfaction.

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Insights From Textual Data and Machine Learning Algorithms For Consumer Behavior

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Discussant: Ming Hsu, University of California, Berkeley, USA

Paper #1: Machine Learning Models For Predicting, Understanding and Influencing Health Perception

Ada Aka, University of Pennsylvania, USA
Sudeep Bhatia, University of Pennsylvania, USA

Paper #2: Topic Preference Detection: A Novel Approach to Understand Perspective Taking in Conversation

Michael Yeomans, Imperial College London, UK
Alison Wood Brooks, Harvard University, USA

Paper #3: Attribute Sentiment Scoring with Online Text Reviews: Accounting For Language Structure and Missing Attributes

Ishita Chakraborty, Yale School of Management, USA
Minkyung Kim, University of North Carolina-Chapel Hill, USA
K. Sudhir, Yale School of Management, USA

Paper #4: Mapping 25 Years of Consumer Knowledge from Text Corpora

Vincent Chen, University of California, Berkeley, USA
Zhihao Zhang, University of California, Berkeley, USA
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SESSION OVERVIEW

People generate and are exposed to vast amounts of text data as they search for information on the Internet, read and share news articles, generate social media posts, chat with friends and family, and write online reviews. The existence of such large amounts of data, along with recent advances in machine learning and natural language processing, have created new opportunities for social and behavioral scientists. Our session explores the use of these data and novel methods (that are different than dictionary-based approaches) for four topics central to the study of consumer behavior.

The first paper of the session examines consumer perceptions for over 700 medical conditions. The authors obtain quantitative representations of online text explanations of these medical conditions through state-of-the-art language models, and use these representations to accurately predict consumer health perception. The authors also use these models to study the psychological correlates of health perception, and understand how language influences health perception.

The second paper examines an important question that consumers constantly face when engaging in everyday conversation: whether to stay on the same topic or switch to a new one. Across multiple studies, the authors demonstrate that while people want to accommodate their partner's topic preferences, they consistently underperform compared to machine learning algorithms that use natural language processing methods for extracting text-based features of the conversations. Thus, this paper presents a novel, text-based approach for topic selection in conversation.

The third paper of the session integrates deep learning-based text analytics methods and structural econometric modeling to construct a real-time, scalable market intelligence tool from freely available online text reviews from websites such as Yelp.com. To accomplish this goal, they overcome two important challenges: computing accurate numerical sentiment scores from free-flowing online reviews and addressing the difficulties with missing attributes in text

data. This novel approach is highly accurate and have the potential to answer additional novel marketing-related questions.

The fourth paper seeks to develop a text analytic approach to perform large-scale inferences of the evolution of consumer knowledge over time. Compared to traditional methods that are costly and limited in scope, the authors demonstrate that this text-based vector semantic algorithm is able to accurately capture and predict many aspects of the evolution of consumer knowledge in the last 25 years, therefore providing a flexible tool for uncovering theoretical and managerial insights into consumer knowledge.

To conclude, the four papers presented in this session will show how different types of text data, combined with various machine learning techniques, can be used to obtain new insights about consumer behavior. The prevalence of text data in everyday life, and the growing power and popularity of machine learning methods, has made easy for researchers to study nuanced behavioral phenomena in naturalistic settings, opening up new avenues for research across diverse areas of Marketing. For this reason, we believe our session will appeal to a broad audience of researchers, as well as practitioners, interested in understanding and influencing consumer behavior.

Machine Learning Models for Predicting, Understanding and Influencing Health Perception

EXTENDED ABSTRACT

Health perception has significant implications for healthcare funding. Unsurprisingly, such funding decisions depend on how consumers, voters, and donors perceive the severity of health states, and changes to media coverage and popular perceptions of a disease can have considerable effects on how much funding is allocated to health programs aimed at combating the disease (Casamayou, 2001).

How can we predict, understand, and influence people's health perceptions for common disease states? One possibility is to use quantitative measures such as "disability adjusted life years" (DALYs) that assess the severity of different medical conditions associated with the disease state (Calvert & Freemantle, 2003). Yet considerable research in psychology and marketing has found that such objective measures are not good predictors of people's health state perceptions (Slovic & Peters, 2006). That is, people are not actually good at evaluating the severity of different health states. Rather, their judgments rely on emotion, memory, linguistic, social, and other psychological cues, which occasionally lead to perceptions that deviate from objective measures such as the mortality rates or DALYs (Chapman, 2019).

More recently, the Internet has become an important information resource, with millions of people using health websites to inform health perceptions and guide health decisions. Our goal, in this paper, is to use information communicated on these websites to model health perceptions for hundreds of common disease states. We use textual information presented on the National Health Service (NHS) website, which is one of the main online sources of health information in the United Kingdom (Powell, Inglis, Ronnie, & Large, 2011). We additionally rely on recent advances in machine learning, known as word and sentence embeddings, which can quantify textual content for use in quantitative analysis (Bhatia et al., 2019; Günther et al., 2019; Jones et al., 2015). By using embedding methods to quantify the informational content of health descriptions on the NHS we

can build a machine learning model that is capable of predicting health perception given a textual description of a health state.

We collected health perceptions for a large set of medical conditions, diseases, and other health states with an online experiment in Prolific. We first scraped online text explanations of 777 different health states such as 'acne' and 'brain aneurysm' on the NHS website. Each of these health states is associated with multiple sentences of summary information ($M = 3.88$, $SD = 2.30$) as well as many pages of additional details. In the experiment, participants ($N = 782$ UK residents) were asked to read NHS summaries for ten randomly selected health states, to imagine that they were diagnosed with each of the health states, and to report their evaluations of the health states by using a standard EQ-5D's visual analogue scale.

We used two state-of-the-art language models called Distil-BERT and Word2Vec (Sanh et al., 2019; Mikolov et al., 2013) to represent our NHS text explanations as high-dimensional vectors. In Study 1, these vector representations were mapped onto aggregate human judgments using a Ridge regression. Our machine learning approach was able to accurately predict how participants perceived different health states (out-of-sample correlation of $r = 0.70$ between predicted and observed health ratings, $p < .0001$). This correlation is close to the split-half reliability correlation of 0.75 which is the theoretical upper-bound in making such predictions. In Figure 1, we also demonstrate the power of our model by comparing its performance to other competing models and measures, including those that rely only on objective statistics like mortality rates, frequency in language, or simpler features extracted from the text data (e.g. text length, concreteness, and sentiment).

A natural next question in our investigation is to interpret the information contained in health state text explanations and discussions that gives rise to these successful predictions. Since the embedding vectors are based on word co-occurrence statistics in natural language, they quantify the extent to which words and concepts are associated with each other in language, and more generally, in the minds of lay people. Thus, in Study 2, we used our embeddings approach to explore which concepts and constructs are most associated with high (and low) health state judgments. Using Linguistic Inquiry and Word Count (LIWC; Tausczik & Pennebaker 2010) and other participant generated keywords as inputs into our model, we found that health states which contained text related to the constructs of "death", "risk", and "money" were more likely to be perceived as bad health states. In contrast, those with text related to other constructs such as "present-focused" (e.g., looks, work), "negation words" (e.g., shouldn't, don't) were more likely to be rated as good health states.

Finally, in Study 3, we used our embedding models to predict how different descriptions of the same disease state can be associated with different health perceptions. Here, our goal was to test the utility of our approach for studying health communication and its effects. In an online study run on Prolific Academic, we asked a separate group of participants ($N = 80$ UK residents) to complete our initial health states ratings survey after reading a health state summary from one of six health states obtained from health-related websites like AmericanBreastCancerFoundation.org. We also obtained a prediction from our model and compared our model predictions with actual participants' average ratings. We found that we were able to correctly predict changes in participants' ratings as a function of disease description. This illustrates one way in which our approach can be used to inform policy-insights and behavioral interventions for better health communication.

In summary, we presented a novel machine learning approach to estimate how people use online summaries of medical conditions, and other health states, to form health perceptions. Our approach uses recent advances in natural language processing, and is able to predict lay health perceptions with very high accuracy. This technique is not only unique in predicting health judgment, but also has significant time and cost efficiencies as it can be easily applied to out-of-sample diseases without participant data. Policymakers, marketers, and researchers can use our method to quantify people's perceptions about different health states as well as to better understand the psychological cues that people use to make health state judgments. We look forward to future applications of textual data and machine learning to the study of lay health perception.

Topic Preference Detection: A Novel Approach to Understand Perspective Taking in Conversation

EXTENDED ABSTRACT

Conversation is one of the most common and important tasks humans do together (Dunbar, Marriott & Duncan, 1997; Pickering & Garrod, 2004). People reveal their preference to converse constantly, and while conversations can serve instrumental or strategic goals (Crawford & Sobel, 1982; Berger, 2014), they can be intrinsically and mutually enjoyable, as well (Mehl, Vazire, Holleran & Clark, 2010; Epley & Schroeder, 2014; Kumar & Gilovich, 2015; Sun, Harris & Vazire, 2019). But even when people share a seemingly simple, cooperative goal such as enjoyment, the decisions necessary for generating conversation can be quite complex. While people may want to talk, they must still mutually decide what to talk about.

Topics are a fundamental structure of conversation, allowing speakers to jointly maintain common ground (Hardin & Higgins, 1996; Passoneau & Litman, 1997; Stalnaker, 2002; Schegloff, 2007). But consider a judgment that everyone confronts during every turn of every conversation: Should we stay on topic, or switch topics?

This decision can be difficult. Although people may have a general sense of their own preferences for different topics, those preferences may vary depending on whom they are talking to. Furthermore, others' preferences can be ambiguous, even after the topic has begun. Formally, we define this task as "topic preference detection": Can people tell whether someone else wants to stay on a topic based on what they have said about it?

Here, we study how well people learn their partners' topic preferences, and whether that affects their own topic choices. We develop this as a naturalistic perspective-taking task, that tests how well people can learn about one another in conversation (Eyal, Steffel, & Epley, 2018). Across three studies we find that (i) people want to accommodate their partner's topic preferences, but (ii) they routinely fail to detect what topics other people prefer. All data, code and preregistrations can be found (anonymized) on OSF at https://goo.gl/gmxyR3.

To define a common set of topics as stimuli, we conducted a pilot study (n=199), using fifty topic-starting questions drawn from previous research (Aron et al., 1997, Huang et al., 2017). Participants wrote a response to each topic question and then rated their preference (-10 to +10) for staying on topic. From that we chose a list of 12 topics (e.g. "what is the strangest thing about where you grew up?"), using topics that had average (but high-variance) ratings. Throughout, we estimate preference detection accuracy as the non-parametric correlation between predicted and actual preferences over the twelve topics.

Study 1A had an asynchronous design, similar to the pilot. We asked mTurk participants (n=392) to read the twelve topic questions one at a time, writing a response, and reporting their preference for staying on-topic. In Study 1B, other mTurkers (n=654) rated their

own preferences for each topic, and then predicted the writer's topic preferences for a set of 24 responses (6 topics each for 4 writers). These human judges were less able to detect writer's preferences (τ = .142, CI_{95} = [.127, .158]), than a simple NLP algorithm (τ = .174, CI_{95} = [.151, .196]) that parsed the same text responses that humans had seen, using ngrams + politeness + word2vec features in a cross-validated LASSO regression (Freidman, Hastie & Tibshirani, 2010; Mikolov et al, 2017; Jurafsky & Martin, 2017; Yeomans, Kantor & Tingley, 2018). The judges also rated their preference for each topic with each of the four writers whose responses they saw. Their responses revealed a strong preference for mutually enjoyable topics – they preferred topics they thought their partner liked (τ = .531, CI_{95} = [.511, .550]). We empirically disentangle this topic accommodation from egocentric projection, which was also common among judges in every study we ran.

In Study 2, we again used the asynchronous topic preference detection paradigm from Study 1, recruited pairs of participants who know each other well (e.g. friends, family) to predict one another's preferences (n=172, preregistered). Again, the machine learning algorithms (τ = .155, CI_{95} = [.121, .189]) outperformed humans (τ = .188, CI_{95} = [.156, .219]). Participants were also overconfident in their prediction accuracy. And when they had more information about their partner - by having known their partner for longer, or by reading their response (vs. only the question) - their confidence increased, but not their accuracy.

In Study 3, we recruited laboratory participants (n=196) to take part in a synchronous paradigm. Participants reported their preference for each topic before meeting their partner, then had 10-minute dyadic conversations. Afterwards, they reported their own topic preferences, and predicted their partner's. Pre-conversation preferences strongly predicted speaking time on each topic (β = .117, SE = .023). And like Study 1, post-conversation preferences revealed a desire for mutually enjoyable topics (β = .557, SE = .031). However, speakers were less accurate predicting topic preferences (τ = .203, CI_{95} = [.166, .240]) than a simple word count of each person's on-topic speech (τ = .247, CI_{95} = [.206, .288]). A separate set of lab participants (N=330) watched videos of the conversations, but were not as accurate as the speakers themselves (τ = .150, CI_{95} = [.128, .171]). Conversely, we applied new a preference detection NLP algorithm to the transcripts, using the same features as before, as well new dialogic cues (e.g. laughter, pauses, follow-up questions), and it again outperformed humans (τ = .338, CI_{95} = [.305, .369]).

This research provides a novel framework for topic selection in co-operative conversation. Our finding show that topic preferences drive conversational behavior, and conversationalists want to find mutually enjoyable topics with one another. However, they are constrained by their ability to listen and reason about other people's conversational behavior. This suggests important limits to perspective taking even in open-ended natural language.

Attribute Sentiment Scoring with Online Text Reviews: Accounting for Language Structure and Missing Attributes

EXTENDED ABSTRACT

Many firms conduct routine tracking surveys on product/service performance on selected attributes chosen by managers that they believe drive overall customer satisfaction (Mittal et al. 1999, Mittal et al. 2001). The summary scores from these surveys are used as dashboard metrics of overall satisfaction and used as performance metrics at firms. However, surveys are costly, suffer from response biases and get outdated quickly (Culotta and Cutler 2016, Bi et al. 2019). Therefore, crowd-sourced online review platforms have emerged as an alternative and less expensive source of scalable, real-time feedback for businesses to listen in on their markets for both performance tracking as well as competitive benchmarking (e.g., Xu 2019, Li et al. 2019).

In this paper, the authors combine deep learning-based text analytics methods with structural econometric modeling to develop a real-time, scalable market intelligence tool from freely available online reviews. While we use restaurant reviews from Yelp.com as an empirical illustration of our method, this tool can be applicable in a range of industries like hotels, education etc. where firms care about monitoring a fixed set of managerially important attributes over time and benchmarking against competitive performance. Even when not used as a replacement for tracking surveys of performance, such quantitative summary metrics are valuable for managers because consumers use review platforms when making choices (e.g., Zhu and Zhang 2010, Luca and Vats 2013). In a study conducted on Amazon Mechanical Turk, we find evidence that providing attribute-level sentiment scores instead of an overall rating and text improves consumer decision-making by reducing the cognitive burden in making a choice. Moreover, with employee compensation and performance being directly linked to online review performance in many firms, the need to develop reliable quantitative metrics that capture attributes and related sentiments from online UGC both for tracking gaps in customer satisfaction as well as managing one's e-reputation has gained critical importance.

Deriving attribute-sentiment scores from text reviews requires addressing two novel and challenging problems: The first challenge lies in coming up with accurate numerical sentiment scores from free-flowing online reviews. For this, they develop a deep learning convolutional-LSTM hybrid model to account for language structure, in contrast to bag-of-words methods that rely on word frequency alone. Bag-of-words based approaches are limited in their ability to adequately score attribute sentiments especially for certain classes of hard sentences. Examples of hard sentences include various types of negations like contrastive (``but", "yet"), long sentences and instances of sarcasm that account for almost 50% of sentences in online reviews. Consider the following examples where sentiment degree is modified, as in (i) "horrible," "not horrible," "not that horrible" and (ii) "delight, "just missed being a delight". When words are just counted as in bag-of-words, making the connections between the key sentiment words "horrible" and "delight" with their degree modifiers will be difficult, without considering how they are grouped adjacently to form phrases—i.e., spatial structure. Likewise, it is difficult to capture the true sentiment in a long or contrastive sentence without accounting for the order in which the words/phrases occur (sequential structure). In our model, the convolutional layer accounts for the spatial structure (adjacent word groups or phrases) and LSTM accounts for the sequential structure of language (sentiment distributed and modified across non-adjacent phrases). Our deep learning model brings about significant accuracy improvements not only in 5-level granular sentiment classification but also in polarity detection (positive and negative) for both "easy" and "hard" sentences.

The second challenge is addressing the problem of missing attributes in text in constructing attribute sentiment scores—as reviewers write only about a subset of attributes and remain silent on others. It is important to understand what causes people to remain silent on certain attributes because assuming ``missing" as "unimportant" can bias attribute-sentiment scores. Further, behavioral science research has long recognized the importance of the right imputation for missing values because people do not ignore missing attributes

in evaluations and often make complex and imperfect inferences from them (Gurney and Loewenstein 2019). For addressing attribute silence, the paper develops and estimates a structural model of reviewer rating behavior that takes into account the data generating process to develop a model-based imputation procedure. This econometric model of rating behavior also helps to identify the different incentives of various groups of reviewers to engage in online WOM. We find three segments of reviewers—the smallest but most active reviewers ("Status Seeking Regulars") who write mainly for being informative to others and maintaining platform status; the largest segment ("Altruistic Mass") who review without reward expectations, and a mid-size segment of "Emotive Irregulars" who review infrequently but write about attributes they are extremely satisfied or dissatisfied with. Our insights around attribute silence in reviews shows that informativeness and need to praise/vent drive more of the writing than the importance of the attribute. Not only does this contribute to the literature on why people engage in online word of mouth (Berger 2014), it also has implications for using reviews as a source of data for needs/benefits identification. In particular, contrary to conventional wisdom, the frequency of mentions of a benefit or a topic may not necessarily be a proxy of its importance. Overall, the paper illustrates the value of combining "engineering" thinking underlying machine learning approaches with "social science" thinking from econometrics to answer novel marketing questions.

Mapping 25 Years of Consumer Knowledge from Text Corpora

EXTENDED ABSTRACT

Consumer knowledge, the set of consumers' acquired understanding of brands, products, and other offerings, is known to be an important driver of consumer responses to brands and product offerings (Alba & Hutchinson, 2000; Hadar et al., 2013; Berger et al., 2020). Notably, consumer knowledge is constantly evolving and can change substantially over time (Smith and Lux, 1993; Polanyi, 1957). Just fifteen years ago, Facebook and MySpace were both rising stars in the social media category. Now, one is nearly synonymous with social media, while the other has fallen out of the mind of many. The ability to understand and predict such changes are thus valuable from both scientific and managerial perspectives.

To our knowledge, however, no method exists that can provide a quantitative, data-driven description of the evolution of consumer knowledge. Although longitudinal databases (especially commercial ones) exist, it is difficult to capture the full trajectory of every brand due to difficulties in keeping up with the constant entry and exit of firms and brands in the marketplace. Short of having a time machine, researchers cannot survey consumers from the past.

This study proposes a novel text analytic technique, Principal Semantic Component Analysis (PSCA), to track the changing meanings of words from time-indexed text corpora and characterize the evolution of consumer knowledge. Specifically, PSCA represents a combination of Principal Component Analysis (PCA) and the Dynamic Word Embedding (DWE) model (Yao et al., 2018), a recently developed diachronic natural language processing (NLP) approach that captures semantic changes.

Compared to static NLP methods such as traditional word embedding models, where the meaning of a word is invariant across time, DWE assigns a distinct meaning to a word per time period. For example, Hamilton et al. (2016) used an early version of DWE to trace the change in meaning of the word "gay" through the past hundred years from emotion to sexuality. Building on this line of literature, we hypothesize that a DWE approach can capture the rapid and

sometimes subtle changes in consumer knowledge. Specifically, in the studies below, we use a DWE model based on New York Times articles from 1996 to 2019, containing 1.3 billion words.

Study 1 presents PSCA findings on changing meanings of brands. Although the method is applicable to any arbitrary brand, only a select set of brands are shown given space constraints. Fig. 2A shows the DWE trajectory of the word "blackberry," which tracks the significant change of the word over the past 25 years, from being associated with the fruit to the smartphone brand and back again. A quantitative account of the above statement therefore should contain two parts: the *vector* of the largest semantic change, and the *timing* of the movements. In the case of "blackberry," a successful model should tell us (a) where "blackberry" was moving to and from, e.g., "smartphone", and (b) when "blackberry" was at the peak or nadir in terms of strength of association, e.g., peaking around 2008 to 2011, which corresponds to the peak years of the brand Blackberry according to its stock prices and revenues.

Specifically, PSCA captures the vector of the largest semantic changes by computing the first principal component of DWE, referred to as Principal Semantic Component (PSC) hereafter. To identify the timing of movements, we then computed the time series of semantic similarities between the brand and the PSC. In Fig. 2B, the PSC of "blackberry" has the meaning of "android, app, smartphone." That is, PSCA identifies that "blackberry" moved most along the direction of "smartphone" from 1996 to 2019. The time series also gives information about the timing of Blackberry's rise and fall along the "smartphone" dimension. In particular, PSCA identifies 2010 as the time when Blackberry reached its peak as a smartphone brand, before dropping sharply after.

To explore the generalizability of PSCA beyond brands, we applied PSCA to detect changes in more intangible concepts, such as fashion trends and fads. For example, PSCA identifies that the word "Atkins" had a sharp but transient rise in association with diets in 2004, likely reflecting the rise and fall of the Atkins diet, and it uncovers how the word "selfie" came to popularity since 2010 and is still going strong (Fig. 2C).

These and other results that match with common impressions provide initial support for the utility of PSCA. In Study 2, we show that PSCA findings correspond with, and can even forecast, commonly used marketing metrics. Specifically, we compare PSCA results with several external metrics related to consumer knowledge. As a benchmark for existing text-based metrics for popularity, we also include word counts of the brand names. Due to space constraints, here we only present comparisons with Interbrand's Best Global Brand ranking, a ranking based on brand equity. Other metrics, including number of users and Brand Asset Valuator scores, lead to similar results.

There are several consistent trends which show that PSCA captures at least part of the consumer knowledge (Fig. 2DE). First, for brands which have peaks in the external metrics, e.g. Blackberry, peaks of PSCA coincide with those of external metrics. Moreover, we found that PSCA acts as a leading indicator of other metrics in the rising stage. This suggests that the semantic information leveraged by PSCA allows the algorithm to detect the rising trends earlier than considering word counts alone. Another notable feature is that external metrics often delay in providing data about brands. For example, Interbrand did not include Facebook until 2011, when the social media platform had already plateaued out according to PSCA. This highlights the important role of textual data in providing information about brands in their early stages, when longitudinal data is scarce.

Collectively, the results demonstrate that (a) textual data indeed contain rich information about consumer knowledge which is other-

wise difficult to obtain, and (b) PSCA offers an accessible solution to extracting such information with similar temporal resolution as survey-based methods, but at much lower costs.

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Understanding Consumer Conversations
Chair: Grant Packard, York University, Canada
Discussant: Jonah Berger, University of Pennsylvania, USA

Paper #1: What Drives Longer Word-of-Mouth Conversations?
Reihane Boghrati, University of Pennsylvania, USA
Jonah Berger, University of Pennsylvania, USA

Paper #2: Conversational Receptiveness: Improving Engagement with Opposing Views
Mike Yeomans, Imperial College London, United Kingdom
Julia Minson, Harvard Kennedy School, USA
Hanne Collins, Harvard Business School, USA
Francesca Gino, Harvard Business School, USA

Paper #3: The Influence of Environmentally-Focused Conversations on Pro-Environmental Behavior
Grant E. Donnelly, The Ohio State University, USA
Kristin Hurst, The Ohio State University, USA
Nicole Sintov, The Ohio State University, USA

Paper #4: Discovering When Language Matters in Service Conversations
Grant Packard, York University, Canada
Yang Li, Cheung Kong Graduate School of Business, China
Jonah Berger, University of Pennsylvania, USA

SESSION OVERVIEW

What the world needs now… is a little more conversational understanding. Interpersonal communication is a fundamental part of everyday life. People share word of mouth, customers talk to salespeople, and managers discuss market strategies.

But while a great deal of recent work in marketing has begun to examine why people talk and share, there's been less attention to the broader *conversations* in which interpersonal communication is situated. Why do some conversations last longer than others? In this age of polarization, how can people improve engagement with opposing views? When in conversation are certain linguistic feature more effective? And can conversations help encourage sustainable behavior?

This session addresses these and other questions as it sheds light on the drivers and consequences of consumer conversations. It examines language produced in both experiments and the field, applying text analysis, machine learning, and other techniques to deepen understanding around these important phenomena.

First, **Boghrati and Berger** examine why some consumer conversations last longer than others. Using deep learning to analyze over 26,000 turns in oral conversations reveals the importance of questions and linguistic concreteness in keeping conversations going. That said, not all questions have the same impact, and they distinguish between differential effects of broad and narrow questions.

Second, **Yeomans, Minson, Collins, and Gino** explore how to improve engagement with opposing views. They use machine learning to analyze the language of over 5,000 conversation participants to identify language that communicates thoughtful engagement during disagreement, and show that such language makes writers more persuasive, builds reader trust, and prevents conflict escalation among Wikipedia editors.

Third, **Donnelly, Hurst and Sintov** examine whether conversations can encourage commitment to sustainability. The demonstrate that participants used less electricity, committed to more sustainable foods, and shifted their attitudes more towards a conversational partner's when discussion time was embedded in dyadic decision-making tasks.

Fourth, **Packard, Li, and Berger** study *when* within a conversation particular language features are more impactful. Examining conversational dynamics in over 23,000 turns in call centre conversations from two different firms reveals that using both affective and competent speaking styles can impact customer satisfaction and purchases if one identifies *when* during the interaction each style matters. Results are also replicated in an experiment. The method is further extended to shed light on *when* within conversations using first person singular pronouns and asking questions matters.

Taken together, these papers highlight the causes and consequences of conversations for consumers, as well as employees and organizations. The session should attract a wide audience of researchers with interests in social influence, sustainability, and language across contexts such as word of mouth, negotiation, and customer service. It should also have appeal to those interested in learning about text analysis and machine learning applications. We look forward to a stimulating conversation about conversation among the attendees and presenters.

What Drives Longer Word-of-Mouth Conversations?

EXTENDED ABSTRACT

Consumers have dozens of conversations each day and these conversations have a huge impact on consumer behavior. While there has been great interest in the consequences of everyday consumer conversation, there has been less attention to its drivers. Why do some conversations last longer than others?

Longer conversations can provide more information, reasons, or details, all of which should increase word of mouth's impact (Shafir et al., 1993). A great deal of research demonstrates that longer reviews are more helpful (Liu & Park, 2015; Mudambi & Schuff, 2010; Pan & Zhang, 2011), more persuasive (Zhang et al., 2010), and boost purchase (Ghose et al., 2012; Kim et al., 2018). But why do some consumer conversations, or topics, persist while other don't? In this research, we focus on two main drivers of conversations, questions and concreteness.

Questions. One might imagine that any question encourages conversation. A key function of questions is to solicit information and encourage someone to respond (Dillon, 1982; 1988). Consequently, compared to just making statements, questions can help move a conversation forward.

We suggest that whether or not questions encourage topic persistence depends on the question type (i.e., breadth).

Prior work (Miles, 2013) suggests that questions can be arrayed in terms of their breadth. Broad, or more open questions, broadly seek information and don't constrain the scope of appropriate response. Narrow, or more closed questions, however, tend to suggest a narrower range of responses.

We suggest while narrow questions should encourage topic persistence, broad questions may not have the same effect.

Narrow questions should encourage further progress down a particular direction. Further, to the degree that these questions follow-up an existing line of thought, they suggest that the questioner is interested in that line of thought, and would be happy to continue discussing it.

Broad questions, however, should be less likely to have the same effect. While broad questions give conversation partners more

things to talk about, by calling for more complex or exploratory answers, they also open up other directions for discussion.

Concreteness. In addition to question breadth, we also examine linguistic concreteness. Concrete languages arises from or appeals to immediate sensory experience, while abstract language refers to intangible qualities and concepts (Hansen & Wänke, 2010).

Building on past research, we suggest that concrete language should encourage topic persistence. Consistent with the fact that they tend to refer to real or perceptible entities, concrete things are easier to visualize and require less cognitive resources to process (Friederici et al., 2000). This vividness or ease of imagery, in turn, can impact things like interest and comprehension.

Consequently, we suggest that linguistic concreteness should encourage discussion. Concrete language should facilitate imagery, encourage interest, and make it easier for people to understand the conversation, all of which should encourage continued conversation.

Data. Participants (N=222) completed a conversation study in the laboratory. They were given 10 minutes to talk about whatever they wanted. A professional transcription service converted the recordings to text.

Each ten-minute conversation was then broken down into pieces based on the topic discussed. To break conversations down into these different topics, two research assistants went through each transcribed conversation and marked topic changes. Any instances where participants talked about the conversation itself were removed, resulting in a dataset of 745 conversation topics with over 26,000 conversational turns.

Method. We used NLP to extract key features (i.e., question breadth, linguistic concreteness, and control variables) from each conversational turn.

To determine which turns contained a question, building on prior work (Stolcke et al., 2000) we train a deep learning model. This approach was also used to extract other dialogue acts (e.g., statements) as control variables.

For classification, we use Robustly Optimized Bidirectional Encoder Representation for Transformers (RoBERTa, Liu et al., 2019). We add a neural layer on top of the base model to fine-tune the pre-trained model for our classification task.

Next we identified broad and narrow questions. Research assistants coded each question in the dataset as broad or narrow. We then built a deep learning classifier for question breadth using our manually coded data for future research.

Linguistic concreteness was captured using measures from prior work. We use a boot-strapped extension of the MRC Psycholinguistic Database (Paetzold & Specia, 2016). Averaging concreteness scores across the words in each turn provided a score for that turn.

Given our interest in predicting an event (i.e., topic death) based on a number of time-varying explanatory variables (e.g., linguistic features for a given turn), hazard modeling seems the most appropriate approach. Hazard models relate the time that passes before an event occurs to variables that may be associated with that quantity of time (Allison, 1982).

Results. Topics lasted longer when conversation partners asked questions, but the strength of the effect depended on the type of questions. Topics lasted longer when people asked narrow questions (= -1.23, $p < .001$), and the effect of narrow questions was larger than the effect for broad questions (= 9.78, $p < .01$). This difference consistently persists across all the robustness tests. While broad questions were linked to longer conversations in the most basic specification (= -.44, $p < .05$), this relationship became non-significant once more controls were added.

Topics also lasted longer when people used more concrete language (= -.15, $p < .001$).

Results persist when controlling for factors such as interest, linguistic style matching, other dialogue acts, word count, LIWC content categories, and a variety of modeling approaches.

In conclusion, while a great deal of research has studied the consequences of word of mouth, the drivers of interpersonal communication are less studied. Analyzing hundreds of consumer conversations suggests that even beyond topic interest, linguistic features may drive topic persistence. We demonstrate the important role of question type. Topics last longer when people asked narrow questions, but broad questions did not have the same positive effect. Topics also lasted longer when people spoke more concretely. Hopefully this investigation will encourage more research into this interesting and important topic.

Conversational Receptiveness: Improving Engagement with Opposing Views

EXTENDED ABSTRACT

Disagreement is a fundamental feature of social life, in civic spaces, in professional organizations, and in personal relationships at home. Opposing viewpoints are often inevitable in the pursuit of more important organizational and interpersonal goals. Engagement with diverse perspectives can also help us increase the accuracy of our own belief. However, disagreement can also give rise to biased processing, negative inferences, and conflict. While engagement with opposing viewpoints can be beneficial, its effects will be tempered by the contents of those interactions (see Bail et al., 2019; Paluck, Green & Green, 2018). Here we examine whether "conversational receptiveness" can foster co-operative goals during disagreement and prevent conversational conflict spirals.

In this research we conduct four studies, and all data, analysis code, stimuli, and preregistrations from each study are available (anonymously) at https://bit.ly/2QwyiuL. In Study 1 we instructed 1,102 participants to write responses to statements written by people with whom they disagree, on one of two controversial issues. A separate group of 1,322 participants read responses from people with opposing viewpoints, and evaluated how receptive the writer had been. We parsed the text of the responses into features from the politeness R package (Yeomans, Kantor & Tingley, 2018), and we trained a supervised machine learning algorithm (Friedman, Hastie & Tibshirani, 2010) to build a receptiveness detection model that was generalizable (for datasets from other domains) and interpretable (to design interventions). This model was just as accurate (pairwise accuracy = 66.8%; p<.001), as any one human rater (65.2%; p<.001). The model focuses on the structural, domain-general elements of the language (hedges, acknowledgment, negation, reasoning), and the model's accuracy was unaffected when it was trained and tested on different topics (65.2%; p<.001). In Studies 2 & 3, we apply the model in conversations from organizational contexts where disagreement naturally arises.

In Study 2, we collected conversations between 238 senior local government officials in an executive education program, who were paired up to discuss controversial policy topics (using a negative assortative matching algorithm to ensure they all disagreed with their partner). After the conversation, participants rated their own and their partner's receptiveness. Partner-rated receptiveness was associated with a range of positive interpersonal benefits, like trust in judgment and willingness to work together (r=.289, p<.001). Furthermore, the receptiveness model from Study 1 predicted these positive interpersonal outcomes (r=.232, p<.001), and also showed that partners' re-

ceptiveness converge over time, indicating that one of the benefits of receptiveness is that it is returned in kind (r=.335, p<.001). However, people could not predict how receptive their partner would rate them (r=.048, ns). Our language model held their own speech to a different standard than their partner's speech, focusing more on formality (titles, gratitude, etc.) than demonstrations of listening.

In Study 3 we extend this result to conversations within globally-distributed organizations where disagreement naturally arises, and where people are free talk about many different topics, with many different people. In Study 3A we examine receptiveness among 3,303 students in policy-themed massive open online courses at HarvardX. We collect ideology measures and compare them to the contents of the class discussion forums. We find that on average, students were less receptive to students they disagreed with (r= .099, p < .05). However, the receptiveness of students' posts predicted the receptiveness of the replies they received from other students who disagreed with them (r= .226; p<.001). This suggests that receptiveness is often, and individual choices to be more receptive can foster a more receptive dialogue going forward. In Study 3B, we measure receptiveness during the editorial process of correcting Wikipedia articles. We borrowed a dataset of talk page threads, in which 585 threads ending in personal attacks were each matched to similar thread without an attack (Zhang et al., 2018). We found that editors who were less receptive were more likely to be attacked themselves (59.9%; p<.001).

Study 4 was similar to Study 1 except that some writers were first taught a "recipe for receptiveness", which was developed as a 100-word summary of Figure 1 that can be cheaply deployed as a nudge during conversation. Opponents who read the responses from writer who saw the recipe thought they were more trustworthy and persuasive than writers who responded naturally. However writers did not always predict this effect, and expressed surprising hesitation to be receptive in the future.

Overall, our results suggest that receptiveness is measurable and has meaningful interpersonal consequences, but can be under-utilized in part because speakers can misjudge their own receptiveness. Our results also highlight an under-discussed element of recent efforts to improve civic discourse: The linguistic behavior that people exhibit in conversation can powerfully affect their partners' perceptions, engagement, and willingness to cooperate.

The Influence of Environmentally-Focused Conversations on Pro-Environmental Behavior

EXTENDED ABSTRACT

To address global climate change, action to promote more sustainable use of natural resources is required. Most studies evaluating consumer decision-making rely on paradigms that collect data from a single participant, or examine household-level outcomes. These approaches fail to capture the fact that many consumption decisions are not made independently, but rather in conjunction with others. As a result, these decisions may often involve conversations between two or more actors, during which relevant preferences and beliefs are exchanged and joint commitments are created (Sintov et al., 2019).

Prior work has demonstrated that conversations between two or more people can influence consumer knowledge and beliefs. For example, interpersonal discussions can influence climate change beliefs (Goldberg et al., 2019), and a brief conversation with a political canvasser improved attitudes toward transgender people and intentions of supporting policies in favor of these individuals (Broockman & Kalla, 2016). However, the influence of conversation on behavior is less clear. Two studies evaluating self-reported discussions and energy conservation intentions speak to the promise of conversations in influencing behavior (Sintov et al., 2019; Southwell & Murphy, 2014), but experimental evidence is needed.

In this research we evaluate how conversation content and conversation partners' stances influence subsequent behavior in peer-to-peer sustainability conversations. We achieve this through a set of three experiments with peer dyads that engaged in brief discussions and assessed subsequent behavioral actions supporting environmental policy as well as energy consumption.

Study 1 was a field experiment evaluating the effectiveness of a sustainability-focused conversation on electricity consumption amongst roommate pairs in a college dormitory (*N*=240). The college dormitory had a sustainability-living theme and asked all residents to sign an agreement to conserve resources (including energy and water) and to minimize waste during the semester. After residents signed their agreement, they were asked to have a 10-minute conversation with their roommate and to complete a roommate agreement which required short responses to conversation prompts. In the control condition, roommates conversed and made agreements to quiet hours, sharing of possessions, guests, and cleaning. In the treatment condition, participants were also prompted to converse and make agreements about their sustainability commitment: to conserve electricity, water and reduce waste.

The study team compared average daily electricity use between the treatment and control conditions for the Fall 2019 semester. A significant effect of the intervention was observed such that the treatment condition consumed less energy than control (*b*=-16.23, *SE*=1.89, *p*<.001). We found a positive and significant interaction between intervention and day of treatment (*b*=0.54, *SE*=.06, *p*<.001), suggesting that the effect of the intervention weakened over time. Overall, our effects suggest that a 10-minute conversation that included prompts to discuss energy conservation followed by a commitment resulted in a 22% decrease in energy consumption over the Fall 2019 semester. Our effects weakened after students went home for the Thanksgiving break, suggesting the need for reinforcement after prolonged absence to allow roommate pairs to recommit to resource conservation. Similar effects were observed for water consumption.

Study 2 sought to understand the cumulative benefit of a conversation paired with a commitment by utilizing a between-subjects experimental design. Specifically, participants in a lab setting (*N*=568) were randomly assigned to a conversation-only, commitment-only, or conversation plus commitment condition. We posited that a commitment becomes more impactful following a conversation on the issue at hand. Conversations allow for learning and exchange of pertinent beliefs, thoughts and ideas (Huang et al., 2017), and can serve as an opportunity for conversation partners to develop rapport, trust and psychological safety (Edmondson, 1999).

Participants were informed they would interact with another participant and, following the interaction, they would have the opportunity to click their mouse to support a plant-based foods initiative. Participants were told that if the mouse was clicked collectively 400 times between themselves and their conversation partner a $1 donation would be made to the initiative. Participants were then instructed to have a conversation that was video recorded and the structure of the interaction was varied as a function of treatment. Participants in the conversation-only condition were instructed to spend 2.5 minutes discussing their stances on whether the university should increase plant-based food offerings in on-campus dining areas. Participants in the commitment-only condition were instructed to discuss actor biographies for 2 minutes (as a filler task) and then spend 30 second forming a commitment as to how much effort they

would both contribute to support the plant-based food initiative. Participants in the conversation and commitment condition discussed their stances on plant-based foods for 2 minutes, followed by a 30 second commitment of how much effort they would contribute to the clicking task.

There was a significant effect of condition on clicking ($F(2,281)=5.62$, $p=.004$) such that participants in the conversation and commitment condition clicked significantly more than participants in the conversation-only condition and the commitment-only condition. There were no differences between the conversation-only and commitment-only conditions ($p=.27$). Participants rated policy-relevant conversations as more psychologically safe than conversations about celebrities, and reported greater collaboration in forming a commitment following conversations about the policy. These differences mediated the difference in clicking between the conditions.

In Study 3, participants ($N=302$) had a conversation about plant-based foods with a confederate that either presented three arguments in favor of plant-based foods (supportive of policy) or 3 arguments against plant-based foods (against the policy). We also assessed participants support for the policy before the conversation to assess how policy support was influenced following a conversation with a peer who was either supportive or against the policy. Following the conversation, participants had the same opportunity to click for the policy as Study 2.

Regressing clicking on confederate stance, participant stance, and an interaction of these variables revealed a significant interaction ($b=-.12$, $p=.02$), demonstrating that confederate support (vs. opposition) increased participant clicking among participants who were initially unsupportive of the policy, but did not influence clicking of participants who were initially supportive. These results suggest that conversations can be differently influential depending on pre-support, and suggest that conversations can be more influential to individuals less supportive of environmental policies.

In sum, this research suggests that conversations can be quite effective at motivating increased effort toward sustainable behavior and that the structure and content of dyadic dialogue can influence behavior.

Discovering *When* Language Matters in Service Conversations

EXTENDED ABSTRACT

Consumer conversations are dynamic. People chat with each other online (discussion boards, texting, social media) and debate word of mouth opinions in the "real world." Salespeople try to persuade potential buyers who sometimes push back, while call centre workers talk with customers to help resolve their issues. These important consumer interactions are not monologues, but dynamic dialogues between people.

While conversations are a central feature of consumer life, they can be remarkably difficult to analyze. They entail a messy series of conversational turns with dramatic variation in content and importance. These challenges may be why most prior consumer or marketing language research examines texts or speech acts as singular, static events (e.g., Kronrod et al. 2011; Packard and Berger 2020; Packard, Moore and McFerran 2018).

But a more granular view may be useful. Clearly some parts of conversations may be more important than others, but which parts might those be, and how can researchers identify them? We introduce a novel method allowing researchers to not only examine *what* language matters, but *when* it matters. Specifically, when different linguistic features may play a larger role in a conversation's success.

To demonstrate the approach, we explore the two most important dimensions of person perception—warmth and competence (Abele and Wojciszke 2007; Fiske, Cuddy and Glick 2007). It's difficult to seem both affective (warm) and cognitive (competent). Trying to be more emotionally-concerned impedes perceptions of competence, while acting in a more rational, cognitively-oriented manner makes people seem less warm (the warmth / competence trade off; Godfrey, Jones and Lord 1986; Holoien and Fiske 2013; Wang et al. 2019). As a result, research in customer service contexts suggests employees should use competence-related language, while warm language should be avoided (e.g., Marinova et al. 2018).

Rather than being either competent or warm, we suggest that a better solution may be to think about particular times within customer interactions when each is beneficial. Instead of diving straight into finding a solution, we suggest that affective language may be important at a conversation's beginning. When employees and customers interact for the first time, such as in retail or call center interactions where they usually don't know each other, affective language may help build situated rapport (DeWitt and Brady 2003; Gremler and Gwimmer 2000). But being warm will only go so far. Eventually the employee must address the customer's needs. Here, competence should be important, so shifting to a more analytic, cognitive style should be valuable. Finally, given the work on recency or end effects (Greene 1986), closing with affective language may be key to leaving the customer feeling positive. Our approach uses dynamic modeling and an experiment to test these possibilities.

Data. We obtained nearly 20 hours of audio recordings of 200 customer service calls from a large American retailer. As a dependent measure, the firm provided their end-of-call customer satisfaction measure (1 = not at all helpful, 4 = very helpful). The recordings were transcribed to text. Each conversational turn was treated as a separate record (e.g., turn 1 (agent): "How can I help you?", turn 2 (customer): "I can't find (…)"), resulting in 12,410 turns for analysis.

For our independent measures, we captured affective versus cognitive language using validated linguistic dictionaries (affective processes, cognitive processes; LIWC; Pennebaker et al. 2015) for both the employee and customer previously used as measures of linguistic warmth and competence (Decter-Frain and Frimer, 2016; Berry et al. 1997). Results are also robust to alternative dictionaries (Marinova et al. 2018). We include over 50 controls including customer and employee attributes (e.g., gender, lifetime expenditures, tenure), customer language, and conversation features (e.g., issue, severity, linguistic synchronicity).

Method. We extend methods from functional data analysis (FDA; Ramsay and Silverman 2007) and machine learning (Yang and Zou 2015; Kong et al. 2016) to address the challenges of analyzing conversational language. For any conversation feature(s), this method produces sensitivity (beta) curves that can deviate either positively or negatively from non-significance (zero line) in relation to the outcome of interest.

Results. Results support our theorizing. The importance of cognitive language is limited to the middle of the conversation, as indicated by the area above the zero line and below the 95% confidence interval in Figure 1, panel b. That said, as shown by the negative relationship of cognitive language with customer satisfaction at the beginning of the call, employees who try to quickly and competently solve the customer's problem—see significantly negative customer satisfaction (area below the zero line). Instead, as shown in Figure 1 (panel a), those who use more affective language at the beginning and end of the call see higher customer satisfaction. Using purchases (order count) in the 30 days after the interaction as the dependent measures produces the same results.

Notably, the average employee's use of both affective and cognitive language does not follow the optimal functional forms. Instead, affective language is least used at the start of the call, when it is particularly important, while cognitive language is near its lowest point between 12.5% and 40% into the conversation, which our method reveals is when it offers its most positive impact on customer satisfaction.

These results are replicated in a separate field data set of 204 calls (11,548 turns) from an airline call centre, and in a causal test that experimentally manipulates conversational language.

Discussion. This research begins to shed light on a richer theory of conversational dynamics. While a great deal of work has looked at *what* consumer and employee language matters, *when* linguistic approaches are most useful has received little attention. While prior work suggests speakers should be only warm or competent, our dynamic approach reveals that the warmth/competence trade off may not be so stark. Finally, this work introduces a new method by which consumer and marketing scholars can consider temporal features of language in a range of marketplace dialogues (e.g., social media, live sales interactions). To demonstrate, we offer additional sample applications of the method to previously investigated conversational features like personal pronouns and questions.

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Exploring and Responding to Consumer Outrage, Failure, and Incivility

Chair/Discussant: Jeff D. Rotman, Deakin Business School, Deakin University, Australia

Paper #1: Moral Peacocking: Outrage and Identity Signaling on Social Media

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Paper #2: I'm Sorry!: Investigating the Influence of Customer Failures and Apologies on Frontline Service Employee Well-being

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Paper #3: "Let's Laugh About it!": Using Humor to Answer Complainers' Online Incivility

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SESSION OVERVIEW

Brands often have to deal with negative customer behaviors such as uncivil complaints, social media outrage, or other customer-induced failures. Many of these behaviors are public or can be made public, creating a difficult situation for brands, who are expected to respond to these behaviours (Hogreve, Bilstein, and Hoerner 2019). On the one hand, the customer is king and the expectation is that brands should respond favorably, especially given the public nature to these complaints and failures; on the other hand, the incivility and outrage are on behalf of the customer, and rewarding this outrage and accommodating customer-induced failures may result in negative consequences for the brand.

At present, there is no clear path forward for brands as to how best to minimize backlash and foster positive outcomes for the brand and managing consumer outrage and incivility has been identified as an important research avenues in recent calls (Bacile 2020). Building from this, the aim of this session is to provide timely and critically important insight into how brands should navigate what to do when consumers act uncivil, express highly public outrage toward a brand, or are themselves the cause of a service failure. Specifically, the three papers examine 1) What are the underlying types and motivations underlying consumer outrage, failure, and incivility?; 2) What are the consequences to the brand, employees, and other consumers?; and 3) How should firms respond to these behaviors?

The first two papers explore the first two questions. Specifically, the first paper introduces the concept of *moral peacocking*: the act of condemning perceived offensive behavior via public expression of one's outrage. Results suggest that the motivation stems from personal outrage and is amplified by the desire and ability to signal this outrage to one's ingroup. This results in an unintended 'counter-peacocking' effect, whereby dissociative groups that observe moral peacocking against the brand, not only do not reduce their willingness,

but actually have a strengthened desire to purchase from the brand. The second paper views this question from a service perspective, first categorizing various customer failure types and then demonstrating their negative effect on service worker well-being and the importance of a customer apology to alleviate it.

Finally, all three papers provide some insight into how firms should respond to this outrage and incivility. Specifically, the first paper suggests that due to counter-peacocking, managers may not want to immediately retract marketing messages that enrage a specific segment. The second paper outlines the importance of managerial support when dealing with customer failures. Lastly, the third paper argues that under some circumstances, utilizing humor to address incivility is an effective strategy to generate greater purchase intentions.

In conclusion, the papers in this session aim to provide brands with a path forward when navigating the complex landscape of responding to consumer failure, outrage, and incivility in a way that draws in rather than alienates witnesses and other consumers.

Moral Peacocking: Outrage and Identity Signaling on Social Media

EXTENDED ABSTRACT

Consumer responses to social and moral transgressions are ubiquitous on social media. Donald Trump, the former President of the United States, spent years using Twitter to provoke outrage among Democrats while cementing support among his base (Joseph et al., 2019). Further, reports suggest that Russia utilized social media outrage to sow polarization and division during the 2016 United States election (McCarthy, 2017), with similar campaigns carried out in the UK, France, and Australia (Zappone, 2018).

These online reactions manifest in the marketing world as well. Corporations and brand managers have responded to the acceptance of social media by working to incorporate social media channels into their marketing mix in order to engage consumers (Mousavi, Roper, & Keeling, 2017). However, unlike any previous time in history, these social media channels allow consumers to rapidly respond online to corporate behavior in real time, at times seeking reparations and shaming companies, brands or organizations (Dunn & Dahl, 2012; Joireman et al., 2013; Ward & Ostrom, 2006). Consumers who join in the condemnation see themselves as a group, resulting in increased hostility toward the 'evil' firm as they seek reinforcement from their group members or attempt to align themselves with their group norms (Ward & Ostrom, 2006; Love, Salinas, & Rotman, 2020).

The speed by which these collective responses can spread through social media creates a field full of potential landmines for organizations marketing on social media. For example, when Bud Light advertised the slogan "*The perfect beer for removing 'No' from your vocabulary for the night*" as part of their 'Up For Whatever' campaign, it was immediately condemned for supporting sexual assault, and subsequent independent brand analyses determined it had weakened the Bud Light brand (BrandIndex, 2015). More recently, in late 2018, Nike launched an advertising campaign featuring Colin Kaepernick, the famously polarizing NFL quarterback known for kneeling during the American national anthem in order to bring attention to violence against African Americans at the hands of the police. This resulted in immediate condemnation and a drop in Nike's stock price as consumers took to social media to post pictures of burning

their Nike shoes and apparel. However, the stock subsequently rebounded the following day with an outpouring of consumer support and has continued to significantly exceed market performance at the time of writing.

While examples abound of social media responses targeted at individuals or corporations perceived to break social or moral contracts, there is little extant research that examines consumers' underlying motivation for engaging in these behaviours (Rotman, Khamitov & Connors, 2018). Although these responses may be the result of sincere outrage, another possibility is that these responses are solely the function of identity signaling and impression management, and thus serve simply to elicit recognition and respectability. Ultimately, at present it remains unclear what motivates consumers to take to social media and condemn via public outcry, under what circumstances it becomes likely, and what the consequences of doing so are. For example, would Nike consumers have been motivated to burn their apparel if they knew no one was watching? Similarly, would liberal consumers have marshalled support for Nike if these kinds ofexploring

 public protests did not occur?

The current research explores these questions under the label *moral peacocking*, which we define as the act of condemning perceived offensive behavior via public expression of one's outrage to others. Specifically, we examine why individuals condemn persons, brands, or corporations they deem offensive or outrageous and the downstream psychological consequences of doing so. Across six experiments, we propose and test a model of moral peacocking that includes different social identities and diverse situations to demonstrate that moral peacocking is not necessarily driven solely by personal offense, but also by the perception that one's ingroup would similarly be offended (studies 1a and 1b), thus requiring a public platform (study 1c). We further predict and find that the moral peacocking response can be used to predict offline consumption behavior (study 2). Finally, we provide evidence that moral peacocking can result in greater group polarization causes *counter-peacocking,* whereby a dissociative outgroup is motivated to strengthen their opposing views (study 3) and alter their consumption behavior (study 4).

Study 1a and 1a provide converging evidence for our framework of moral peacocking. Specifically, individuals were more likely to condemn an offensive social media message when they were both personally offended, and they believed their ingroup would be offended by the content of that message. This result builds on traditional identity signaling and moral outrage research by showing that these two motivations act as a multiplicative function leading to an increased intention to peacock. Study 1c demonstrates that that while individuals were more likely to *publicly* condemn a post from an individual representing an opposing group they were not more likely to do so *privately*. This further supports our position that the motivation to morally peacock is a function of not only outrage but also identity signaling.

Study 2 extends the findings from studies 1a-c to the consumption consequences of moral peacocking. In particular, this study highlights that moral peacocking is not simply an act of 'slacktivism' (Kristofferson et al., 2014), but instead can be used to predict real world offline support of a brand.

Study 3 and Study 4 demonstrate the effect of counter-peacocking with real brands and behavior demonstrating that dissociative groups that observe moral peacocking against the brand not only did not reduce their willingness to buy from the brand but actually had a strengthened desire to purchase from the brand. Thus, this "counter-

peacocking" effect highlights that moral peacocking may be counterproductive as a means of punishing an offending brand or company.

The current research suggests that the motivation underlying consumer outrage arises from the interplay of moral outrage alongside the public, ingroup-focused nature of social media platforms. Consequently, in contrast to social media bringing people together, this inadvertently foments backlash as counter-peacocking, further polarizing group identities.

I'm Sorry! Investigating the Influence of Customer Failures and Apologies on Frontline Service Employee Well-being

EXTENDED ABSTRACT

There is a large body of literature on service failure and recovery (Van Vaerenbergh *et al.*, 2019), however surprisingly customer failures (CFs) have not been empirically examined. CFs are characterised by customers failing to effectively fulfil their role expectations. Much of frontline service employees' (FSEs') daily lives are spent co-creating services with customers (Cho, 2019) who frequently generate failures (Tax *et al.*, 2006). CFs can negatively impact that customer's experience, the experience of other customers, and/or the company's productivity (Tax *et al.*, 2006).

Prior research assumes that dealing with such negative customer behaviours is part of the FSE role (Stock and Bednarek, 2014), and the mantra of "the customer is always right" reinforces the inequality of FSEs versus customers (Henkel *et al.*, 2017). Handling CFs requires FSEs to engage in emotional labour by behaving politely and pleasantly even when FSEs do not have these genuine feelings (Cho, 2019), and regardless of the poor performance of customers who hinder their delivery of service quality.

Despite the ubiquity and importance of CFs, the service failure and recovery literature rarely considers them, such as their types, and no prior research contemplates their downstream consequences on FSE well-being. FSE well-being is important, under-researched, and one of eight transformative service research (TSR) themes (Anderson and Ostrom, 2015). FSE well-being can generate positive outcomes, including increased FSE productivity and job satisfaction, enhanced morale and motivation, and reinforced organisational commitment (Robertson and Cooper, 2011). Conversely, stressed and unhappy FSEs are unproductive, demotivated and disengaged (Sawang, 2010).

We argue that the negative impact of CFs extends to FSEs who need to manage them. CFs have a detrimental effect on FSE wellbeing, an important transformative outcome, but we advance that a customer apology can alleviate this by customers taking the blame for their failures. Overall, apologies are a valued reward that redistribute fairness and trust in an exchange relationship (Walster *et al.*, 1973). Apologies enable the victim to make sense of the apologiser and his/her failure (Basford *et al.*, 2014). They can diminish anger, promote forgiveness (Radu *et al.*, 2019) and enhance service evaluations (Hart *et al.*, 1990).

Despite research examining how apologies from FSEs affect customer evaluations following a service failure, there is no literature on the flipped relationship of how customer apologies affect FSEs following a CF. This is surprising given that one in three service failures are customer-caused (Zeithaml and Bitner, 2003). In this paper, we argue that a customer apology, i.e., a customer message containing an acknowledgement of blameworthiness for the CF (Roschk and Kaiser, 2013), can alleviate the negative impact of a CF and improve FSE well-being. We suggest that FSE well-being is negatively affected by a CF due to the extra demand and responsibil-

ity it places on FSEs but can be restored by a customer apology that acknowledges blame and responsibility for CFs.

This paper reports on three studies that investigate this phenomenon. The initial study applies the critical incident technique (CIT) to develop a taxonomy of intentional and unintentional CFs and explores the influence of customer apology on FSE well-being following a CF. Semi-structured telephone interviews were conducted with 103 randomly selected FSEs from a range of business-to-consumer (B2C) service industries. The vast majority of CFs were found to be unintentional and align with the different service consumption stages. Although relatively minor in severity, we confirm that CFs often have harmful implications for FSE well-being. This is particularly in the absence of a customer apology where FSEs frequently experienced negative feelings. In contrast, when describing their emotions following a customer apology, most FSEs felt happiness, delight and relief. This provides initial evidence of the positive influence of customer apology on FSE well-being. An overwhelming proportion of FSEs (79%) felt that there were benefits for themselves, the customer, and/or the organisation emanating from the customer apology. FSEs commonly spoke about the CF and apology incident (multi-coded) to managers (35.1%), co-workers (36%), and family and friends (13%). However, 32% of FSEs kept the incident to themselves.

Studies two and three utilised a full-factorial between-subjects scenario-based experimental design using Mechanical Turk (MTurk). In study two (n=91), we triangulate study one by testing the relationship between customer apology and FSE eudaimonic well-being (interpersonal and intrapersonal dimensions), which is supported. Furthermore, we demonstrate that FSE job satisfaction increases following a customer apology, along with positive affect. These findings extend the service literature by showing that customer apology is a promising approach to foster FSE well-being following CF.

Finally, in study three (n=216), as suggested by the study one findings, we examine the downstream implications of perceived supervisor support following a CF in the presence (versus absence) of a customer apology. Perceived supervisor support is the degree to which an FSE feels that he/she is supported by his/her supervisor in the context of a CF. FSEs feel valued when they perceive supervisor support, and this can buffer stress via emotional regulation (Cho 2019). We argue that FSEs count on managers to relieve job stress and provide emotional support (van Jaarsveld *et al*., 2019) in problematic CF situations. Support helps to relieve the extra demand of CFs so that FSEs are not left feeling to blame or responsible. Our findings suggest that perceived supervisor support nullifies the negative effect of the customer not apologising for their failure, yet when perceived supervisor support is lacking, this washes out the positive effect of a customer apology.

Service organisations need to clearly communicate performance expectations to customers to reduce CFs. We also recommend that signage and other communication be used to emphasise customer responsibilities. FSEs could be trained to garner customer apologies by responding to CFs constructively, drawing customers' attention to their failures without being aggressive or vindictive. Given their prevalence, management should identify intentional and unintentional CF types and develop processes and procedures to minimise them. To promote effective communication between supervisors and FSEs, supervisors could be trained in empathy and emotional intelligence, e.g., via role-playing. High-risk FSEs who chronically experience CFs should be identified and provided intensive ongoing support.

"Let's Laugh About it!": Using Humor to Answer Complainers' Online Incivility

EXTENDED ABSTRACT

[Example A]
@GokeAdebayo: *"Always f***ing up, f**k you and your stupid trains.*
@Virgin_TrainsEC: *Oh I'm soooo sorry, no reaaaaaallly I am – I forgot that we poured gallons and gallons of rain onto the tracks!"*

[Example B]
@DaneMarseille: *"How 'poor' persons can take the high-speed train if a one-ticket costs €179.*
@SNCF: *And how do you do to buy the last-generation smartphone? Same problem and I think it's understandable even for those who don't have a high school diploma"*

The two examples below present two companies' responses—Virgin Trains (Example A) and SNCF (the French railway company; Example B)—to customers' complaints posted on social media. While both companies adopted a form of humorous response with the attempt to amuse, observers' reactions to these replies were diametrically different. In Example A, Virgin Trains receives a large approval from observers, with thousands of likes and retweets. In Example B, SNCF's attempt was a complete fiasco, generating a "bad buzz" that ultimately leads the company to delete the tweet and to present public apologizes.

In this context, managers need to know when humor is appropriate, versus when an accommodative recovery (i.e., apologizing, providing explanations) represents a safer strategy. Unfortunately, academic research does not provide many insights to know when humor is a beneficial tactic for observers (e.g., Béal and Grégoire 2021), versus when humor should be proscribed in favor of an accommodative recovery (e.g., Shin and Larson 2020). In this research, we argue that Virgin Trains' response was amusing because it uses humor to respond to an uncivil complaint. Complaint incivility refers to all forms of rude, disrespectful, condescending, or degrading complaints made by a customer about a firm or an employee (Bacile et al. 2018; Grégoire et al., 2019). The phenomenon of customer incivility is clearly on the rise on social media because of the anonymity associated with such online environments. In a recent survey, 73% of observers reported having witnessed incivility on social media (Pew Research Center 2014). This phenomenon raises the critical question of how companies should manage incivility on social media; this issue has been identified as an important research avenues in recent calls (Bacile et al. 2018). We address such calls and posit that humor is an appropriate and effective tactic to address complainers' incivility on social media.

A recent body of literature has examined the effectiveness of humor on social media (e.g., Béal and Grégoire 2021; Shin and Larson 2020); however, we are not aware of any prior humor research incorporating the notion of complainers' incivility. To examine the effect of humor in the context of online incivility, we rely on benign violation theory, which constitutes an established framework to distinguish successful and failed humorous attempts (McGraw and Warren 2010). Using humor to address online complaints represents a norm violation because the company "makes jokes" rather than resolving the problem. However, if this intervention is perceived as benign, observers would be amused by this norm violation.

In their seminal work on benign violation theory, McGraw and Warren (2010) identify some conditions that make a norm violation benign, including the level of commitment toward the victim of humor. On the one hand, observers tend to have a bad opinion of uncivil complainers, and as result, they feel less committed toward them (Bacile et al. 2018). Accordingly, for uncivil complaints, observers judge the company's humorous response as being benign and amusing, given complainers' prior incivility (e.g., Virgin Trains' example). On the other hand, in the case of civil complaints, observers would feel more committed toward the complainers, and humor will be perceived as a malign violation, translating into little amusement and reduced purchase intentions (e.g., SNCF's example).

Building on this logic, the current research makes three contributions by using three scenario-based experiments conducted in different services contexts (i.e., internet service provider and restaurants). First, the research contributes to the recent literature on customers' incivility in a social media context (Bacile et al. 2018). All things being equal, Study 1 shows that observers are more amused and report higher purchase intentions when companies use humor to address uncivil complaints rather than civil complaints. The more uncivil is a complaint, the more a humorous attempt is effective at generating observers' amusement and purchase intentions.

Second, Study 2 examines if complainers' incivility influences the effects of two types of humor—that is, affiliative humor (e.g., laughing *with* the complainer) and aggressive humor (e.g., laughing *at* the complainer)—on observers' responses. Past research usually finds that people are more amused by interlocutors who favor affiliative humor over the aggressive type (Martin et al. 2003). Building on this, we argue that both types of humor are more amusing in the context of incivility, compared to a civil context. However, we still confirm that affiliative humor keeps its advantages in the eyes of the observers, no matter if the complaint is civil or uncivil.

Third, because affiliative humor is viewed as a more appropriate use of humor (as established in Study 2), we compare, in Study 3, its effectiveness with an accommodative response. The online service recovery literature acknowledges that an accommodative response usually develops the highest observers' positive attitudes and intentions (Johnen and Schnittka 2019). Recent research has recently challenged the overall superiority of accommodative recovery for observers in a social media by highlighting the effectiveness of using humor-based responses. Here, some researchers find that affiliative humor is as effective as an accommodative recovery (Béal and Grégoire 2021), whereas others reconfirm the superiority of accommodative recovery over any humorous attempts (Shin and Larson 2020). Study 3 reconciles such discrepancies about the usage of humor versus accommodative recovery by referring to the incivility of the complaint. When *complainers are civil*, observers respond more favorably to an accommodative recovery compared to affiliative humor. In turn, when *complainers are uncivil*, affiliative humor and accommodative recovery generate similarly high levels of purchase intentions from observers.

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When Firms Meet Consumers on Social Media: The Influence of Online Communications on Consumers, Firms, and Platforms

Chairs: Sonia Kim, Columbia University, USA
Gita Johar, Columbia University, USA
Discussant: Gita V. Johar, Columbia University

Paper #1: Did You See What I Did? How Receiving Attention Enhances Post-Sharing Satisfaction with Shared Experiences

Matthew J. Hall, Oregon State University, USA
Jamie D. Hyodo, University of Nebraska-Lincoln, USA
Alix Barasch, New York University, USA

Paper #2: Snapping is Believing: The Effect of Brand Selfies on Brand Preference

Gabriela Funk, University of Lucerne, Switzerland
Reto Hofstetter, University of Lucerne, Switzerland
Leslie K. John, Harvard Business School, USA

Paper #3: This is My Space: When and Why Ads on Social Media Cause Negative Platform Evaluation

Sonia S. Kim, Columbia University, USA
Gita V. Johar, Columbia University, USA

Paper #4: When Friends (Don't) Care About Facts: Belonging Motivation Drives Untrustworthy Information Sharing

Kristen Lane, University of Arizona, USA
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SESSION OVERVIEW

Social media platforms have become the main vehicle for firms to communicate information about their products and services to consumers. Some use more direct ways of communicating such as advertisements, while others encourage consumers to share product experiences, post selfies with products, or share specific information with other consumers. Online platforms differ from traditional communication vehicles (e.g., TV or newspapers) in important ways that affect the nature of interaction between consumers and firms. It is therefore timely and critical to understand how consumers react to new forms of communication on social media, so that both firms and consumers benefit from their interactions. The four papers in this session discuss how different types of product communications impact the way consumers think and feel about the target products and the networking platforms.

The first two papers focus on the psychological reactions of consumers after they make a post on social media, specifically, how consumers feel after taking or posting photos about a product or experience. First, Hall, Hyodo, and Barasch demonstrate that consumer satisfaction from an experience is higher when the shared experience (i.e., post) draws more attention. They find that greater attention to a shared post increases self-esteem, which leads to higher satisfaction with the experience. Next, Funk, Hofstetter, and John investigate the effect of taking selfies with a brand. They demonstrate that these brand selfies, compared to simply taking a photo of the brand or a selfie without a brand, elevate both the short-term and long-term brand preference due to heightened self-brand connection. These papers highlight the distinct features of social media, such as the ability to post one's own photos and the visibility of others' reactions, that affect consumer well-being through building consumer-brand relationships and enhancing self-esteem.

The next two papers shed light on the effects of another distinct feature of social media platforms—the presence of others—and examine how this factor affects one's motivations and behavior online.

Kim and Johar investigate the differential impact of social media ads on platform evaluations. They demonstrate that the presence of ads negatively affects evaluations of platforms intended for interaction with close others; this effect is attenuated on platforms intended for interactions with acquaintances or strangers. They posit that consumers feel psychological ownership over their newsfeed when interacting with close others on the platform and this feeling of ownership is threatened when ads intrude in the feed. The fourth paper examines a behavioral consequence of social media interactions, namely the propensity to share information with one's network. Lane and Brucks investigate the specific behavior of sharing untrustworthy news articles. They demonstrate that a "need to belong" motive, readily activated on social media platforms, increases consumer willingness to share these untrustworthy articles because it decreases the sensitivity to source trustworthiness.

Taken together, these four papers contribute to the literature by identifying novel antecedents and consequences of different product communication strategies of firms. They also offer practical implications for firms who desire to develop closer relationships with their consumers online.

Did You See What I Did? How Receiving Attention Enhances Post-Sharing Satisfaction with Shared Experiences

EXTENDED ABSTRACT

Consumer attention is a limited resource that is steadily increasing in value due to an imbalance between the static attention supply each individual and the ever-increasing attention demands faced by consumers (Davenport and Beck 2001; Simon 1971). While marketers recognize the importance of firms attracting and retaining consumer attention, little research has considered the value consumers place on attracting attention from other consumers. This lack of research examining consumer-to-consumer attention exchange is notable given that consumers recognize the relative scarcity of both their own and others' attention (Derber 2000). Specifically, consumers understand that receiving others' limited attention indicates those others are prioritizing that specific signal over competing others (Falkinger 2007). Thus, consumers generally value receiving attention because it is interpreted as a positive social signal.

In order to attract attention, consumers must send some type of signal (Falkinger 2007). In the consumption domain, one such signal is the sharing of consumption experiences. While consumers derive many benefits from consuming experiences (Holbrook 1994; Schmitt 1999), we propose that sharing an experience can provide additional experiential value by helping the consumer attract attention. Because receiving higher levels of attention from others is a positive social signal (i.e., others have prioritized the sharer's signal), we propose the level of attention one receives will predict sharer self-evaluations (i.e., self-esteem). Thus, after sharing an experience, receiving higher levels of attention should enhance sharer self-esteem. This enhanced self-esteem would not have been possible without the experience, meaning this self-esteem value should be partially attributed to the experience, ultimately increasing the sharer's satisfaction with the

experience. We note that many signals of online attention transfer are inherently affirming (likes and favorites). Thus, receiving these signals could simply affirm the desirability of the experience (i.e., social proof). However, we propose our hypothesized effects will be observed when sharers receive even unvalenced attention (e.g., views), because consumers value attention itself.

To test our theory, we leverage a variety of methodologies to establish both internal and ecological validity. Study 1a was a field study in which we partnered with a local jazz concert series to run a social media contest. Concert attendees shared about their concert experience on social media as part of the contest. Two days after sharing, we followed up with those who posted (n=46) and asked them to subjectively indicate the amount of attention their post received (1=very low levels of attention, 100=very high levels of attention) and their satisfaction with the concert (9-point bipolar scale; satisfied/dissatisfied, positive/negative experience). Participants who received higher levels of attention after sharing reported greater satisfaction with the concert experience (B=.027, SE=.009, p =.006). This finding was replicated in Study 1b, in which participants (n=99) logged into their own social media accounts and identified an experience they had shared in the past. Posts that had received higher levels of attention promoted greater satisfaction with the experience itself (B=.288, SE=.093, p=.003).

In Study 2, undergraduate students (n=258) completed a social media simulation in which received attention was manipulated in real time. Participants first viewed a video of a virtual rollercoaster experience and reported their initial satisfaction with the experience (1-7 scale; satisfied/dissatisfied; positive/negative; pleased/displeased). Next, they entered a social media simulation (adapted from Wolf et al. 2015), in which they chose a screen capture from the rollercoaster experience and wrote an accompanying caption. After joining the platform with ten other ostensibly real participants, attention was manipulated by altering the number of "views" participants received (participants could also indicate they had "viewed" other users' posts). Posts received either 9 (high attention) or 1 (low attention) view(s). After the simulation, participants again indicated their satisfaction with the experience and their self-esteem (15 items; 5-point scale; Bagozzi and Heatherton 1994). As a consequential choice measure, they were also offered an opportunity to view another similar rollercoaster. As expected, those who received higher attention reported higher self-esteem (M_{High}=3.95; M_{Low}=3.71; F(1,255)=4.31, p=.039) and satisfaction (M_{High}=5.41; M_{Low}=5.06; F(1,255)=11.21, p=.001; CI_{90}=[.001,.049]). This effect held when controlling for pre-attention satisfaction (F(1,256)=11.83, p=.001). Those receiving high attention were also more likely to view another rollercoaster (χ^2=3.96, p=.047).

Study 3 compares the receipt of explicitly affirming attention (likes) versus neutral attention (views). Undergraduates (n=184) read about sharing a restaurant experience to Instagram. They then saw a screenshot which displayed either 15 or 150 likes (affirming attention) or views (neutral attention). They then reported how satisfied they would be with that restaurant experience. There was no main effect of attention type (F(1,180)=.54, p=.465) or interaction (F(1,180)=.12, p=.732). However, those who received high attention, regardless of type, reported higher satisfaction than those who received low attention (M_{High}=4.42; M_{Low}=4.18; F(1,180)=3.90, p=.050). This effect was again mediated by self-esteem (CI_{95} = [.008, .293]). This suggests attention itself is valued even when it does not explicitly affirm the experience.

Lastly, Study 4 ruled out the possibility that sharers use others' attention to confirm the social desirability of the experience. This was done by manipulating the valence of the experience (sharing a negative experience) and attention recipient (self vs. other). Undergraduates (n=158) read about having a negative hiking experience with a friend, which either they or their friend shared on Instagram Story (which only provides unvalenced attention metrics; i.e., views). Participants learned that their or their friend's post received 9 (low attention) or 96 (high attention) views. Satisfaction was measured before and after the attention manipulation. A significant repeated-measures interaction emerged (F(1,154)=8.12, p=.005). Controlling for initial satisfaction, participants who received high attention reported greater satisfaction with the hiking experience (M_{High}=3.50; M_{Low}=2.08; F(1,153)=23.40, p<.001). However, when attention was received by the friend, the amount of attention did not affect satisfaction (M_{High}=2.72; M_{Low}=2.87; F(1,153)=.17, p=686). Thus, the amount of attention the experience receives does not necessarily signal its quality. Rather, consumers derive value when they *personally* receive attention—value that enhances satisfaction with even negative experiences.

Overall, this research demonstrates the importance of consumer-to-consumer attention exchange for marketers by demonstrating that consumers not only value receiving attention, but also that received attention enhances the value of consumption.

Snapping is Believing: The Effect of Brand Selfies on Brand Preference

EXTENDED ABSTRACT

Many firms actively and conspicuously encourage consumers to take brand selfies, sometimes offering modest incentives to do so, such as a small chance to win a prize (Dunkin' Donuts, 2014; Forever21, 2017). For example, Fisherman's Friends offered consumers the chance to win 24 packs of lozenges for direct messaging a brand selfie to the brand. In doing so, marketers may seek to influence the selfie-taker herself (e.g., when prompting consumers to take a brand selfie, as Fisherman's Friends did), as well as her social networks (e.g., when prompting consumers to share the brand selfie on social media). Here, we focus on the former goal, investigating how and why brand selfie-taking impacts the selfie-taker.

We develop and test a conceptual account for when and why brand selfie-taking can affect the selfie-taker's preference for a given brand. Drawing on self-perception theory (Bem 1972; Festinger and Carlsmith 1959; Shaver 1970), we predict that consumer compliance with a marketer's request to take a brand selfie sparks a self-inferential process that can lead the consumer to feel connected to the brand (e.g., "If I took the brand selfie, I must feel connected to this brand"), increasing brand preference. Specifically, we propose that taking a brand selfie can increase brand preference (H1), and that this effect is mediated by self-inferences of connectedness to the brand (H2). We also test two theoretically-informed moderators. We predict that the effect of brand selfie-taking on self-brand connection is attenuated when consumers are prompted to make external attributions for their behavior (H3). Second, our account is premised on the notion that people sometimes infer their attitudes from their behaviors, and so when they look pleased [dissatisfied] in a photo with a brand, we presume them to infer positive [negative] attitudes (in the form of enhanced [decreased] self-brand connection; Laird 1974, 2007; Strack and Martin 1988). Therefore, we predict that brand selfie-taking will increase [decrease] self-brand connection when the selfie-taker's facial expression is positive [negative] (H4).

Study 1 tests H1 "in the wild" using data from Instagram. Specifically, we assessed the sentiment of a sample of product reviews (N = 120,000) as a function of whether the reviewer (i.e., poster) had taken a brand selfie. As predicted, reviewers' posting of a brand selfie

is positively associated with the sentiment of their review. Although this association persisted after controlling for possible confounders (e.g., brand and user fixed effects, review length), its correlational nature cannot pinpoint causality; therefore, we conducted four randomized experiments, which we describe next.

Study 2 (N = 100) tests H1 using a two condition between-subjects design in which participants chose which of two bottles of water to have as their reward for participating: a bottle from the target brand, or a larger, more valuable, bottle from a different brand. Between-subjects, we randomized participants to either an experimental group, in which they took a brand selfie (i.e., a self-photo with the target brand) or a control group, in which they simply took a selfie (without the brand). Consistent with H1, participants in the brand selfie condition were more likely to choose the bottle from the target brand relative to those in the control group (68% vs. 48%; χ^2 = 4.11, p = .043).

Study 3 (N = 200) tests whether H1 holds over time, as well as offering a partial test of H2. Specifically, participants were randomized to either take a brand selfie or simply a selfie as in Study 1. Then, two days later, we assessed participants' self-brand connection as well as purchase intention. Participants in the brand selfie condition exhibited higher purchase intent relative to the control group (F(1, 366) = 10.49, p < .01); and this effect was mediated by self-brand connection (indirect effect = .69, BootSE = .22, 95% CI = [.27, 1.11]; c' = -.03, SE = .22, p =.91).

Study 4 (N = 594) tests H3. We manipulated the ease of drawing inferences from one's behavior and test whether doing so affects self-brand connection in predicted ways. Specifically, for half of participants, we disrupted the self-inferential process by facilitating external attributions. We did so by prompting participants to attribute their compliance with the photo-taking request to the fact that they had been given an extrinsic, monetary incentive. The study was a 2x2 between-subjects design in which we manipulated photo type (i.e., brand selfie versus brand photo) and attribution prompt (internal versus external). As predicted, the effect of brand selfie taking on self-brand connection was attenuated when participants were prompted to make external attributions for their photo-taking behavior (F(1,590) = 6.96, p < .01, η^2 = .01; *see Figure 1*).

Study 5 tests H4 in a 2x3 between-subjects design. Participants were randomized to either take a brand selfie or a selfie. Critically, we also manipulated participants' facial expressions in their photo, by either instructing them to have a positive expression (e.g., a smile), or a negative expression (e.g., a frown), or giving them no particular instruction on how to appear. As predicted, self-brand connection was reduced in the negative expression condition relative to both the no instruction and positive expression conditions (F(2, 992) = 7.34, p < .001, η^2 = .01; *see Figure 2).*

These results contribute to scholarship by identifying a novel process by which self-brand connections can be constructed: self-inferences generated by taking a selfie with the brand. In doing so, we heed Schmitt's (2013, 2019) calls for more research on how consumers' interactions with brands affect the relationships they form with those brands, particularly when it comes to digital content creation. Second, we contribute to the emerging scholarly literature on consumer engagement by identifying the effects of a novel and increasingly prevalent form of content creation—brand selfies—on the content-creators themselves (including marketing-relevant outcomes, such as purchase interest). With respect to practice, findings imply that marketers ought to prompt consumers to actually smile in their brand selfies, for the positive effect of brand selfie-taking on brand preference emerges when consumers look pleased in the photos.

This is My Space: When and Why Ads on Social Media Cause Negative Platform Evaluation

EXTENDED ABSTRACT

Social media revenue is highly dependent on advertisements. Over 95% of Facebook's 2020 global revenue was solely from advertisements, while platforms such as Twitter, Instagram, and Pinterest all have growing ad revenues every year (Tankovska 2021). Meanwhile, consumer reactions towards social media advertisements are quite negative, ranging from blocking ads on their feeds to deleting the apps altogether. But do ads always decrease evaluations of the platform? The current research investigates when ads hurt platforms and when they do not.

One unique feature of social media ads is that they are shown in a space where you interact with others. We propose that *who* is on the platform with you (e.g., close friends or far acquaintances) will moderate the effect of ads on platform evaluation through feelings of psychological ownership (Pierce et al. 2003; Weiss and Johar 2013). Specifically, the presence of close friends creates the feeling that the platform newsfeed is "my" space, which makes ads feel like an intrusion taking one's ownership away. This decreased sense of ownership causes negative platform evaluation (Jussila et al. 2015; Stoner et al. 2018). If the platform is used for interacting with acquaintances and strangers, this feeling of psychological ownership will not be as high; therefore, ads will not affect platform evaluations as much. We briefly describe four studies that test this theorizing below.

In study 1 (N = 150), we surveyed people's social media usage. For each social networking platform participants said they used, they reported the percentage of the time on the platform they spent interacting with close others and how much psychological ownership they felt over their platform feed (Peck and Shu 2009). Participants further indicated how they would feel about the platform if it showed them advertisements. Across platforms, the higher the percentage of time spent with close others on the platform, the more psychological ownership they felt over the feed (= 2.23, $p < .001$) and the more negativity they had towards platforms showing ads (= 0.34, $p = .007$.

Study 2 (N = 399) was a 2 (tie: close vs. far) 2 (ad: no ads vs. ads) between-subjects experiment. Participants read about a new social networking platform meant for either interacting with close friends or with acquaintances. They wrote down the names of five people that they expected to interact with on this platform, and then saw an example newsfeed with these people. There were either no ads or two ads in between the posts and on the bottom of the page they evaluated the platform. A two-way ANOVA revealed an interaction effect of tie and ad on platform evaluation ($F(1, 388) = 4.29$, $p = 0.039$); for the close-friend platform, the presence of ads significantly lowered evaluation ($M_{noad} = 4.30$ vs. $M_{ad} = 3.77$; $F(1, 388) = 6.98$, $p = 0.009$) while for the far-friend platform, the presence of ads had no effect ($M_{noad} = 3.85$ vs. $M_{ad} = 3.91$; $F(1, 388) = 0.09$, $p = 0.767$).

Study 3 (N = 800) helped pin down the role of psychological ownership. The study was similar to study 2 with the addition of questions where participants indicated the psychological ownership they felt over the newsfeed. Participants who saw ads on the example newsfeed also indicated whether they felt like the two advertisements infringed in their territory. Two-way ANOVAs replicated results from study 2 (interaction: $F(1, 617) = 3.80$, $p = 0.052$). In support of the proposed underlying mechanism, the presence of ads decreased felt ownership over the platform significantly for a close-friend platform ($M_{noad} = 4.51$ vs. $M_{ad} = 3.56$; $F(1,617) = 25.43$, $p < 0.001$) but not for a far-friend platform ($M_{noad} = 3.65$ vs. $M_{ad} = 3.34$; $F(1,617) = 2.76$, $p = 0.097$; interaction: $F(1, 617) = 5.58$, $p = 0.018$). A moderated mediation model revealed that where psycho-

logical ownership mediated the negative effect of ads on the platform evaluation for close-friend platforms but not for far-friend platforms (indirect effect = -0.40, CI95% = [-0.7387, -0.0750]).

What can platforms intended for close interactions do to generate revenues given that advertising can backfire in this case and negatively affect the platform? The psychological ownership literature suggests two possibilities. First, consumers may have higher intentions to purchase customizing features when they feel a higher ownership over the feed (Kirk et al. 2015). Second, consumers may be willing to pay more voluntary donations (Jami et al. 2021; Peck et al. 2020).

Study 4 (N = 400) tested these possibilities using a single factor (no ads vs. ads) between-subjects design. All participants were told that the platform was intended for interacting with close friends. After either seeing no ads or ads, they indicated psychological ownership over the newsfeed. Participants were then asked whether they would pay $1 per month for customizing features and indicated their willingness-to-pay for a donation to the platform (in dollars). As in study 3, ads decreased psychological ownership over the feed (M_{noad} = 4.24 vs. M_{ad} = 3.55; $F_{(1,324)}$ = 17.47, $p < 0.001$). When participants saw no ads, they showed a higher purchase intention for customizing features (M_{noad} = 2.10 vs. M_{ad} = 1.74; $F_{(1,324)}$ = 4.91, p = 0.027) and a greater willingness-to-pay for donations (M_{noad} = 1.13 vs. M_{ad} = 0.80; $F_{(1, 324)}$ = 3.40, p = 0.066). Both effects were mediated by psychological ownership (Indirect effect on customizing = 0.2764, CI95% = [0.1427, 0.4338]; Indirect effect on donation WTP = 0.2112, CI95% = [0.0874, 0.3647]).

In sum, we identify that there is a differential effect of ads on social networking platform evaluations, depending on who is present on these platforms. Specifically, the presence of ads is detrimental to consumer evaluations of social media platforms that are used for interactions with close friends and this effect is driven by feelings of psychological ownership. These findings suggest that it is important for social media platforms to know who their users interact with on the platform and to use advertisements strategically to avoid consumer backlash.

When Friends (Don't) Care About Facts: Belonging Motivation Drives Untrustworthy Information Sharing

EXTENDED ABSTRACT

The explosion of social networking sites has created an online information environment that is inextricably mingled with a social environment (Stafford, Stafford, & Schkade 2004). Although a more social information environment offers the benefit of diverse viewpoints (Dahlberg 2011), it has also been found to reduce fact-checking (Jun, Meng, and Johar 2017) and hinder discernment between true and false information (e.g., Pennycook and Rand 2018, 2021). These inherent susceptibilities and potential for false information to quickly spread online (Vosoughi, Roy, and Aral 2018) represent a pressing challenge for marketers, policymakers, and global citizens.

The current research explores the impact of online socializing spaces on consumers' propensity to share untrustworthy information. As in other social contexts, individuals' online information sharing behavior is largely motivated by a desire to feel a sense of belonging (Nadkarni and Hoffman 2012; Oh and Syn 2015; Syn and Oh 2015). Consumers who are motivated to belong (Baumeister and Leary 1995) tend to prioritize elements of information that connect them to social others (e.g., Higgins 1992). When accuracy is central to group norms, we predict that belonging motivated individuals will pay attention to accuracy cues (e.g., source trustworthiness, McGinnes and Ward 1980). When accuracy is not central to group norms, we

predict that belonging motivated individuals will rely less on accuracy cues, and more on other relationship-promoting elements (e.g., entertainment value of information, Aditya and Darke 2020). As a result, belonging-motivated consumers will be more likely to share untrustworthy information when the recipient members do not (vs. do) have accuracy norms.

We test our predictions in four studies. In each of the studies, we expose participants to social groups that have accuracy norms (trivia night social group) vs. entertainment norms (happy hour social group). We then measure their likelihood of sharing a set of articles paired with either untrustworthy sources (e.g., the National Enquirer) or trustworthy sources (e.g., the Economist) with members of the social group.

In study 1, participants (n = 97; M_{age} = 34.09 years, SD = 13.08; 59.8% female; Prolific) imagined being a member of a trivia night social group with accuracy norms. As predicted, the results revealed a significant main effect of source trustworthiness on article sharing ($F_{(1, 95)}$ = 8.77, p = .004): participants were less likely to share articles associated with untrustworthy sources ($M_{Untrustworthy Sources}$ = 4.07, SD = 1.50) as compared to articles associated with trustworthy sources ($M_{Trustworthy Sources}$ = 4.91, SD = 1.30) among members of a group with accuracy norms.

In study 2, participants (n = 602; M_{age} = 33.88 years; 53.7% female; Prolific) imagined being a member of a trivia night (accuracy norm) or a happy hour (entertainment norm) social group. Results revealed a significant interaction ($F_{(1, 598)}$ = 14.20, p = .000): while participants were less likely to share articles from untrustworthy sources ($M_{Untrustworthy Sources}$ = 3.71, SD = 1.35) vs. trustworthy sources ($M_{Trustworthy Sources}$ = 4.40, SD = 1.46) among members of a group with accuracy norms $F_{(1, 598)}$ = 18.42, p = .000), participants were insensitive to source trustworthiness when sharing information among members of a group with entertainment norms ($M_{Untrustworthy Sources}$ = 4.70, SD = 1.36; $M_{Trustworthy Sources}$ = 4.54, SD = 1.43; $F_{(1, 598)}$ = 1.04, p = .31). As predicted, participants were more likely to share untrustworthy information among members of a group with entertainment vs. accuracy norms ($F_{(1, 598)}$ = 38.03, p = .000)

In study 3, we tested the mediating role of attention. We predicted that participants sharing among groups with accuracy (vs. entertainment) norms would pay closer attention to accuracy cues (i.e., source trustworthiness). After completing the same tasks as in study 2, undergraduates (n = 255; M_{age} = 20.99 years; 55.3% female) completed a memory recognition task for article sources. Memory is an indicator of where attention was directed during a task (e.g., Mandler 1980). Participants sharing among groups with entertainment norms produced lower article source recognition scores (correctly recognized sources – incorrectly recognized sources) as compared to participants sharing among groups with accuracy norms ($M_{Entertainment Norm}$ = .55, SD = 1.16; $M_{Accuracy Norm}$ = 1.36, SD = 1.85; $F_{(1, 253)}$ = 17.78, p = .000). This difference in article recognition explained why participants were less likely to share untrustworthy information among groups with accuracy vs. entertainment norms (IMM = .21 (.10), 95% CI [.03, .43]; Hayes PROCESS Model 14).

Studies 1-3 operationalize belonging by provoking the need for affiliation with groups. Study 4 manipulates another core component of belonging that is distinct from the need for affiliation: the need to feel a sense of connectedness (Lee and Robbins 1995). Individuals who feel disconnected experience difficulty following social cues (e.g., DiTommaso et al. 2003) and are perceived as less interpersonally competent (e.g., Spitzberg & Canary 1985). Thus, we predict that feelings of disconnect will suppress the impact of accuracy norms on untrustworthy information sharing.

In study 4, participants ($n = 689$; $M_{age} = 29.67$ years; 51.7% female; Prolific) imagined being a member of trivia night (accuracy norm) or happy hour (entertainment norm) social group. In a third condition, participants who imagine being a member of a trivia night group were additionally asked to write about their feelings of social disconnect experienced during COVID-19 quarantine. Results revealed a significant interaction ($F(2, 683) = 3.12$, $p = .04$). The patterns for accuracy vs. entertainment norm conditions replicate the findings in the previous studies (figure 1). Most importantly, participants who experienced social disconnect were more likely to share untrustworthy information as compared to participants who were exposed to the same trivia night group but did not experience social disconnect ($M_{Accuracy Norm} = 3.73$, $SD = 1.41$; $M_{Accuracy Norm + Social Disconnect} = 4.21$, $SD = 1.40$; $F(1, 683) = 8.86$, $p = .003$). This finding provides strong support for our theory that the motivation to belong is a key driver of untrustworthy information sharing.

By revealing how belonging needs use shape consumer information sharing decisions, this research advances our understanding of the impact of socializing spaces on the spread of misinformation.

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Becoming Better Consumers: Decision-Making in Sustainable and Ethical Marketing

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Paper #1: Communal Attributions Drive Perceptions of Price Fairness When Recouping Green Manufacturing Costs

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Paper #2: Not All Green is Equal: The Sequence of Environmental Harm and Benefit Affects Preferences of Green Products.

Elina Yewon Hur, Cornell University, USA
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Paper #3: Do Challenge Based Advertising Appeals Motivate Consumers to Try Virtuous "Replacement" Products?

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Paper #4: Ethicality-As-Source-Of-Specialness: How and When Ethical Ventures Succeed in Crowdfunding

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SESSION OVERVIEW

Recent events have raised consumers' awareness of climate change and ethical consumption (Latham 2021). To fulfill their expectations, there has been a notable increase in green and ethical products in the marketplace, giving rise to various marketing campaigns such as crowdfunding and diverse advertising appeals, as well as some consequences such as price increases. While previous research has mostly examined how to promote ethical and sustainable (vs. non-ethical) consumption (e.g., Luchs et al. 2010; White, Habib, and Hardisty 2019), little is known about how consumers respond to different marketing practices and products related to ethical topics. The proposed session brings together four papers offering deeper insights on sustainable and ethical consumption, examining how features of sustainable products affect consumers' decision-making and explore how to facilitate ethical practices more effectively.

The first two papers examine how consumers construe companies' green practices and products based on their features. **Longoni, Tari, and Trudel** (N=1,860) investigate how consumers assess price fairness from companies' green practices, with implications for supporting the company. When the product's price increase is due to the company's willful investment in green manufacturing, consumers perceive it as fairer than price increases due to non-green manufacturing costs. This is because consumers infer that the company has a greater communal orientation. **Hur and Shu** (N=1,515) examine systematic differences in consumers' preference for different types of green products based on the sequence of environmental harm and benefit the product generates. They found that consumers prefer products generating environmental benefits following harm (e.g. conventionally-manufactured electric car) more than products generating benefits followed by harm (e.g. sustainably-manufactured gasoline car). They perceive green products that generate harm first, benefit later (vs. benefit first, harm later) as having greater positive impact on the environment, independent of the actual net effect, especially when they have greater sustainability motivation.

The remaining two papers investigate novel and more effective strategies to promote consumers' ethical practices. **Landekhovska-**

ya, Donnelly, and Reczek** (N=1,306) demonstrate that challenge appeals (e.g., "We Challenge you to Taste the Difference"), compared to informational or ethicality appeals, encourage consumers to try virtuous replacement products such as plant-based meat or lab-made diamonds. They found that the challenge appeals decrease the perceived risk associated with trying the product, which is more successful for more competitive consumers. Lastly, **Thürridl and Kamleitner** (N=816) identified perceived specialness as a key driver, above and beyond creating prosocial impact, in increasing funding behavior for ethical ventures when the ventures seek crowdfunding in exchange for venture-related rewards such as environmentally friendly products. They further found that people's funding behavior is attenuated when they cannot receive products in return for their crowdfunding or when the product is already special.

Together, this session takes a step forward to better understand ethical consumption, with important consequences in supporting ethical companies and sustainable products as well as making the right decisions in evaluating such products. This session should have broad appeals to scholars, marketers, and policymakers who are interested in how different features of ethical products and marketing campaigns shape consumers' decision-making.

Communal Attributions Drive Perceptions of Price Fairness When Recouping Green Manufacturing Costs

EXTENDED ABSTRACT

In recent years, several companies have made strides toward "greening" their manufacturing practices to minimize the negative environmental impact. However, green cost-based reasons for a price increase may lead to perceptions of unfairness. Consumers may view sustainable manufacturing as avoidable (Kahneman et al. 1986), not directly linked to product costs (Bolton et al. 2003; Bolton and Alba 2006), and discount long-term environmental gains compared to short-term losses (Hardisty and Weber 2009). By contrast, we show that consumers view willful adoption of sustainable manufacturing practices as an insight into a firm's communal orientation. Because pro-environmental behaviors signal concern for the welfare of other people and the planet (Stern et al. 1993), consumers attribute a firm that willfully engages in pro-environmental practices with a communal orientation—the perception that the firm acts based on concern for the welfare of others (Clarks and Mills 1993) and is willing to consider other people in the allocation of resources (De Bruin and Van Lange 2000; Fiske et al. 2007).

Across five studies, we show that consumers view price increases due to green manufacturing costs as fairer than price increases due to non-green manufacturing costs of equivalent magnitude (Studies 1A-1B). Green costs boost price fairness perceptions because willful investment in green manufacturing signals that a company is concerned with the welfare of others, a marker of a communal orientation (Study 2). However, the boost in fairness perceptions is eliminated when communal attributions are undermined: if a firm reveals self-interest (Study 3), or is exogenously forced to adopt greener practices (Study 4). Higher price fairness perceptions in case of green costs ultimately affect positive behavior toward the firm (Study 5).

Studies 1A (N=370) and 1B (N=296) showed preliminary evidence of the main phenomenon two different domains and price points. Participants read information about a price increase for a par-

ticular product, and then, in a 3-cell between-subject design, read no information about the source of the price increase (*baseline*); or read information about a non-green source (*non-green costs*); or read information about a green source (*green costs*). Participants rated the fairness of the price increase. In both studies, participants judged a price increase to be fairer when given a reason about the source of a price increase than when given no such cue (*p*s<.001). Most pertinent to our theorizing, participants judged a price increase to be fairer in case of green than non-green costs (*p*s<.001). This effect was robust across domains (i.e., jeans, carpet tiles), and type of cost (energy, raw materials).

Study 2 (N=291) provided further evidence of the effect of green costs on fairness perceptions, and used an analysis of mediation to examine the role of communal attributions. Participants judged the fairness of a price increase due to green or not-green costs and then rated the firm's communal orientation. Perceptions of price fairness replicated prior results (*p*s<.001). Additionally, participants inferred greater communal orientation when a price increase was due to green than non-green costs (*p*s<.001). Higher communal attributions in turn resulted in higher perceptions of price fairness both in the case of direct (0.80, 95% CI = [.51, 1.10]) and indirect costs (1.22, 95% CI =[.89, 1.58]).

Study 3 (N=443) provided further evidence for the role of communal attributions in driving perceptions of price fairness. If communal attributions drive perceptions of price fairness, such effect should be eliminated when consumers believe that a firm's actions are motivated by self-interest rather than goodwill. One such circumstance is when the price increase is higher than the associated cost increase, which violates a firm's entitlement to profit. In this study, a price increase was attributed to non-green costs or to green costs, and ulterior motives were salient or not salient by varying the salience of the firm's profit to cost ratio. When ulterior motives were not salient, participants judged a price increase as fairer when due to green (*M*=4.11) than non-green costs (*M*=3.32, *p*<.001). By contrast, when the firm's ulterior motives were salient, fairness perceptions were the same irrespective of the type of costs (*p*=.99).

Study 4 (N=340) used a different angle to examine the role of communal attributions as mechanism underlying judgments of price fairness We reasoned that perceptions of fairness should decrease when a company's communal orientation is tainted, such as when a company's decision to adopt eco-friendly practices is attributed to external circumstances that the firm had to comply with rather than to the firm's goodwill. Participants were assigned to one condition in a 2 (cost: non-green vs. green) x 2 (attribution: cost attributable to the management team vs. mandated by the local government). Participants judged a price increase to be fairer if determined by increased green (*M*=4.67) than non-green costs (*M*=3.61, *p*<.001). However, this effect only manifested when the eco-friendly practice was attributed internally to the company rather than to external circumstances (*p*=.85; 2-way *F*=12.14, *p*=.001).

To test the generalizability of the results, in study 5 (N=120) we employed a sample from the general population (i.e., passerbys) and measured the proportion of people that would support a new business (i.e., petitioned for the opening of a new restaurant) as a function of whether a price increase was due to an eco-friendly cost-based reason or to a neutral reason. Whereas 79.7% of passersby signed the petition when the price increase was due to green costs, only 60.7% did so in case of non-green costs (χ²=5.2, *p* = .023).

Overall, this research contributes to the literature on dual entitlement and price fairness perceptions (Bolton and Alba 2006; Bolton et al. 2003; Campbell 1999; Kahneman et al. 1986) by showing that green costs are perceived to be fundamentally distinct from costs of equal magnitude but different nature (i.e., non-green), because consumers make moral inferences based on a firm's adoption of greener practices. Our research also has reaching implications for policy makers and contributes to the literature on sustainability (Haws et al. 2014; Luchs et al. 2010) by providing a framework to understand when and why consumers reward companies adopting eco-friendly practices.

Not All Green is Equal: The Sequence of Environmental Harm and Benefit Affects Preferences of Green Products.

EXTENDED ABSTRACT

With rising concerns about climate change, more companies introduce environment-friendly products by making changes to conventionally made products. For example, Ford and BMW have changed manufacturing processes by using recycled plastics for vehicle interiors, while Tesla makes vehicles that operate in an environment-friendly way. However, there is criticism that companies overstate products' environmental benefits, disregarding the hidden cost that are unavoidable at present, and a gap may arise between consumers' perceptions and products' actual impact to the environment. It is thus important to understand how consumers evaluate green products and provide accurate guidelines for their decision-making.

The current research demonstrates that consumers have systematic differences in evaluating green products based on the sequence of environmental harm and benefit generated by products. We show that consumers prefer products that generate environmental benefit following (vs. followed by) harm. This is consistent with Prelec and Loewenstein (1998), where consumers prefer products that generate cost (i.e., environmental harm) up front in order to purely enjoy the product's positive utility (i.e., environmental benefit) afterwards. We predict that this effect arises because consumers perceive products generating environmental benefit following (vs. followed by) harm yield a more positive impact (Chernev 2010; Spreitzer 1995). Further, we propose that this effect is moderated by individuals' sustainability motivation. Consumers with stronger motivation for sustainability would seek products with a greater impact to the environment, and they would prefer products that generate environmental benefit following (vs. followed by) harm even more (Touré-Tillery and Fishbach 2017; Tsiro and Irmak 2020).

Four studies test our theory. Study 1 (N=401) examined the effect of sequence between environmental harm and benefit on perceived environmental impact in a 2(sequence: harm-first-benefit-later vs. benefit-first-harm-later) x 2(information: single-sided vs. double-sided) between-subjects design. Participants in the benefit-first-harm-later condition read descriptions of a gasoline car made with recycled materials that emits gas when driven, and an apartment built with renewable energy but operated with conventional energy in a counterbalanced order. Participants in the harm-first-benefit-later condition read descriptions of an electric car made in a conventional way, but producing no emissions while driven, and an apartment built with conventional energy sources and materials and operated with renewable energy. We also manipulated information by showing either descriptions about benefit only (single-sided) or both harm and benefit (double-sided). We found that people perceived products have greater positive environmental impact when the benefits are generated later (*M*=1.45) than earlier (*M*=.31; *F*(1,397)=91.17, *p*<.001, η_p^2=.19), and this effect attenuated when people read product descriptions about benefits only (*F*(1,397)=13.42, *p*<.001, η_p^2=.03; Figure 1).

In Study 2 (N=302), we used only the double-sided descriptions and examined consequential outcomes of purchase intention.

We also tested whether individual sustainability motivation moderates our effect. We manipulated the sequence of environmental harm and benefit of a car and an apartment as in Study 1. As predicted, participants in the environmental harm-first-benefit-later (vs. benefit-first-harm-later) condition were more interested in purchasing the car and renting the apartment ($M_{harm-benefit}$=4.95 vs. $M_{benefit-harm}$=3.84; $F(1, 300)$=43.98, p<.001, η_p^2=.13), and also felt the products have more positive environmental impacts ($M_{harm-benefit}$=1.38 vs. $M_{benefit-harm}$=-.70; $F(1, 300)$=258.95, p<.001, η_p^2=.46). We measured their individual sustainability motivation, and found a significant interaction between the sequence and their sustainability motivation (β=.47, p<.001). Those with higher motivation (+1SD) were more interested in purchasing products that generate environmental harm first, benefit later (β=1.73, p<.001) than those with lower motivation (-1SD) (β=.38, p=.046; Figure 2). We also found a significant moderated mediation where the perceived environmental impact mediates the effect of sequence on purchase intention, and it is moderated by sustainability motivation ($\beta_{indirect}$=.23, 95% CI=[.13,.33]; PROCESS model 8; Hayes and Preacher 2014).

Study 3 (N=408) demonstrates that our effect holds regardless of when the environmental benefit and harm are generated using a 2(sequence: harm-first-benefit-later vs. benefit-first-harm-later) x 2(manufacturing timing: past vs. future) between-subjects design. Participants in the past condition read the same product descriptions as in Study 2. Participants in the future condition read the products will be manufactured in the future such that both the environmental harm and benefit have not yet been generated. We found that participants in the harm-first-benefit-later (vs. benefit-first-harm-later) condition preferred products more ($M_{harm-benefit}$=1.15 vs. $M_{benefit-harm}$=-.19; $F(1,404)$=128.06, p<.001, η_p^2=.24), and it was not influenced by the manufacturing timing ($F(1,404)$=.32, p=.570), qualified by no interaction ($F(1,404)$=3.04, p=.082). We also found a significant interaction between sequence and sustainability motivation (β=.18, p=.015). Those who had higher motivation (+1SD) perceived the products to have more positive environmental impact than those with lower motivation (-1SD) in the harm-first-benefit-later condition (β=.21, p<.001).

Lastly, Study 4 (N=404) provides additional process evidence using a validated measure of perceived personal impact to the environment. We also demonstrate that our effect is not influenced by perceived causality in generating environmental harm and benefit using a 2(sequence: harm-first-benefit-later vs. benefit-first-harm-later) x 2(causality: low vs. high) between-subjects design. Participants in the low causality condition read a car description as in Studies 2-3; those in the high causality condition read the car is made-to-order and generates environmental harm and benefit only upon personally placing an order. We found that participants in the harm-first-benefit-later (vs. benefit-first-harm-later) condition were more interested in purchasing the car ($M_{harm-benefit}$=4.47 vs. $M_{benefit-harm}$=3.91; $F(1,400)$=12.05, p<.001, η_p^2=.03). Causality did not influence the purchase intention ($F(1,400)$=2.65, p=.104), supported by non-significant interaction ($F(1,400)$=.25, p=.617). Participants in the harm-first-benefit-later (vs. benefit-first-harm-later) condition perceived they have greater environmental impact ($M_{harm-benefit}$=4.13 vs. $M_{benefit-harm}$=3.00; $F(1,400)$=50.46, p<.001, η_p^2=.11), which mediated the effect on purchase intention ($\beta_{indirect}$=.64, 95% CI=[.45,.83]; PROCESS model 4; Hayes and Preacher 2014).

Overall, we find that products that generate environmental benefit following (vs. followed by) harm are perceived to have more positive impacts for the environment and are more preferred. This research contributes to literature on sustainable consumption (White, Habib, and Hardisty 2019) by building forwards from literature on mental accounting (Prelec and Loewenstein 1998), contrast effects (Chernev 2010), and perceived impact (Spreitzer 1995). It offers insights to policymakers and marketers, as not all sustainable products are equally preferred independent of the actual environmental impact, especially among those who care more about sustainability.

Do Challenge Based Advertising Appeals Motivate Consumers to Try Virtuous "Replacement" Products?

EXTENDED ABSTRACT

Consumers increasingly have access to a variety of virtuous "replacement" product options for existing products, such as plant-based meat and dairy (Jiang 2019; Plant Based Foods Association 2020) and lab-made diamonds. We define a virtuous replacement product as a product that is intended to be similar in quality to an existing product, but produced in a more ethical manner (e.g., more sustainability in the case of plant-based meat and without human rights violations in the case of lab-made diamonds; Pimentel and Pimental 2003; Gem Society 2021).

Previous research has demonstrated that it is difficult to encourage consumers to switch to virtuous replacement products, even when informational campaigns highlight the positive impact these choices have on the moral or ethical issue in question (Tobler, Visschers and Siegrist 2011). However, as advances in technology and production of virtuous replacement products have improved, marketers appear to be focusing on the similarity between these more virtuous products and those they are intended to replace. For example, the restaurant Freshii advertises their plant-based chili with the message "We challenge you to taste the difference" (Freshii 2020).

Despite the use of such challenge appeals, no academic research to our knowledge has investigated the efficacy of challenge-based appeals for encouraging trial of virtuous replacement products. We propose that challenging the consumer to discern the difference between the original product and its virtuous replacement will decrease the risk associated with trying the product, promoting trial. Consistent with research documenting consumer reluctance to consider affectively unpleasant ethical issues like environmental harm and human rights violations (Ehrich and Irwin 2005; Reczek et al. 2018; Zane, Irwin, and Reczek 2015), we further predict that challenge appeals can actually be more effective than appeals focused on ethicality. As such, this research contributes to the growing literature documenting effective strategies for increasing consumer interest in virtuous products (e.g., Reczek, White, and Trudel 2018; White, Habib, and Hardisty 2019).

In Study 1 (n = 381; M_{age} = 40.06, SD = 11.82, 49.3% female, all of whom had previously reported never eating plant-based meat) imagined eating in a restaurant and viewing an advertisement for a meatless burger. In the control condition, the burger was advertised as plant-based meat that "tastes just like beef." In the challenge condition, the advertisement further read, "We Challenge you to Taste the Difference." Participants reported their relative preference on a scale ranging from 1 (Definitely Beef Burger) to 7 (Definitely Plant-Based Burger). The challenge appeal significantly increased preference for the plant-based burger ($M_{challenge}$ = 3.38, SD = 1.99, $M_{control}$ = 2.92, SD = 1.93, $t(380)$ = 2.31, p = .02), consistent with our predictions.

In Study 2 (n = 400; M_{age} = 37.04, SD = 10.50, 53.5% female, all of whom had previously reported that they would be purchasing diamond jewelry for Valentine's Day) imagined entering a jeweler and viewing an advertisement for lab created diamonds. In the control condition, the diamonds were advertised as having the same physical and optical properties as traditionally mined diamonds but with no

mining required. In the challenge condition, the advertisement further read, "We Challenge You! Bet You Can't Tell the Difference!" As in study 1, the challenge appeal increased trial, operationalized as interest in asking the jeweler to show them a lab-created diamond jewelry piece from the display case ($M_{challenge}$ = 5.42, SD = 1.63, $M_{control}$ = 5.03, SD = 1.82, $t(398)$ = 2.31, p = .02). We also assessed perceptions of risk associated with lab created diamonds. The challenge condition significantly reduced perceived risk ($M_{challenge}$ = 3.58, SD = 1.52, $M_{control}$ = 3.90, SD = 1.69, $t(398)$ = 1.96, p = .05), which mediated the positive effect of the challenge appeal on interest (95% CI = [.00, .25]).

Study 3 crossed an ethical appeal with a challenge appeal in a 2 x 2 design. Participants (n = 496; M_{age} = 38.54, SD = 16.89; 52.1% female, all of whom had previously indicated they would be purchasing diamond jewelry in the next year) saw the same advertisements as study 2 in the no ethical appeal conditions or an advertisement that stated "Make the Ethical Choice" or "We Challenge you to Make the Ethical Choice" in the ethical appeals conditions. As before, the challenge appeal increased consumer intention to view the lab created diamonds ($M_{challenge}$ = 5.43, SD = 1.70, $M_{control}$ = 4.98, SD = 1.83, $F(1, 495)$ = 8.17, p = .004). There was no main effect for ethical appeal, $F(1, 495)$ =.13, p = .72, but there was a significant interaction, $F(1, 495)$ = 4.43, p = .036, such that a challenge appeal increased trial when no ethical appeal was present, $t(245)$ = 3.69, p < .001, but did not increase trial when an ethical appeal was present, $t(247)$ = .51, p = .61 (see Figure 3).

In sum, this research suggests that a challenge appeal can be effective to increase consumer motivation to try virtuous replacement products, even more so than an ethical appeal. Future studies are planned to explore the impact of challenge-based appeals beyond initial trial.

Ethicality-As-Source-Of-Specialness: How and When Ethical Ventures Succeed in Crowdfunding

EXTENDED ABSTRACT

Crowdfunding offers individuals the opportunity to make small financial contributions to entrepreneurial ventures in exchange for venture-related rewards (Kuppuswamy and Bayus 2018). These often equate to the product of the venture (Thürridl and Kamleitner 2016). Ventures that seek support for products with ethical benefits, i.e., products that positively contribute to social and/or environmental issues, are particularly successful (Simpson et al. 2019). Since crowdfunding decisions are at least partly driven by an opportunity to make an impact (Kuppuswamy and Bayus 2017), the relative advantage of ethical ventures has been suggested to derive from the ideological congruence between their own prosocial goals and the prosocial essence inherent in the reward-based crowdfunding model (André et al. 2017; Simpson et al. 2020).

We argue that beyond creating impact, crowdfunding ethical ventures offers individuals an opportunity for differentiation (Tian, Bearden, and Hunter 2001). Specifically, we propose that funding ethical ventures imbues individuals with specialness, which stimulates funding behavior. In fact, despite possessing a prosocial core, most crowdfunding platforms are primarily positioned around specialness. Indiegogo, for example, describes itself as a platform where "early adopters and innovation seekers find lively, imaginative tech before it hits the mainstream". What thus seems to attract individuals to crowdfunding is the opportunity to obtain special products (Taeuscher, Bouncken, and Pesch 2020; Zvilichovsky, Danziger, and Steinhart 2018). Ethicality can act as a differentiating feature (Defazio, Franzoni, and Rossi-Lamastra 2020). We thus expect that ethi-

cal ventures will be backed because they can satiate funders' need for specialness. This goes beyond current literature suggesting the presence of merely pro-social motivations. Consistent with our ethicality-as-source-of-specialness account, we also propose two practically relevant boundary conditions. We expect our effect to be attenuated when people do not get the specialness-affording ethical product but an alternative reward and when the product is special already.

Study 1 provides initial evidence for our ethicality-as-source-of-specialness account. 100 US mTurkers (39% female, M_{age} = 33 years) evaluated a crowdfunding campaign for a washing bag. In the control condition, participants saw a picture of the bag and read about its functional benefits ("prevents fabric from fading"). In the ethical condition, they saw the same bag but read about its environmental friendliness ("prevents emission of microfibers to keep our waters clean"). We assessed felt specialness (three items from Kamleitner, Thürridl, and Martin 2019, 7-point, α = .91), perceived prosocial impact ("This project would make a positive difference in the world", 7-point), and intended contribution size as a dependent variable (0 = smallest possible, 100 = largest possible). We find main effects on specialness (p < .001), impact (p < .001) and contribution size (p < .01). Mediation analysis shows that specialness [4.73, 22.89] but not impact [-2.01, 12.27] underlies the effect.

Study 2 extends this finding to products with different ethical benefits. 277 European undergraduates (47% female, M_{age} = 21 years) evaluated a campaign for a hammock, which provided a functional benefit ("maximum strength", control group) plus either an environmental ("made from recycled plastic", environmental group) or a social benefit ("made by local artisans in Thailand", social group). We measured felt specialness (α = .84) and prosocial impact as before and assessed funding intentions ("Would you support this project?", 7-point) and monetary contributions (slider scale: €0 - €100). Both the environmental and prosocial venture led to an increase in specialness (environmental: p < .05, social: p < .01), impact (environmental: p < .05, social: p < .001), funding intentions (environmental: p < .001, social: p < .01) and monetary contributions (environmental: p < .01, social: p < .05). Since the environmental and social condition differed on neither variable (all p's > .25), we combined them for mediation. Specialness mediated the effect of venture ethicality on funding intentions [.04, .38] and monetary contributions [.36, 3.95]. Impact also mediated the effect on funding intentions [.08, .41] but not on monetary contributions [-1.35, 1.73]. Regressing funding intentions on both predictors shows a stronger effect of specialness (β = .34, p < 001) than impact (β = .28, p < 001).

In Study 3, we tested the prediction that ethicality loses its advantage when consumers can only back the project but not obtain the special product as a reward. 121 participants (66% female, M_{age} = 27 years) participated in a 2 (venture: ethical vs. non-ethical) x 2 (reward: product vs. goodie bag) between-subjects experiment. Participants saw a travel shoe that was either made of recycled ocean plastic or not and were subsequently informed that they would either receive the shoe or a goodie bag in exchange for a €80 contribution. We then assessed their funding intentions (7-point). When the focal product was offered, the ethical venture was more likely to receive funding (p < .01). When the goodie bag was offered, however, the effect of venture ethicality was attenuated (p = .61, Table 1).

In Study 4, we tested mediation via moderation. 318 nationally representative panelists (51% female, M_{age} = 42 years) participated in a 2 (venture: ethical vs. non-ethical) x 2 (product: special vs. ordinary) between-subjects experiment. We asked them to evaluate a crowdfunding campaign for sunglasses that either provided an ethical ("sponsoring an eye operation per contribution") or functional benefit ("providing clearer views"). In addition, these sunglasses

were either described as special ("innovative sunglasses, patented ultra-flex frame") or ordinary ("classic sunglasses, flexible plastic frame"). We assessed how much participants were willing to contribute (open-ended). The ethical venture yielded a higher funding amount than the non-ethical venture for the ordinary product, ($p <$ .05) but not for the distinctive product ($p = .70$, Table 1).

Our research provides a novel explanation for why many ethical ventures succeed in crowdfunding: specialness. We thereby add to the growing body of research that implicates self-interested rather than prosocial motives behind ethical consumption (Trudel et al. 2019). Insights also contribute to the particular debate about whether crowdfunding is motivated more by altruism or self-interest (André et al. 2017). Finally, we provide clear practical implications for ethical entrepreneurs seeking to realize their ventures through crowdfunding.

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How Social Hierarchy Influences Consumption

Chair and Moderator: Bryce Pyrah, University of Iowa, USA

Paper #1: The Charisma Bias: How Vigilance Can Help and Hurt Disadvantaged Consumers

Bryce Pyrah, Tippie College of Business, University of Iowa, USA

Chelsea Galoni, Tippie College of Business, University of Iowa, USA

Paper #2: Two Pillars of Disadvantage: When and Why Scarcity is Different from Powerlessness

Christopher Cannon, Shidler College of Business, University of Hawaii, USA

Kelly Goldsmith, Owen Graduate School of Management, Vanderbilt University, USA

Caroline Roux, John Molson School of Business, Concordia University, Canada

Paper #3: Dominance- (vs. Prestige-) Based Hierarchies: How Social Hierarchy Base Influences Consumers' Desire for Higher Positional Goods

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Derek D. Rucker, Kellogg School of Management, Northwestern University, USA

SESSION OVERVIEW

Worsening income inequality, protests against racism, and the COVID-19 pandemic have increased attention to the topic of social hierarchy across societies. Researchers have further emphasized the influence that social hierarchies and social rank have on consumption (Dubois and Ordabayeva 2015; Rucker 2020). Adding to this burgeoning body of work, this special session provides new insights and novel findings from three papers on the topic of social hierarchy and consumption. Importantly, this session answers the call of the conference theme, *What the World Needs Now*, by providing insights into an important matter at the forefront of the world today: social hierarchy.

In the first paper, Pyrah and Galoni investigate how individuals on the low ranks of social hierarchy positions express vigilance in their decision-making. They find that low-ranking consumers exhibit a *charisma bias*, in which they overweight social cues relative to other cues in the marketplace. This leads them to be more vigilant at protecting themselves when confronted with social threats, while also increasing their susceptibility to marketers' influences in the face of more positive social cues.

Keeping the focus on low-ranking individuals, Cannon, Goldsmith, and Roux introduce a conceptual work. They propose a new framework for how scarcity and powerlessness – two types of disadvantage that individuals of lower social rank experience – lead to both similar (through one's relative state of disadvantage), and divergent (through one's relative dependence on oneself versus others), consumer behaviors.

While the first two papers examine how an individual's own place in a social hierarchy influences consumption behavior, the third paper rounds out the session by demonstrating how different bases of social hierarchy, dominance versus prestige, impact preferences for positional goods. Specifically, authors Desmichel and Rucker find that dominance (versus prestige) bases of hierarchy increase consumer preferences for higher-positional goods because consumers feel more highly scrutinized in dominance- (vs. prestige-) based hierarchies.

This set of papers opens up new avenues of research in the area of social hierarchy and its consequences for consumers. These papers offer insights into distinct aspects of social hierarchy, including consequences of an individual's own low social rank, the distinction between two types of disadvantage, and divergent effects across different types of hierarchy. As a result, this session is likely to have a broad appeal to the ACR audience, and attract researchers not only curious about social hierarchy broadly, but also interested in specific topics, such as power, trust, consumer disadvantage, and status-signaling. Importantly, we feel that this session is central to the conference theme of *What the World Needs Now*, with social hierarchy at the forefront of many issues across the world. All of the papers are at an advanced stage of completion. Overall, the two empirical papers comprise 10 studies, employing online and lab experiments, with the conceptual paper enhancing the theoretical rigor of the session. We anticipate that this session will provide much-needed insights on the changing world and spark important research questions to be investigated.

The Charisma Bias: How Vigilance Can Help and Hurt Disadvantaged Consumers

EXTENDED ABSTRACT

Disadvantaged and vulnerable populations are among those most targeted and susceptible to manipulative marketing practices. Elderly consumers are asymmetrically victimized and deceived (Benet, Pitts, and LaTour 1993), children are often taken advantage of (Blatt, Spencer, and Ward 1972), and impoverished consumers are disadvantaged in the marketplace, where they are often subject to higher fees, prices, and credit terms (Hill 2002, 2008). Despite evidence that these consumers are often taken advantage of, other work suggests that lower-power consumers should be the most vigilant toward protecting themselves from harmful outcomes. For instance, individuals of lower socioeconomic status and social rank are more vigilant toward threats in the marketplace (Chen, Lee-Chai, and Bargh 2001; Kraus et al. 2011; Kraus et al. 2012). Thus, there seems to be a paradox; on one end, these disadvantaged consumer groups seem to be *more* susceptible to manipulative marketing practices. However, other work also suggests that they should be more vigilant against threats, indicating that they should be *less* susceptible to these practices than their high-powered counterparts.

To resolve this paradox, we propose that low-power consumers exhibit what we call a *charisma bias*. Building on the notion that low-power consumers are communally oriented (Rucker, Galinsky, and Dubois 2012), we propose that low-power consumers overweight social cues when forming opinions about sellers and making purchasing decisions. This overweighting causes them to be less trusting of agents that signal potentially threatening social cues, but also more trusting of agents that signal more positive social cues. Thus, this charisma bias explains why low-power individuals can be both more vigilant toward threats, and also more susceptible to marketers' influences.

We test our Hypothesis across 4 studies. The purpose of studies 1 and 2 was to show that low-power consumers can more successfully identify, and therefore protect themselves from, social cues that signal untrustworthiness. We measured participants' own sense of power in study 1 (Anderson, John, and Keltner 2012) and manipulated power in study 2 (using a recall writing task; Galin-

sky, Gruenfeld, and Magee 2003). To manipulate a potential threat to trustworthiness, we used salesperson compensation method because commissioned (versus salaried) salespeople can be perceived as having ulterior motives, reducing perceptions of trustworthiness (DeCarlo 2005).

In both studies, participants (Ns = 451, 451) were randomly assigned to read a scenario about an interaction with a financial advisor who was either salaried or commissioned. They reported their willingness to invest with the advisor and how much they trusted the advisor's opinion. In both studies, we found the predicted power x seller type interaction on investment willingness (S1 p = .034; S2 p = .057). In both studies, this interaction was such that low-power participants were less likely to invest when the advisor was commissioned (vs. salaried; ps < .001), but there were no significant differences for high-power participants (ps > .11). Finally, a significant index of moderated mediation (95% CI [-.36, -.02]) confirmed that perceptions of trustworthiness mediated this relationship, indicating that low-power (but not high-power) participants successfully identified the untrustworthiness cue, attributing less trustworthiness and lower investment intentions to the commissioned advisor.

The purpose of study 3 was to show that low-power consumers also overweight *positive* social characteristics, potentially leading them to be more susceptible to marketers' influences. We use physical attractiveness, as it has long been associated with positive attributions (Dion, Berscheid, and Walster 1972). We again measured participants' own sense of power. Participants (N = 278) imagined they were shopping for a car and saw a picture of either an unattractive or attractive salesperson (faces previously validated from the Chicago Face Database) (Ma, Correll, and Wittenbrink 2015). After their interaction with the salesperson, participants reported purchase intentions and perceptions of trustworthiness. A significant power x physical attractiveness interaction emerged for both purchase intentions (β = -.127, SE = .060, p = .036) and trustworthiness (β = -.145, SE = .063, p = .022). Low-power participants were more likely to purchase from (and more trusting of) an attractive salesperson. There were no differences for high-power participants. Again, trust mediated the relationship between salesperson attractiveness and purchase intention for low-power, but not high-power, participants (moderated mediation: 95% CI [-.20, -.01]).

The purpose of study 4 was to introduce a non-social cue (product quality) to show that social cues dominate other cues for low-power consumers' decision making. Participants (N = 307) were randomly assigned to a 2 (power: low vs. high) x 2 (physical attractiveness: low vs. high) between-subjects design. After the power manipulation, participants viewed two car options where one car was objectively superior. Participants then viewed the salesperson, who then recommended the *inferior* option. Participants reported their car preference and their perceptions of trustworthiness. Significant power x physical attractiveness interactions were present for both car preference ($F(1, 303)$ = 4.42, p = .036) and perceptions of trustworthiness ($F(1, 302)$ = 9.51, p = .002). Low-power participants were more likely to prefer the inferior car from the attractive salesperson (M = 4.56) than from an unattractive salesperson (M = 4.03; $F(1, 303)$ = 4.12, p = .043). There was no difference for high-power participants ($M_{attractive}$ = 4.11, $M_{unattractive}$ = 4.36; $F(1, 303)$ = .91, p = .341). The same, predicted pattern emerged for trustworthiness. The index of moderated mediation was significant (95% CI [-.425, -.082]). Interestingly, a manipulation check indicated that all participants viewed the objectively superior car as better than the inferior car ($M_{superior}$ = 5.45, $M_{inferior}$ = 4.85, $t(304)$ = 8.33, p < .001; interaction *ns*.), suggesting that low-power participants knowingly

chose an inferior option when they were shopping from an attractive salesperson.

We show that low-power consumers overweight social cues relative to other cues, leading them to be both more vigilant toward potential threats when negative social cues are present (studies 1 and 2), but also more susceptible to marketers' influences when positive social cues are present (studies 3 and 4). This helps resolve the paradox around the vigilance of low-power consumers and shows how this vigilance can both help and hurt low-power consumers' decision making.

Two Pillars of Disadvantage: When and Why Scarcity is Different from Powerlessness
CExtended Abstract

Two prevalent psychological experiences associated with disadvantage in social hierarchies are relative deprivation—i.e., scarcity—and a sense of powerlessness (Andreasen 1975). Scarcity involves a discrepancy between current resource levels and a higher, more desirable reference point (Cannon, Goldsmith, and Roux 2019). A lack of power—or powerlessness—involves a deficit in valued resources in an asymmetric social relationship (Rucker, Galinsky, and Dubois 2012). In the consumer behavior literature, these two constructs are among the most studied topics within the last decade. A literature search reveals that there are 42 academic articles published on either scarcity or power in leading consumer behavior journals (*Journal of Consumer Research*, *Journal of Marketing Research*, and *Journal of Consumer Psychology*) within the past 10 years.

Despite independent interest in scarcity and power, no research to date has investigated the relationship between these two constructs. Perhaps, both scarcity and a lack of power (or powerlessness) are two names for the same psychological experience. First, as evident by how scarcity and powerlessness are defined, both psychological states involve a deficit in valued resources. Many states of disadvantage such as these are viewed as pragmatically interchangeable in their psychological underpinnings (Rucker, Galinsky, and Magee 2018). Second, scarcity and powerlessness can lead to similar behavioral outcomes. For example, both scarcity and powerlessness are associated with a lack of control (Chou, Parmar, and Galinsky 2016); Fast and Chen 2009; Mittal and Griskevicius 2014; Smith and Hofmann 2016) and an increased desire to engage in compensatory consumption by purchasing expensive, luxury goods (Dubois, Rucker, and Galinsky 2012; Hill et al. 2012; Rucker and Galinsky 2008, 2009; Walasek, Bhatia, and Brown 2018; Walasek and Brown 2015).However, other research suggests that scarcity and powerlessness lead to divergent consumer behaviors. For example, scarcity often leads to agentic behaviors such as competitively maximizing one's own financial standing (Roux, Goldsmith, and Bonezzi 2015) and acting aggressively toward inanimate objects, such as a vending machine (Kristofferson et al. 2017). In contrast, powerlessness often leads to communal behaviors such as spending money on others (Rucker, Dubois, and Galinsky 2011) and acting selflessly toward others (Dubois, Rucker, and Galinsky 2015). Therefore, although scarcity and powerlessness can produce similar outcomes, they are not simply interchangeable psychological experiences.

This conceptual review resolves this tension that scarcity and powerlessness produce both similar and different consumer behaviors. To do so, we propose a 2 × 2 theoretical framework to formally situate scarcity and powerlessness in the same model. One dimension captures their similarities through the focus on one's relative state of disadvantage (vs. advantage). A second dimension captures their differences through one's relative dependence on oneself (vs. others). In support of this, Rucker and colleagues observed that par-

ticipants in a low-power state directly reported a greater dependence on others (i.e., dependence on others to get things done, value others' opinions when making a decision) compared with participants who were induced to a high-power state (Rucker et al. 2011). In contrast, scarcity leads consumers to view others not as instrumental to goal pursuit, but instead as competitive threats in their social environment (Kristofferson et al. 2017; Roux et al. 2015).

As a result of this framework, we are able to specify unique consumption consequences for consumers in a state of scarcity versus powerlessness. Because scarcity involves the dual experience of disadvantage and self-dependence, scarcity leads consumers to adopt *self-adjustive* consumer behaviors. That is, consumers experiencing scarcity compensate for their disadvantage by improving themselves on a personally valuable dimension, such as materialism (Chaplin, Hill, and John 2014; Tully, Hershfield, and Meyvis 2015) or caloric intake (Briers and Laporte 2013; Laran and Salerno 2013). In contrast, because powerlessness involves the dual experience of disadvantage and other-dependence, powerlessness leads consumers to adopt *social-adjustive* consumer behaviors. That is, low-power consumers compensate for their disadvantage by strategically improving themselves in the eyes of others, such as showing off via conspicuous consumption (Rucker and Galinsky 2008) and cheating to help others (Dubois et al. 2015).

As a secondary benefit of this framework, we are also able to incorporate power and status as complementary states of advantage. Power is a type of advantage in which one has control over valued resources in a social relationship (Galinsky, Gruenfeld, and Magee 2003; Rucker et al. 2012). In contrast, status is a type of advantage in which one is respected or admired for one's use of skills and expertise (Henrich and Gil-White 2001; Magee and Galinsky 2008). Because power and status are both types of advantage, they lead to the authentic expression of intrinsically-held values (Cheng, Tracy, and Henrich 2010; Kifer et al. 2013; Kraus et al. 2012). However, the active value systems differ between the two types of advantage. Because power is associated with self-dependence and an agentic motivation (Rucker et al. 2012, 2018), power leads consumers to adopt *self-expressive* consumer behaviors, in which one purchases items that align with personally held values, such as high-quality, performance products (Rucker and Galinsky 2009). In contrast, because status is associated with other-dependence and a communal motivation (Blader and Chen 2012; Blader, Shirako, and Chen 2016), status leads consumers to adopt *social-expressive* consumer behaviors, in which one purchases items that align with socially held values, such as eco-friendly products (Griskevicius, Tybur, and Van den Bergh 2010).

Dominant theories on social hierarchy have proposed that advantage leads to agentic responses, whereas disadvantage leads to communal responses (Kraus et al. 2012; Piff et al. 2010; Rucker et al. 2018). However, our conceptual review reveals that two dimensions, rather than just one, is necessary to fully understand how social hierarchy influences consumer behavior. Moreover, our framework explains when advantage and disadvantage *each* produce agentic and communal responses. Practically, this work suggests that not all disadvantaged consumers are interchangeable. Marketers should consider tailoring advertising messages depending on whether the consumer feels scarcity or powerlessness. For example, low-power individuals should be more persuaded by communal messages (Dubois, Rucker, and Galinsky 2016), whereas individuals experiencing scarcity should be more persuaded by agentic messages (Salerno and Escoe 2020).

Dominance- (vs. Prestige-) Based Hierarchies: How Social Hierarchy Base Influences Consumers' Desire for Higher Positional Goods

EXTENDED ABSTRACT

Prior research has established that individuals navigate social hierarchies using two main strategies, namely dominance or prestige (Maner and Case 2016). In dominance-based hierarchies, people in positions of disadvantage navigate and ascend the hierarchy through intimidation and force. In contrast, in prestige-based hierarchies, people navigate and ascend the hierarchy through the support of their peers and skills (Cheng et al. 2013; Henrich and Gil-White 2001). Dominance-based hierarchies are characterized by their steepness (i.e., high inequality) and political manipulations, creating a climate of insecurity and oppression, whereas prestige-based hierarchies are flatter, fostering social harmony and compliance with the hierarchy (Maner and Case 2016).

Both dominance and prestige have been shown to be adaptative and successful bases of social hierarchy, but how they influence consumers' behavior is completely unexplored. For example, what are the consequences for consumption when a consumers' workplace is based more on dominance versus prestige?

The present work provides the first known discussion and exploration of how dominance versus prestige hierarchies fundamentally shape consumption. We examine the relationship between the nature of one's social hierarchy—dominance versus prestige—and consumers' preference for higher positional goods. That is, goods can be higher-positional when the brands or products are viewed as higher in the category (e.g., Armani) than lower in the category (e.g., Old Navy; Walasek et al. 2018). We propose that individuals within dominance-based hierarchies exhibit a stronger desire for higher positional goods (e.g., luxury or premium goods) than individuals within prestige-based hierarchies.

Although some theories suggest that individuals in prestige hierarchies might be more sensitive to status and respect (Plourde 2008), we suggest people might gravitate more towards higher positional goods in dominance hierarchies because consumers may feel more highly scrutinized in dominance- (vs. prestige-) based hierarchies. As such, consumers display status goods as they would show other physical attributes (e.g., height, strength; Stulp et al. 2012) as a means to defend themselves in contexts where their weaknesses could be used against them (Ma et al. 2019). As such, the effect should also be more prone to occur among low-confidence consumers versus high-confidence consumers; the latter tending to follow their personal intuitions even when faced with social scrutiny.

Overall, the present work sheds new light on the protective value of higher positional goods (and for example luxury goods) and show these items are considered as safer options in contexts of high scrutiny.

Methodology and Results. We tested our Hypothesis across six studies. In Study 1, we surveyed workers from two different subject pools (MTurk, N = 196, and a Downtown lab pool of non-student respondents in a major US city, N = 118) to learn what they wear at work based on whether they view their work environment as prestige- versus dominance-oriented. We found that participants reported wearing more positional goods when working in more dominant companies (*ps* < .05); in contrast, consumers' consumption of positional goods was not influenced by the prestige-orientation of their company (*ps* > .22).

In Study 2 (N = 200 students), participants watched the video of a fellow student who prepared himself for a job interview at Google. This student read real quotes extracted from Glassdoor.com

either describing Google in a manner consistent with a dominance- or prestige-based company. Participants then voted on the attire that he should wear for the (supposedly real) interview. Participants were more likely to recommend higher-positional attire in the dominance (M = 3.65) than in the prestige condition (M = 2.29, p < .001). In a Supplemental Study, we replicated these results by asking participants to choose between a 7-Eleven (i.e., lower-position) or Starbucks (i.e., higher-position) coffee for themselves to bring to a described work office.

In Studies 3 and 4, we tested the underlying effect of social scrutiny, by measuring (Study 3, N = 286) and manipulating (Study 4, N = 335) the mediator. We manipulated the hierarchy types in a company description, and measured participants' desire to wear a Rolex watch in the given company (7-point scale). In Study 3, the watch was deemed more attractive in the dominance (M = 5.00) than in the prestige condition (M = 4.58, p = .02). The effect was mediated by a greater feeling of social scrutiny (e.g., "I would be scrutinized by others"; Indirect effect = .16, se = .07, 95%CI = [.039, .313], direct effect = .27, se = .18, 95%CI = [-.090, .622]). In Study 4, this effect was eliminated when we reduced social scrutiny by informing participants would not be judged for what they wore (p = .38 vs. p < .001 in the baseline condition).

In Study 5 we used an incentive-compatible design (N = 396) and tested the moderating role of consumers' self-confidence. Specifically, we assigned participants to read the guidelines of either a prestige or dominance-based instructor. Participants then selected the venue in which a business event should be organized. Participants had to select between a standard pub (lower-positional good, "0") and a Hilton hotel (higher-positional good, "1"). To incentivize their decision, participants learned that the instructor would evaluate their answers and designate a winner ($30 bonus). Participants' measured self-confidence moderated the effect of hierarchy types on product choice (p = .01). Participants with relatively low self-confidence were more likely to choose the Hilton hotel (vs. pub) in the dominance condition than in the prestige condition; however, this effect was not found for participants relatively high in self-confidence.

Conclusion. This work is the first to explore how dominance-versus prestige-based hierarchies affect consumption. Simply being immersed within a hierarchy does not produce unilateral effects on consumption; rather, the base of the hierarchy impacts the value and demand for positional goods. With this research, we hope to contribute to understanding how different forms of social hierarchy influence consumers' behavior in unique ways.

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Learning from Highly Unstructured Data: Insight from Videos, Images and Audio

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Paper #1: Does it help to be creative on TikTok?

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Paper #2: Video Influencers: Unboxing the Mystique

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Paper #3: Brand Faces: Mining Brand Preferences from Consumer Faces

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Paper #4: Measuring Objective Vocal Similarity in Human-AI Agent Interactions

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SESSION OVERVIEW

Consumer researchers and marketing managers alike are increasingly confronted with highly unstructured data. Text, images, audio, and video provide valuable sources of information, but this content is often non-numeric, multi-faceted, and difficult to parse (Balducci & Marinova, 2018). How can we better use these exciting resources to test theory and uncover insight?

While some prior work has begun to explore unstructured data, the applicability of these methods in consumer research is still quite novel. How can we use video content to understand what becomes popular and why? Might profile pictures provide insight into personality and thus the brands people prefer? And how do vocal features impact perceptions of warmth and competence? This session addresses these and other questions as it deepens our understanding of these new sources of data, and how researcher can parse them to better understand consumer behavior.

First, Bravin, Clegg, Hofstetter, Pouly, and Berger employ a 3D convolutional neural network trained on a large data set of TikTok videos to investigate the value of originality in social media content. Analysis of hundreds of thousands of posts, combined with controlled experiments reveals that highly original content can backfire, because it evokes cognitive dissonance.

Second, Rajaram and Manchanda use deep learning to analyze unstructured data across multiple modalities (text, audio and images). They provide a novel *interpretable* methodological approach that allows testing causality and theory in various contexts. They demonstrate their approach through examining how the composition of influencers' video content can influence user reactions.

Third, Hartmann, Schönmüller, Zwebner, Goldenberg, and Netzer apply deep learning to automated face analysis, testing rela-tionships between personality factors extracted from profile pictures and consumer brand preferences. Their findings validate a conceptual link between consumer facial features and brand personality dimensions and imply how image analysis can be used to predict consumer behavior.

Fourth, Na Kyong, Lowe, and Krishna measure the timbre similarity between users' and AI voices. Three studies analyze the influence of vocal similarity on perceived warmth and competence of AI agents, and choice. They demonstrate how automated voice analyses can shed light on the impact of subtle perceptual cues.

Given the dramatic growth of unstructured data, the world needs a better understanding of how to use it to build consumer theory. The papers in this special session provide methodological tools that offer innovative and theory-driven solutions for important issues in consumer research. These tools are widely applicable to problems related to high-scale and unstructured data sources, as is the case in many of today's contexts (e.g., social media, online branding, and online behavior). Furthermore, this session motivates researchers to embrace methodological triangulation to solve current consumer research issues.

Does it Help to Be Creative on TikTok?

EXTENDED ABSTRACT

People often suggest that originality should boost success on social media. Particularly in online contexts, people like to talk about and share novel information (Berger & Iyengar, 2013) as it is considered more surprising, entertaining, and useful resulting in greater proliferation (Berger, 2014; Berger & Milkman, 2012). Since creative and original things appeal to our natural curiosity (Silvia, 2008), it is widely assumed that originality is valuable in social and business contexts (Hofstetter, Dahl, Aryobsei, & Herrmann, 2020).

But is that actually true? Psychological theories suggest that less originality may actually increase liking of stimuli in our environment. For instance, seeing the same stimulus several times positively affects our attitudes toward this stimulus—a phenomenon called "mere exposure effect" (Zajonc, 1960). Conversely, there exists a systematic bias against high novelty, as it harms our expectations and questions our existing cognitive patterns (Eidelman, Crandall, & Pattershall, 2009; Toubia & Netzer, 2017). Indeed, on social media platforms, content that is of surprisingly low originality oftentimes becomes viral: On TikTok, trending videos follow the same dancing and lip sync screenplay (e.g., one million for the song "savage love", Aniftos 2020).

Accordingly, we suggest that high originality is indeed not advantageous for social media content. Based on cognitive dissonance theory, we argue that highly original content can trigger uncertainty and psychological discomfort (i.e., cognitive dissonance) among viewers, which is an unpleasant state (Whitson & Galinsky 2008). Three studies provide support for this expectation.

The first study provides empirical evidence for a negative effect of originality on content liking. We collected and analyzed a large dataset of 290,503 videos from the social media platform TikTok. The dataset contains descriptive video information (e.g., hashtags, music played, etc.) and content-related statistics such as the number of views, likes, shares, and comments. Since no labels indicate video

dissimilarities, we implement a self-supervised contrastive learning model inspired by Qian et al. (2020). The model is a 3D convolutional neural network trained by simultaneously maximizing the similarity between transformed views of the same video and minimizing the similarity between transformed views of different videos. It allows to extract semantic video embeddings that were used for further analysis. To estimate the degree of originality of a video, we employ the local outlier factor (LOF) algorithm (Breunig, Kriegel, Ng, & Sander, 2000), which computes the local density deviation of a given data point with respect to its k neighbors. Less original videos are more likely to end up in a cluster with high density and thus have a lower LOF. We then use this originality measure in four statistical models that vary in terms of the included control variables to explain video liking. In our first model, we find a significant negative effect of originality on the number of likes ($\beta_{\text{Originality}}$=-1.07, p<.001). Hence, a 1% increase in originality leads to about a 1% reduction in likes. We control for user and music fixed effects in models 2 and 3, respectively, and find that the coefficient decreases consistently with this assumption. Model 4 includes four additional controls (number of days the video was online, popularity, and originality × popularity). We find that a video's lifespan increases its likes ($\beta_{\text{Nr of days online}}$=.19, p<.001) and that the later a user adopted a song in the sequence of adopters, the more likes the video receives (interpreted as higher popularity, $\beta_{\text{Popularity (Nth song user)}}$=.33, p<.001). We find a significant interaction between popularity and originality ($\beta_{\text{Popularity (Nth user of song)}}$=.04, p<.001), showing that the harmful influence of originality is dampened for later adopters.

These models suggest that more original videos receive fewer likes. The fact that the effect is reduced for later adopters supports a cognitive dissonance explanation. As a screenplay becomes more popular, greater originality is required to stand out and trigger dissonance.

Studies two and three test causality through manipulating content originality and measuring liking. We keep the focal content the same but manipulate the context. Everyone saw the same target video (a particular dance), and rated how much they liked it, but we varied the similarity of some videos they watched beforehand. In the low originality condition, participants watched three videos of the same dance first, while in the high originality condition they saw three videos from the same users that involved a completely different dance. All videos were originally retrieved from TikTok. Participants indicated their likelihood to "like" (i.e., how likely they would click on the like button) the video on a scale from 1 (very unlikely) to 7 (very likely).

In study 2 (N=192 participants recruited via Prolific), we find support for the negative main effect of content originality. One-way ANOVA shows that participants are less likely to "like" the target video if it is more original and less similar to previously seen content ($M_{\text{Low originality}}$=4.17, SD=2.05, $M_{\text{High originality}}$=3.55, SD= .18, $F_{(1, 194)}$=4.04, p=.046, d=-.29).

In study 3 (N=134, MTurk), we used different videos, and included a scale for cognitive dissonance (Jiang, Hoegg, & Dahl, 2013). We find again a negative main effect of originality on liking ($M_{\text{Low originality}}$=4.36, SD=2.14, $M_{\text{High originality}}$=3.42, SD=2.36, $F_{(1, 132)}$=7.58, p=.017, d=-.42), which is mediated by cognitive dissonance (indirect effect=-.26, SE=.13, $CI_{95\%}$=[-.04,-.55]; analysis based on 10,000 bootstrapped resamples, 95% confidence intervals; Hayes, 2013).

Our findings support our conceptual reasoning that higher originality of content on social media does not generally pay out. These findings are in contrast to prior research promoting the high value of originality of user-generated content (Berger & Milkman, 2012;

Hofstetter et al., 2020) and suggest a potential negative mechanism triggered by increased cognitive dissonance when viewing highly original content. Our research contributes to literature on consumer behavior on social media and advises managers to not overestimate the value of highly original content (e.g., for brand-related user-generated content). A methodological contribution of our research comes from the development of a self-supervised learning approach that allows systematic investigations of video-based social media content by quantifying its originality.

Video Influencers: Unboxing the Mystique

EXTENDED ABSTRACT

Influencers have the capacity to shape the opinion of others in their network. They were traditionally celebrities (e.g., movie stars and athletes) who leveraged their expertise, fame and following in their activity domain to other domains. However, 95% of the influencers today, or "social media stars," are individuals who have cultivated an audience over time by making professional content that demonstrates authority and credibility (Creusy, 2016; O'Connor, 2017). The growth in their audience(s) has been in part attributed to the fact that influencer videos are seen as "authentic" based on a perception of high source credibility. The increasing popularity of social media stars has resulted in an exponential growth of the influencer marketing industry which is expected to reach a global valuation of $15B in 2022 from $8B in 2019 (Business Insider, 2021). There are now more than 1100 influencer marketing agencies in the world that allow brands to partner with influencers to promote their products (Influencer Marketing Hub and CreatorIQ, 2020). These influencers primarily reach their audience(s) via custom videos that are available on a variety of social media platforms (e.g., YouTube, Instagram, Twitter and TikTok) (Brooks, 2020). Despite the rapid emergence and growth of influencer videos, there is limited research on their design and effectiveness. Specifically, little is known about the relationship between video content and viewer reactions as well as the evolution of these videos over time.

In this paper, we investigate whether the presence and nature of advertising content in videos is associated with relevant outcomes (views, interaction rates, and sentiment). There are a few challenges in carrying out these tasks. First, most data in influencer videos are unstructured. In addition, these data span different modalities – text, audio and images. This necessitates the use of state-of-the-art machine learning methods commonly referred to as deep learning. The second challenge arises from the fact that past approaches in marketing using such methods have typically made a tradeoff between predictive ability and interpretability. Specifically, such deep learning models traditionally use unstructured data to predict marketing outcomes well out-of-sample but suffer from poor interpretability. On the other hand, deep learning models that use ex-ante handcrafted features obtain high interpretability of the captured relationships but suffer from poor predictive ability. Our "interpretable deep learning" approach uses unstructured data across multiple modalities (text, audio and images) to make predictions out-of-sample and ex-post interprets the machine learning "black-box", thus avoiding the need to make this trade-off. We apply our approach to a random sample of publicly available videos of 33 YouTube influencers who receive brand sponsorship.

Our approach helps us identify statistically significant relationships between marketing (brand) relevant outcomes and video elements. The significance of these relationships is supported by a significant change in attention (importance) paid by the model to these video elements. For the outcomes, we use publicly available

data to develop metrics based on industry practice (Influencer Marketing Hub and CreatorIQ, 2020) and past research on visual and verbal components of conventional advertising (Mitchell, 1986). These metrics are # views, engagement (#comments / # views), popularity (# likes / # views), likeability (# likes / # dislikes) and sentiment. The influencer video elements we consider are text (e.g., brand names in title, captions/transcript and description), audio (e.g., speech, music, etc.), and images (e.g., brand logos, persons, clothes, etc. in thumbnails and video frames). In the ex-post interpretation step, we identify salient word pieces in text, moments in audio and pixels in images.

The focus on interpretation allows us to document some interesting relationships (based on a holdout sample) across all three modalities. First, we find that brand name inclusion, especially in the consumer electronics and video game categories, in the first 30 seconds of captions/transcript is associated with a *significant increase* in attention paid to the brand but a *significant decrease* in predicted sentiment. Second, music (without simultaneous human sound) within the first 30 seconds is associated with a *significant increase* in attention. However, longer music duration is associated with a *significant decrease* in predicted engagement, popularity and likeability but a *significant increase* in predicted sentiment. Third, larger pictures (of persons as well as clothes & accessories) in five equally spaced video frames (within the first 30 seconds) are associated with a *significant increase* in attention and predicted engagement. Finally, we also demonstrate that the focus on interpretability does not compromise the predictive ability of our model.

These results are relevant for multiple audiences. For academics, who may be interested in testing causal effects, our approach is able to identify a smaller subset of relationships for formal causal testing. This is done by filtering out more than 50% of relationships that are affected by confounding factors unassociated with attention (importance) paid to video elements. For practitioners, we provide a general approach to the analysis of videos used in marketing that does not rely on primary data collection. For brands, influencers and agencies, our results provide an understanding of the association between video features and relevant outcomes. Influencers can iteratively refine their videos using our model and results to improve performance on an outcome of interest. Brands, on the other hand, can evaluate influencer videos to determine their impact and effectiveness at various levels of granularity (individual video elements, interactions of elements or holistic influence).

Overall, this paper makes four main contributions. First, to the best of our knowledge, it is the first paper that rigorously documents the association between advertising content in influencer videos and marketing outcomes. Second, it presents an interpretable deep learning approach that avoids making a tradeoff between interpretability and predictive ability. It not only predicts well out-of-sample but also allows interpretation and visualization of salient regions in videos across multiple data modalities – text, audio, and images. Third, it generates novel Hypothesis between advertising content and a change in the outcome of interest for formal causal testing as noted above. Finally, it provides a comprehensive, data-based approach for marketers (and influencers) to assess and evaluate the quality of videos.

Brand Faces: Mining Brand Preferences from Consumer Faces

EXTENDED ABSTRACT

For centuries, philosophers, researchers, and practitioners have been fascinated by the information contained in faces and conveyed by facial expressions. This research investigates the association between brand preferences and faces ("brand faces"). Specifically, we propose a novel multi-method approach to extract brand preferences from consumers' profile pictures on social media. While faces have already been used to successfully predict names (Zwebner et al. 2017), sexual orientation (Wang & Kosinski 2018), and political affiliation (Tkachenko & Jedidi 2019), predicting brand preferences from consumers' digital self-portraits poses a promising and managerially relevant challenge.

Conveying identity and emotion, faces are a cornerstone of human communication. Our research bridges two recent literature streams. First, it links to the automated face analysis literature in marketing, management, and psychology (e.g., Choudhury et al. 2019; McDuff & Berger 2020, Xiao & Ding 2014, Zwebner et al. 2017). Second, it employs automated social media mining to harvest brand-related information (e.g., Culotta & Cutler 2016; Netzer et al. 2012). Building on extant research establishing a link between identities and brands (e.g., Bellazza & Berger 2019; Berger & Heath 2007) as well as between identities and faces (e.g., Ballew & Todorov 2007; Cogsdill, et al., 2014; Kachur et al. 2020), we explore if a direct link between faces and brands also manifests in real-world social media data.

Employing recent deep learning techniques for automated face analysis, we show what brand-related information is conveyed in the face by the way consumers present themselves on social media. Specifically, we obtained a data set containing more than 100,000 single-face profile pictures and each user's followership across 444 brands from more than 20 categories (e.g., apparel, cars, print media). For each consumer we represent his or her face as a low-dimensional embedding with the objective to encode it as efficiently as possible while retaining its distinctive characteristics. For this purpose, we work with both a commercial solution (MS Azure) and validate results with a specialized deep neural network (DNN) pre-trained on 2.6 million faces (i.e., the VGG-Face architecture by Oxford's Visual Geometry Group, Parkhi et al. 2015). The DNN embeds faces as 2,622-dimensional vectors through a sequence of (non-)linear operations (see Wang & Kosinski (2018) for a similar approach). The commercial solution returns predictions for 27 facial features, i.e., demographics (e.g., age, gender), head position (pitch, roll, yaw), emotions (e.g., happiness, sadness, anger), accessories (e.g., sunglasses), image quality (e.g., blur, noise).

Across three complementary analyses, we demonstrate the relationship between consumer faces and brand preferences. First, for more than 7,500 unique within-category brand pairs, including "canonical competitors" such as Apple vs. Microsoft, we predict consumers' brand preferences just from their faces significantly above the random-chance baseline. For all brand pairs users with overlapping brand preferences, i.e., users following both brands, are excluded. Out of these images a balanced sample of 200 images (100 per brand) is drawn (80% training data, 20% test data). Given the limited training data, the accuracy levels can be considered conservative estimates. Specifically, the global distribution of accuracies reveals a mean accuracy level of nearly 60%. Hence, error rates are reduced by about 20% compared to a random-chance baseline. Results from robustness checks that we run on subsets of the data suggest that our models capture predictive signals from consumers' profile pictures beyond socio-demographic information. Second, zooming in on consumer faces, our data reveal insightful associations between 27 specific facial features and 47 established brand personality dimensions from the Young & Rubicam's Brand Asset Valuator (BAV), e.g., wearing reading glasses is predictive of liking "intelligent" brands while wearing lip and eye makeup predict liking "glamor-

ous" brands. Third, we can recover meaningful market maps across brands solely from consumer faces, which we validate with external brand perception data. To preempt possible privacy concerns (see Van Noorden (2020) and Zhou et al. (2020) for recent discussions), we abstract from individual faces across all our analyses and explore the link between consumer faces and brand preferences only from an aggregated perspective.

Overall, our results highlight the power of automated face-based brand audience analytics and reveal important implications not only for marketers but also for policy makers as well as for consumers themselves. There are, of course, limitations to our approach. First, brand followership is only a proxy for brand affiliation. For example, someone may follow brands (or politicians) rather out of curiosity and entertainment purposes rather than honest brand preference (see Schoenmueller et al. 2021 for a similar approach). Second, consumers may disguise their real face on social networks. Their profile pictures are not a representation of who they are, but instead of how they consciously choose to present themselves and want to be perceived by others. Despite these limitations, we hope our results stimulate future research on the opportunities and challenges of automated face analytics.

Measuring Objective Vocal Similarity in Human-AI Agent Interactions

EXTENDED ABSTRACT

AI agents (e.g., Apple Siri, Amazon Alexa, social robots including Pepper) have become increasingly prevalent in our daily lives, our homes, and into our workplaces. Voice recognition technology via machine learning has reached the accuracy level of human speech (Arnold, 2018) and algorithms will eventually recognize all the various aspects in speech including nuances and vocal characteristics (i.e., tonal inflection, mood; Kirby, 2019). Also, the use of voice recognition will be advanced to include personalization features, similar to face ID or PIN, so that the AI agent can respond accordingly to the identified user through the vocal characteristics unique to each person's vocal tract. This research examines vocal similarity between an individual consumer and the AI agent. We ask this question: how will consumers perceive, respond to, and be persuaded by an AI agent contingent on similarities between that agent's voice and their own voice?

In this research, we focus on timbre since it is the most prominent feature allowing humans or machines to distinguish one voice from another. Timbre refers to the unique spectrum of frequencies *within* a sound, including one's voice (here measured by Mel Frequency Cepstral Coefficients [MFCCs; Logan, 2000]) and largely accounts for our ability to distinguish between voices or instruments, and can also affect consumer perception in various ways (Bruner 1990). In this work, we ask how *differences* in timbre between a consumer's voice and an AI voice might influence diverse consumer attitudes toward the AI agent, and further impact consumption choice.

This objective measure of vocal similarity in timbre (MFCCs) introduces a new methodological approach measuring the Euclidian distance between the AI agent and each participant's voice. In order to objectively capture and quantify timbre similarity, we wrote employ an observed machine learning process using MATLAB that enables the machine to learn and calculate a point allowing the total Euclidean distance of all vocal elements to reach a minimum. Then, the similarity points are calculated by using the Euclidean distance between the lower rank matrices of the compared voices (i.e., VocSimilarity = dist(Female1, AI Voice1')). Using this procedure to calculate speech similarity, we test our proposed research question and Hypothesis in three experimental studies.

A prevalent body of research in social psychology advocates for the similarity-attraction effect (Collisson & Howell, 2014; Montoya, Horton, & Kirchner, 2008), which suggests that we are more likely to prefer and be initially attracted to similar others. Although research suggests that we prefer to interact with advanced machines that are more human in nature (Nass et al., 1995; Tapus & Mataric, 2007), the uncanny valley theory (Mori, 1970) suggests that the degree to which these machines are similar may play a role in that we experience an eerie sensation and discomfort when they become too similar to ourselves.

In our series of studies, after listening to a single (study 1 and 2) or three different (study 3) AI agents' recommendation of different products (books, SNL videos, and movies), we measured participant's perception of the AI agent. Then, we later recorded and analyzed each participant's voice to create an objective measure of acoustic similarity to the AI voice.

In study 1, participants (152 undergraduates) listened to a sample of an AI voice (gender matched) making a book recommendation and provided their impressions regarding the AI agent. Each participant also had a sample of their voice recorded upon conclusion of the study. Objective similarity between AI and participant voices was calculated using a computer algorithm created for this research. Overall, greater similarity in timbre (MFCCs) led to perceptions of greater warmth (MFCC: $B = -.402$, $SE = .199$, $p < .05$) and competence (MFCC: $B = -.396$, $SE = .159$, $p < .05$). Study 2 (187 undergraduates), used a similar procedure to Study 1, while also including a choice task based on the AI agent's video recommendation. The results suggested that the more similar the participant's voice was to the AI agent's voice in terms of timbre (MFCCs), the participant was more likely to choose the video recommended by the AI agent (MFCC: $B = -.202$, $SE = .087$, $p < .05$).

In Study 3, we introduce three distinct voices of AI agents recommending three different movies. In this study, we demonstrate the effect of vocal similarity on persuasion and trust (competence, benevolence, integrity), and further show that trust mediates actual choice in the recommended movie. The results again show that similarity in timbre significantly predicts evaluations of warmth (MFCC: $B = -.323$, $SE = .085$, $p < .001$), competence (MFCC: $B = -.289$, $SE = .082$, $p < .001$), liking (MFCC: $B = -.295$, $SE = .082$, $p < .001$), and overall trust in the agent (MFCC: $B = -.155$, $SE = .068$, $p < .05$). We also tested the proposed mediation model using the PROCESS macro model 4 (Hayes, 2013). The data shows a full mediation model (direct effect: b = -.231, $SE = .146$, $p > .05$, 95% CI [-518, .055]; indirect effect: b = -.093, $SE = .046$ 95% CI [-.191, -.009]) where overall timbre similarity impacts trust (b = -.155, $SE = .067$, $p < .05$), which in turn leads to higher likelihood to choose the recommended movie (b = .606, $SE = .102$ $p < .001$).

Present research aims to contribute to literatures in psychoacoustics, similarity-attraction effect, and human-computer interaction. We find that, overall, similar timbre and dissimilar pitch was favored. Furthermore, we believe that our research offers useful implications to marketers regarding new technology devices. Although certain voice-relevant cues (e.g., accent, conversational styles) may be more direct and pronounced to individuals when engaging in an interaction, we explore a very subtle cue that subconsciously influence consumers' mindset. Marketers will be able to better understand the mechanisms and conditions under which we prefer AI agents that are more personalized to sound similar in timbre to individual consumers.

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We Need to Go Beyond Demographics: Queering Misguided Consumer Segmentation & [Intersectional] Identity Practices

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SESSION OVERVIEW

In this session we explore race/ethnicity, gender/sex, sexualities, and dis/abilities as "demographic" constructs, recognizing how these identifications matter, how they are socially constructed, and how consumer research can reimagine their deployment so that research more closely aligns with, and can help improve, consumer experiences.

EXTENDED ABSTRACT

"Demographic" categorizations, often used in research and segmentation practices, have many benefits, but they can belie consumers' complex lives. For instance, (dis)abilities may be overlooked or gender over-simplified in favor of race. We posit this occurs because of the hegemonic order: an "imperialist white-supremacist capitalist patriarchy" marketplace (bell hooks, 2010, p.1) assumes able-bodied, white, heterosexual cis-men are the norm. We seek to sensitize scholars, asking ourselves to think differently about the (mis)use of "demographic" identities; emphasizing how consumer research can perpetuate (in)visibilities and (dis)advantages yet could become more inclusive and/or empowering for consumers.

To question and queer these misunderstandings, we focus on these complex issues in the everyday context of grocery stores. These spaces can mundanely (de)construct (in)visibilities and (dis)advantages, like gender-neutral toilets, racially-segregated neighborhoods, and inaccessible buildings, in market-mediated ways. Crucially, these are spaces where multiple identities co-exist, highlighting the helpful yet sometimes insufficient lens of intersectionality. We consider the dynamics of demographics through concrete issues like servicescape design (e.g., accessibility) and material-symbolic structures (e.g., gendered, white-oriented products).

We invite participants to queer their use of demographics and to understand what might be lost by reflecting and sharing their own experiences of (in)visibility and (dis)advantage in supermarkets. Through discussions we will explore:

- How do multifaceted identities shape consumer experiences?
- How are marketplace identities different or similar to personal/political identities?
- When and where can intersectional thinking re-invigorate or develop your consumer research?
- Are there challenges to intersectional research, and how might they be overcome?
- Could such approaches disempower consumers?

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The Politically Conservative Consumer: Understanding Their Unique Motivations to Improve Individual and Societal Well-Being

Chairs: Jianna Jin, The Ohio State University, USA
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Paper #1: Political Ideology and Disclosure of Personal Information

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Nailya Ordabayeva, Boston College, USA

Paper #2: The Impact of Political Ideology on Attitudes toward Customer Reviews: When and Why Conservatives Don't Listen to and Act on Other Customers Reviews

Yunhui Huang, The Ohio State University, USA
Jeehye Christine Kim, HKUST, Hong Kong
David Dubois, INSEAD, Singapore

Paper #3: The Impact of Framing on Political Conservatives' Attitude toward Boundaries

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Selin A. Malkoc, The Ohio State University, USA
Russell Fazio, The Ohio State University, USA

Paper #4: Hoping for Change: How Emotions and Political Ideology Influence Sustainable Consumption

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SESSION OVERVIEW

Partisan polarization, which is on the rise in the US and elsewhere (Pew Research Center 2020), contributes to contemporary societal challenges like sharing fake news (Osmundsen et al. in press), climate change beliefs (Jenkins-Smith et al. 2020) and COVID-19 responses (Sides, Tausanovitch, and Vavreck 2020). Even obedience to safety measures during a global pandemic is best explained by political attitudes (Ivory, Leatherby, and Gebeloff 2021). Thus, understanding political attitudes matters more than ever. This session takes an important step in this direction by exploring the unique factors that motivate conservatives (vs. liberals) and devising interventions that improve individual and societal well-being.

Endorsers of conservative political ideology value tradition (Feldman 2003), like stability (Carney et al. 2008), and prefer hierarchical structure (Ordabayeva and Fernandez 2018). Such ideological differences even carry onto non-political decisions like preferences for vertically differentiated products (Ordabayeva and Fernandez 2018), luxury consumption (Kim, Park, and Dubois 2018), and financial risk taking (Han et al. 2019). Building on this emerging literature, the papers in this session use a varied set of theories to examine the influence of political ideology on issues ranging from information sharing and using (papers 1&2), adherence to guidelines (paper 3) and pro-environmental consumption (paper 4).

The first two papers examine conservatives' tendency to share and use information. First, exploring conservatives' beliefs about market-based processes, *Kim and Ordabayeva* demonstrate that conservatives (vs. liberals) view free economic market as legitimate and just, which makes them more likely to share personal information with for-profit (vs. non-profit) companies despite privacy concerns.

Next, focusing on conservative's beliefs about other customers, *Huang, Kim, and Dubois* show that conservatives (vs. liberals) are less likely to rely on product reviews from other customers, because they tend to view other customers as lay people who possess knowledge that is no better than themselves, even when the reviews might be beneficial.

Shifting gears from individual to societal well-being, *Jin, Malkoc, and Fazio* capitalize on conservatives' positive associations with structure to devise an intervention (structure vs. restriction framing) to increase their adherence to restrictive measures that can benefit the society at large (e.g., social distancing rules).

Finally, exploring ways to improve sustainable behavior, *Cakanlar, Cavanaugh, and White* find that inducing conservatives with hope – an emotion liberals traditionally score higher on and is associated with pro-environmental acts – is effective in motivating conservatives to engage in sustainable behavior.

Taken together, the papers in this session inform a more nuanced understanding of how lay beliefs (paper 1&2), automatic associations (paper 3), and emotions (paper 4) influence conservative's attitudes and decisions. In doing so, these papers identify conservative's unique psychological needs, like legitimacy beliefs of market-based processes (paper 1), viewing the world as having hierarchical structure (paper 2), need for order (paper 3) and hopefulness (paper 4), while also offering concrete interventions that can be used to increase prosocial behaviors (paper 3&4). We hope that the session can generate a fruitful and timely discussion regarding the role of ideological differences in consumer behavior.

Political Ideology and Disclosure of Personal Information

EXTENDED ABSTRACT

Consumer personal information is a valuable source of insights for marketers. Consumers, however, are increasingly wary of sharing their personal information with companies due to a growing concern of privacy. It is, therefore, important for marketers to understand factors that influence consumers' decisions to share personal information with companies. While past research has identified various contextual factors that influence the decision to share personal information (Acquisti, Brandimarte, and Loewenstein 2015) such as the system interface (John, Acquisti, and Loewenstein 2011) or the type of platform (Melumad and Meyer 2020), we know little about stable factors that systematically influence the individual's decision to share personal information. The current research identifies political ideology as a novel determinant of self-disclosure and investigates its underlying process.

Past research has shown that political ideology, measured on the continuum varying from liberal to conservative ("political conservatism"), is a fundamental belief system that influences various types of decisions and behaviors (Jost et al. 2003b). Important to our theorizing, political conservatism has been shown to predict fair market ideology which is the perception that free economic market is fair, legitimate, and just (Jost et al. 2003a). That is, conservatives, relative to liberals, tend to view market-based processes and common business practices to be fair (Jost et al. 2003b). Building on this literature, we propose that conservatives, relative to liberals, view a company's request to share personal information as legitimate because of their stronger trust in the fairness of market practices. This, in turn, increases conservatives' decision to share personal information with a company. Three studies demonstrate that political conservatism increases the decision to share personal information with a company

(Studies 1&2) and this effect is specific to companies belonging to the free market system (i.e., for-profit company) but does not generalize to a non-market system (i.e., non-profit company, Study3).

Study 1 asked participants (N=263, MTurk) to imagine browsing a task service platform which connects users to freelance workers to complete various tasks. They were told to imagine that they are trying to find someone to help with house-related matters and that they can choose to proceed as a guest or sign up as a member which would require them to share some personal information. Participants were shown eight kinds of personal information (i.e., profession, favorite brands) and asked to indicate how willing they are to share each kind of personal information listed (1=not at all, 7=very much) which were then averaged to form the overall score for the willingness to share personal information (Cronbach's α = .91). Afterward, they completed Right Wing Authoritarianism (RWA; Altemeyer 1981) scale which has been used to capture political conservatism in past research (Altemeyer 1981, 1988). We regressed participants' willingness to share personal information with the company on political conservatism. As predicted, political conservatism positively predicted participants' willingness to share personal information with the company (β =.25, p = .012). Results remained significant when we controlled for prevention-focus, interpersonal trust and various demographics.

Study 2 replicates the main effect using a real behavioral DV. Participants (N=194, MTurk) first indicated their political ideology on two items (1="extremely liberal", 7 = "extremely conservative"; 1 = "strong Democrat", 7 = "strong Republican") on seven-point scales (Pearson r = .81; Kim, Park, and Dubois 2018). Participants were told that the survey was conducted for a knowledge-based consulting firm which was currently in the process of developing a stratified sample of 20,000 people across the U.S. for an upcoming research project and the nature of this research requires participants to disclose some personal information. They were also told that a monetary compensation slightly above the market rate will be offered in exchange for the disclosure of their private information and that they will be guaranteed anonymity, but that there is a potential danger of disclosing personal information as the information will be retained in the system for next 5 years. Participants were then asked to indicate whether they would like to sign up for this survey. As predicted, a logistic regression modeling the probability of signing up for the survey revealed a significant effect of political conservatism (b =.43, *SE* = .20, Wald = 4.46, p = .035, Odds Ratio = 1.54).

Study 3 aims to provide process evidence. If our effect is driven by fair market ideology as we argue, the effect should be observed only when the request is coming from an entity that belongs to the free market system and operates by free market principles (i.e., for-profit company) and not generalize to an entity that does not operate by free market principles (i.e., non-profit company). However, if the effect is driven by other factors such as the generalized increased trust (i.e., conservatives are more trusting) or lower processing (i.e., conservatives think less about the potential negative consequences of sharing), the effect should be observed regardless of the source of the request. Study 3 (N=218, MTurk) tested this logic by adopting the same procedure used in Study1, except that half the participants were told that the company was a for-profit company, whereas the other half were told that it was a non-profit. Political conservatism was measured using a multi-item scale (Everett 2013). As predicted, political conservatism increased the willingness to share personal information when the request came from a for-profit company (β =.021, p = .011) but not when it came from a non-profit company (*F*<1).

In sum, three studies demonstrate that political conservatism increases consumers' willingness to share personal information with a company because it increases consumers' tendency to view such requests as a legitimate and fair business practice.

The Impact of Political Ideology on Attitudes toward Customer Reviews: When and Why Conservatives Don't Listen to and Act on Other Customers Reviews

EXTENDED ABSTRACT

Consumers' attitudes toward products and services are often shaped by others' opinions (Cialdini and Goldstein 2004; Goldstein, Cialdini, and Griskevicius 2008). Therefore, what consumers say about a product, that is, consumer word-of-mouth (WOM), is important for marketers to manage, and a growing body of research on WOM speaks to this importance (Berger 2014; Lamberton and Stephen 2016). The bulk of related research has mainly focused on the sender side and examined the drivers of WOM creation and sharing (Berger 2014). A nascent stream of research has started to examine the recipient side and explored factors influencing individual's reliance on customer reviews in product decisions (e.g., experiential vs. material purchase; Dai, Chan, and Mogilner 2020), but relatively less is known in this domain. The current research thus contributes to this growing literature by identifying a variable that systematically influences individual's reliance on customer reviews in product decisions. Specifically, we propose that political ideology, a core belief system that impacts various consumer decisions (Jost 2017; Jung et al. 2017; Kim, Park, and Dubios 2018) influences individual's attitude toward and reliance on customer reviews in product decisions.

Past research has shown that political conservatism is linked to the view that the world is inherently vertically stratified. Across various contexts, conservatives (vs. liberals) have been found to be more accepting of inequality and a hierarchical social structure (Jost et al. 2003) Further, conservatives consider vertically signaling information (e.g., social status) to be more primary than horizontally signaling information (e.g., similarity). Since people infer missing primary information (Kardes 1988), we propose that conservatives may infer one's rank and credentials even when no such prompt is given. Specifically, we argue that in the absence of information about reviewers given, conservatives (vs. liberals) are likely to infer that reviewers are lay people whose level of expertise and knowledge is *no* better than themselves. Consequently, conservatives, relative to liberals, judge customer reviews to be less useful, and as a result rely less on them. We find support for our proposition by demonstrating a negative association between political conservatism and perceived usefulness of customer reviews (Study 1) as well as the actual decision to read customer reviews (Studies 2 and 3). We further provide evidence for the proposed process by manipulating the expertise of the reviewers (Study 3).

In Study 1, participants first reported their political conservatism on a 7-point scale (1= extremely liberal, 7 = extremely conservative; Jost 2006). Participants then imagined that they were going to make an online purchase and answered some questions about how their decision might be influenced by customer reviews. Specifically, they reported how useful reading customer reviews would be in making their purchase, how important knowing previous customers' satisfaction with an option would be in their decision process, and how much previous customers' reviews would influence their purchase decision, the average of which served as the main DV (. Supporting our prediction, political conservatism negatively predicted perceived usefulness of customer reviews (r = -.15; t(204) = -2.20, p = .029).

Study 2 examined actual decision to read customer reviews by asking participants to allocate a fixed amount of time between two types of information (information provided by the company vs. customer reviews). We first measured political conservatism categorically by having participants indicate the political party they identify with (Republican, Democratic, neither; Kim et al. 2018; Morris, Carranza, and Fox 2008). Then, participants completed a product evaluation task in which they were asked to consider a massager for purchase. Participants were provided with two types of information to inform their decision about this massager. One was information from the business ("detailed descriptions of the product"), while the other was information from other customers ("customer reviews"). Participants were then asked to allocate a total of 100 seconds to each type of information. Participants were led to believe that they would actually read each type of information for the amount of time indicated in their allocation decision. Replicating Study 1's results, Republicans allocated less time (M = 59.14 seconds; $F(1,387)$ = 7.42) to reading customers reviews (vs. business-provided information) than Democrats (M = 64.2 seconds; p = .007).

Study 3 (pre-registered) provided process evidence by manipulating reviewer expertise (reviewer: expert vs customer). Participants first completed the Right-Wing Authoritarianism scale (RWA; Altemeyer 1981) which has been used in past research to capture political conservatism. They then completed a similar product evaluation task as in Study 2 with the following modifications. Whereas the description of the business-provided information was kept constant across the conditions, that of the customer reviews varied. In the customer condition, we told participants that the information was "from other customers" without specifying any details about the reviewers. In the expert condition, however, the information was described as coming "from knowledgeable customers who provide high quality reviews about massagers," and that "their reviews have more than 200 helpful votes on review websites." Consistent with Study 2's results, political conservatism negatively predicted the amount of time allocated to customer reviews when no expertise information was provided (b = - 2.56, $t(496)$ = -2.78, p = .006). In contrast, the effect of political conservatism was attenuated and non-significant when the reviews were from knowledgeable reviewers (b = -.71, $t(496)$ = -.78, p = .435).

In summary, the findings contribute to both the literature on political ideology and the WOM literature by identifying a negative relationship between political conservatism and customer review use and documenting the underlying process.

he Impact of Framing on Political Conservatives' Attitude toward Boundaries

EXTENDED ABSTRACT

Since its emergence in late 2019, the COVID-19 pandemic has wreaked havoc around the world, killing millions and devastating even more. The mitigation of COVID-19 relies on adherence to guidelines, which predominantly relies on restructuring one's physical and social environment by imposing boundaries (e.g., social distancing rules, masking mandates). Unfortunately, there are significant ideological asymmetries, as converging evidence demonstrates that conservatives (vs. liberals) are less likely to adhere to these prevention measures (Nace 2020). The question then is why conservatives are less likely to comply with boundaries, and how can we devise interventions to improve such attitudes.

We propose that conservatives (vs. liberals) may be less likely to adhere to boundaries because they are more likely to view them as restrictions. This is because conservatives (vs. liberals) put greater importance on individual freedom (Crawford et al. 2017) and exhibit greater reactance against what they see as restrictions (Irmak, Murdok, and Kanuri 2020). Thus, if conservatives view boundaries as inherently restrictive, then we would expect them to be less likely to comply with boundaries. If so, how might we change conservatives' attitude toward boundaries to be less restrictive? We propose that one way to do so is to highlight the structure-providing function of boundaries. Boundaries can provide a sense of structure by clearly outlining where things belong and are contained (Cutright 2012). We posit that, because conservatives have greater need for order and structure (Carney et al. 2008; Jost et al. 2003), framing boundaries as providing structure (vs. restriction) and thus focusing conservatives' attention to structure-providing function of boundaries will be effective in increasing their attitude toward the boundaries. Seven studies provide support for these propositions.

The first three studies empirically tested whether conservatives naturally associate boundaries with restrictions. In Studies 1a, 1b and 1c, participants first indicated their political orientation on a 9-point scale (1 = extremely liberal; 9 = extremely conservative; Jost 2006). Next, in study 1a (n = 614), participants viewed an image of a social distancing sign commonly used in retail stores (i.e., an arrow indicating the 6 feet social distance) and indicated how much they think the sign is restrictive. In study 1b (n = 347) they viewed an image of a three-sectioned plate and indicated the extent to which they think the plate restricts what they eat, and in study 1c (n = 526), they viewed a time slot (provided by a fictitious grocery store) and indicated how much the slot restricts consumers' pick-up schedule. As expected, the more conservative-leaning participants were, the more likely they were to view the social distancing sign (β = .15, p < .001), the three-sectioned plate (β =.10, p = .03), and the time slot (β =.06, p = .07) as more restrictive (each measured on 7-point scales).

Study 2 (n = 760) used a word evaluation task to test whether conservatives' need for order could account for their favorable attitude toward structure. The task was divided into two parts. First, participants indicated their immediate response (-3 = very negative; 3 = very positive) to twelve words (randomly presented), four of which were structure-related words ("structure," "control," "guidelines," "guidance"). Upon completing the task, participants engaged in an unrelated filler task, and then proceeded to a second study, where they indicated their political orientation and responded to the need for order scale (Cornelis and Van Hiel 2006). A regression analysis demonstrated that the more conservative-leaning participants were, the more favorable they were toward the structure-related words (β = .03, p = .02). A mediation analysis using PROCESS Model 4 (Hayes 2017) revealed a significant mediation through need for order (index = .0095, 95%CI [.0040, .0163].)

The last two studies test the proposed intervention based on structure-framing. Study 3 (n = 611) employed a 3 cell (framing: no-framing vs. restriction-framing vs. structure-framing) between-subjects design. All participants first indicated their political orientation on the same scale used in the previous studies. Then, in an ostensibly unrelated task, participants imagined going to a restaurant that put a social distancing sign on the floor. In the no-framing condition, participants simply viewed the image of the social distancing sign used in study 1a. In structure-framing (vs. restriction-framing) condition, participants viewed the image and read an additional description of the sign that it is "placed to structure (vs. restrict) customer flow in the restaurant." All participants then indicated their attitude toward the sign on three items (-3 = unacceptable/bad/unfavorable, 3 = acceptable/good/favorable; .95). We conducted a regression analysis using political orientation and framing type as the independent variables and attitude toward the sign as the dependent variable. Results

revealed that, as participants became more conservative, they became more favorable toward the sign when it is structure-framed, which differed from when it lacked a frame (β = .15, p = .001) or had a restriction-framing (β = .24, $p < .001$).

Study 4 (n = 227) replicates the findings of study 2 using a different operationalization of boundary and a more indirect measure of political orientation. Specifically, we measured political orientation by asking participants to read an article about Justice Barrett's elevation to the Supreme Court (a timely issue at the time of the data collection) and indicate how satisfied they are with the confirmation on three items (.99), where greater satisfaction implied higher conservatism. Then, in an ostensibly unrelated study, participants evaluated the three-sectioned plate from study 1b, which was described as "a plate that helps you structure (vs. restrain) your meals" and indicated how much they like this product on two items (.94). Regression analysis revealed a significant interaction of political orientation and framing types (β =.10, p = .05), such that those who are more satisfied with the confirmation evaluated the plate more favorably when it was described using structure-framing (vs. restriction-framing).

Together, our findings shed light on why conservatives may show less adherence to boundaries and how framing can be used to elicit favorable attitude changes among them.

Hoping for Change: How Emotions and Political Ideology Influence Sustainable Consumption

EXTENDED ABSTRACT

Despite the strong evidence that climate change is accelerating (Ripple et al. 2019), it remains one of the most divisive issues in the US (New York Times 2020). While 88% of liberals consider climate change a threatening issue, there is still resistance among the majority of conservatives (Pew Research Center 2019), which is a significant impediment to behavioral change among conservatives (Hoffarth and Hodson 2016). Therefore, it is crucial to understand how messaging strategies can narrow the gap between these two groups in the context of sustainable consumption (Briley et al. 2019).

Many marketers employ emotional appeals to encourage sustainable consumption (Antonetti, Baines, and Walker 2015). Traditionally, they have used negative emotional appeals, such as guilt or fear, in advertisements (Wang and Wu 2019). More recently, however, the use of positive emotions, such as pride and hope, to encourage sustainable consumption has become more common (Coleman, Royne, and Pounders 2020). For instance, companies such as Bacardi and Lonely Whale have used hope-based appeals to decrease the consumption of single-use plastic straws (White, Hardisty, and Habib 2019). While the previous literature demonstrates how using positive emotions can encourage consumers to engage in sustainable consumption, researchers have not yet examined whether emotional appeals influence conservatives and liberals similarly. Given that specific positive emotions might affect particular behaviors differently (Cavanaugh, Bettman, and Luce 2015), we examine whether specific emotions may also interact with political ideology to impact sustainable consumption.

Even though prior studies do not directly address this question, some findings could be interpreted to suggest that hope would be more motivating for liberals than conservatives. This stream of the literature has associated hope with a leftist ideology and fear with a conservative ideology (Cohen et al. 2014; Septianto et al. 2019). In contrast to these findings, we posit that hope can be used to increase conservatives' sustainable consumption. We derive our predictions based on three unique features of hope. First, collective efficacy, which is an essential ingredient of sustainable consumption (Fritsche

et al. 2018), increases the intention to act only when hope is high (Cohen-Chen and Van Zomeran 2018). Second, hope is negatively associated with the motivation of system justification (Badaan et al. 2020), which significantly impedes conservatives' participation in sustainable consumption (Feygina, Jost, and Goldsmith 2010). Finally, hope is associated with abstract construal (Winterich and Haws 2011), which is positively related to sustainable consumption (Reczek, Trudel, and White 2018). These unique characteristics of hope will influence conservatives more than liberals as framing does not generally affect groups that already support an issue (Feinberg et al. 2019). Therefore, we predict that hope will increase conservatives' sustainable consumption. We do not expect any difference for liberals. Four studies tested our predictions.

Study 1 (n=400) tested our hypothesis by using an incidental emotion task. We randomly assigned participants to one of the three conditions (hope, nostalgia, control) and asked them to write about a situation that made them feel the focal emotion. Next, participants indicated how often they intend to perform various sustainable behaviors (e.g., Go out of your way to seek out green products; Eom, Kim, and Sherman 2018) and completed a multi-item scale of political ideology (Kidwell, Farmer, and Hardesty 2013). In support of our predictions, conservatives were more likely to engage in sustainable consumption in the hope condition relative to the control (b=-.32, p=.01) and nostalgia conditions (b=-.26, p=.03), but there was no significant difference among the emotion conditions for liberals (p>.10).

In study 2 (n=357), we replicated these findings with an integral emotion task. Similar to study 1, we randomly assigned participants to one of three conditions (hope, nostalgia, control) and asked them to write about a situation that made them feel the focal emotion for the natural environment. Participants then completed the same measures for sustainable consumption as in study 1 and a multi-item measure of political ideology (Kidwell et al. 2013). Consistent with the previous study, conservatives were more likely to engage in sustainable consumption in the hope condition relative to the control (b=-.73, p<.01) and nostalgia conditions (b=-.60, p<.01). Simple slope tests further indicated that higher levels of hope about the environment eliminated the baseline difference between conservatives and liberals (b=-.07, p=.17); liberals reported higher intentions than conservatives in the other conditions (p<.01).

Study 3 (n=193) used a 2 (political ideology: conservative, liberal) x 2 (emotion: hope x control) between-subjects design. We manipulated political ideology by using a procedure developed by Ordabayeva and Fernandes (2018). Specifically, participants were asked to recall a time when they held politically more liberal or conservative views relative to their current views. They were then asked to read three stories written by previous participants: either stories related to hope about the environment or neutral stories about regular evening routines. Subsequently, participants completed the same measures for sustainable consumption as in the previous studies. The focal interaction was significant (p=.034). We found a significant difference in the conservative condition (M_{hope} =4.02, $M_{control}$=3.68, p=.01), but no significant difference in the liberal condition (M_{hope} =3.76, $M_{control}$=3.85, p=.51). Moreover, within the hope condition, conservatives were more likely to engage in sustainable consumption than liberals (p=.07).

In study 4 (n=484), we examined whether other positive emotions will have similar effects on conservatives. Similar to studies 2 and 3, participants wrote about a situation that induced the focal emotion about the environment. Next, participants indicated their willingness to donate part of their payment bonus to the World Wildlife Organization, which was our dependent variable. At the end,

they completed the multi-item scale of political ideology (Kidwell et al. 2013). We find that conservatives donated more in the hope condition, relative to the pride (*b*=-3.62, *p*<.01), fear (*b*=-2.18, *p*=.06), and control conditions (*b*=-1.98, *p*=.09). There was no significant difference for liberals (*p*>.10). Simple slope tests further indicated that liberals and conservatives contributed similarly high donations in the hope condition (*p*=.24) while conservatives donate less than liberals in the other conditions (*p*<.05).

Overall, our findings contribute to the growing literature on political ideology, sustainable consumption, and emotions.

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Methodological Advances in Consumer Research

Chair: Quentin André, Leeds School of Business, University of Colorado Boulder, USA

Paper #1: Noise in the Process: A Meta-Analysis of Mediation Effects in Marketing Journals

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Paper #2: Outlier Exclusion Procedures Must be Blind to the Researchers' Hypothesis

Quentin André, Leeds School of Business, University of Colorado, USA

Paper #3: A Framework for Imputing Choice Shares from Rating Data

Ioannis Evangelidis, ESADE, Universitat Ramon Llull, Spain

Paper #4: A Recipe for Honest Consumer Research

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SESSION OVERVIEW

Ten years ago, two papers launched a quiet revolution in behavioral research. Daryl Bem's "Feeling the Future" provided 9 experiments demonstrating an impossible result: People possess pre-cognitive ability, such that they react to stimuli that they have not seen yet. The same year, Simonsohn, Simmons and Nelson's "False-Positive Psychology" (2011) showed that common practices in behavioral research (e.g., not reporting all conditions and measures, or deciding when to stop data collection) allowed researchers to provide significant evidence for impossible results (e.g., that listening to "When I'm 64" by The Beatles can lower people's age by more than a year).

These concerning results prompted soul-searching efforts among behavioral researchers and launched a new stream of methodological research. On the one hand, large-scale data collection efforts have examined the replicability of behavioral research in general (Ebersole et al., 2016; Klein et al., 2014, 2018; Open Science Collaboration, 2015), or of highly-influential findings (IJzerman et al., 2020; Klein et al., 2019).

On the other hand, papers have re-examined the research practices of behavioral researchers, and offered suggestions to increase the rigor and replicability of behavioral science. In psychology, some papers have for instance discussed the value of analyzing the cumulative amount of statistical evidence present in a paper (Simonsohn et al., 2013), or argued for pre-registration as a way to achieve greater replicability (van't Veer & Giner-Sorolla, 2016). In marketing, other papers have for instance discussed how to increase power in experiments (Meyvis & Van Osselaer, 2018), or under which conditions mediation analysis can yield useful inferences about consumer psychology (Pieters, 2017).

The present session continues this research tradition, and discusses a range of methodological issues in behavioral research. In the first paper, **Charlton, Montoya, Price and Hilgard** provide a meta-analysis of mediation results in consumer journals, and discuss how these results can yield insights into the statistical power of the stud-

ies. In the second paper, **André** discusses a common practice in behavioral research: Excluding outliers by condition (rather than across the data). Using a mix of simulations and re-analysis of existing data, he shows that this practice can yield unacceptable increases in false-positive rates, with Type I error as high as 43%. In the third paper, **Evangelidis** discusses under which conditions marketing researchers can infer product choices from product ratings. In the fourth paper finally, **van Osselaer and Janiszewski** present "A Recipe for Honest Consumer Research." They argue that by better separating exploratory from confirmatory analysis, consumer researchers can achieve higher rigor without compromising their ability to discover novel and unexpected patterns in their data.

Together, these four papers provide a broad overview of current methodological issues in marketing, and cover all stages of the research process: Research design (van Osselaer and Janiszewski), measures (Evangelidis), data analysis (André) and interpretation of results (Charlton et al.). As such, we believe that this session would appeal to a large audience, and generate a lively discussion.

Noise in the Process: A Meta-Analysis of Mediation Effects in Marketing Journals

EXTENDED ABSTRACT

Evidence of mediation is critical for publication in top marketing journals (Pieters, 2017) despite calls for more varied approaches (e.g., Lynch et al., 2012). This is true not only in experimental consumer psychology, but also adjacent sub-fields of marketing. The popularity of mediation analysis is tied to availability of easy-to-use free software (Hayes, 2018) and the expectation that it can help open the black box and reveal the process underlying observed effects. Researchers are incentivized to find statistically-significant results, as such results suggest novel discoveries or effective interventions. Significant findings are, therefore, easier to publish in general and to publish at high-prestige journals in particular. Given the career advantages attached to significant results, researchers may apply motivated reasoning to obtain results that are favorable to them at the expense of science and the truth (Lilienfeld, 2017). Evidence of this problem is demonstrated conceptually (e.g., Simmons et al., 2011), through failed replications (e.g., Klein et al., 2014), and through meta-analyses of reported statistics (e.g. p-curve; Simonsohn et al., 2013). More recently, this problem was observed in mediation tests in psychology (Götz et al., 2021).

Like the afore-mentioned meta-analyses, the current research examines the average power of mediation tests through analysis of reported statistics—specifically confidence intervals from mediation tests. For our analysis we chose all 2018-2020 articles from the Journal of Marketing, Journal of Marketing Research, Journal of Consumer Research, and Journal of Consumer Psychology that reported at least one mediation test. We selected the first mediation test of a hypothesis from each paper for inclusion in our dataset. This was typically the first mediation test reported, except in rare cases where the first test was intended to rule out an alternative explanation. Meta-analyses, longitudinal studies, and multilevel models were excluded from our dataset. Trained students completed the coding redundantly in pairs with discrepancies being reconciled by the second author. Our key statistic, relative proximity (RP; Götz et al. 2021) was computed by dividing the reported CI's distance to zero by its width. RP's are negative if the CI overlaps zero and positive other-

wise. In this way, we created a table of statistics from 251 mediation tests roughly following the recommendations of a p-curve disclosure table (Simonsohn et al. 2013).

We next ran a series of simulations to determine how the RP scores ought to be distributed for simple mediation analyses when adequately powered (80-95% power), low-powered (33-79% power) and with no power (5% false positive rate) using the 'simstudy' and 'psych' packages for R (Goldfeld & Wujciak-Jens, 2020; Revelle, 2021). We programmed all three sets of simulations to run until the highest positive point of each of their respective RP histograms was 1,000 units for a bin width of .05. We then scaled down the simulated distributions so that their peaks would be 67, equal to the peak of reported results (see Fig. 1). In our final simulated distributions, mediation tests reached statistical significance in 85.0% of tests (adequate power), 55.4% of tests (low power), and 4.4% of tests (null effects).

To simulate true effects, we created a series of 3-variable datasets with a weak population-level indirect effect (β=.04) that fully mediated the relationship between X and Y. We settled on β=.04 because it allowed us to achieve desired power levels using sample sizes that are similar to those reported in marketing journals. This implies that reported indirect effects are also close to β=.04 on average, assuming they are mostly true effects with power in the range of 33% to 95%. We manipulated power by varying the sample size of each simulation while holding all other parameters constant. Sample sizes were drawn at random, uniformly, from a range based on Monte Carlo estimates (Schoemann et al., 2017) for adequate power (80-95%; N=238 to 356) and for low power (33-79%; N=124 to 234).

For null effects, we simulated a 3-variable model in which the population correlations were set to zero for all paths except the path between mediator and dependent variable (b-path) which varied across 4 levels (r=.1, r=.3, r=.5, r=.7). Simulated sample size was also varied based on 20th, 40th, 60th, and 80th percentile sample sizes reported in the mediation tests we coded (138, 195, 250, and 335 respectively). These different levels of b-path correlation and sample size were used to simulate the heterogeneity in a real-life null distribution and to assess whether there are meaningful differences among null distributions, but were all combined for the present analysis when meaningful differences were not found.

The figure posted on the OSF repository (https://osf.io/25b69/) shows that in aggregate, the distribution of RP scores for mediation tests reported in marketing journals is inconsistent with adequately-powered studies. Indeed, the RP scores from reported tests most closely resemble the simulated null distribution. The right tail of the reported tests is longer, however, indicating some statistical power, but less than the desired 80%. This is consistent with the finding that too many confidence intervals from mediation tests just barely exclude zero in psychology journals (Götz et al. 2021).

Although our analysis does not shed new light on why so many mediation tests might be underpowered or false, it is plausible that disconfirming results are being disregarded. Although we estimate the average mediation test to have poor statistical power, nearly all results were statistically significant. Indeed, the observed distribution of RP scores is highly suggestive of some form of selection bias: Even with good (80-95%) statistical power, some portion of tests should result in Type II errors (5-20%), yielding negative RP scores. We observe that confidence intervals which include zero are exceedingly rare in mediation tests in marketing journals.

Many solutions to this problem already exist, including adjustments for familywise error rates in the context of multiple testing, larger sample sizes, replication studies, preregistration, open data sharing, and publication of non-significant results. We propose that greater adoption of such practices and policies in marketing research will substantially increase the quality of evidence in our field.

Outlier Exclusion Procedures Must be Blind to the Researchers' Hypothesis

EXTENDED ABSTRACT

Data about human behavior is noisy. Participants misread instructions, get distracted during the task, experience computer errors, or simply do not take a study seriously. To reduce noise and increase statistical power, it is common practice to identify and remove such "nasty data" (McClelland, 2014) in people's response to a task.

A common example of such aberrant responses are "outliers": Data points that are "too extreme," compared to the rest of the data, to reflect to genuine responses. Multiple methods have been offered to distinguish between regular responses and outliers, and recent papers have summarized the different techniques available to researchers (Aguinis et al., 2013; Leys et al., 2019). Three metrics are commonly used to detect univariate outliers: The z-score (the response's deviation from the mean, expressed in units of standard deviation), the Median Absolute Distance (MAD; the response's deviation from the median; Leys et al., 2013), and the Inter-Quartile Range (IQR) distance (the response's distance from the upper or lower quartile of the distribution).

However, an important question has rarely been discussed in the literature on outlier exclusions: In an experiment with multiple conditions, should one identify and remove outliers across all the data, or within each condition taken separately? Indeed, recent papers covering the topic of outlier removal (e.g., Aguinis et al., 2013; Leys et al., 2019) and the most-cited books and papers on the topic of univariate outliers (e.g., Barnett & Lewis, 1994; Ghosh & Vogt, 2012; Hawkins, 1980; Miller, 1993; Osborne & Overbay, 2004; Ratcliff, 1993) have not discussed this question. Only Cousineau and Chartier (2010) and Meyvis and van Osselaer (2018) have offered an explicit discussion of this question, and suggested that outliers should be searched for, and excluded, within conditions.

In the present paper, I show that this recommendation is, in fact, incorrect. When researchers exclude outliers by condition (rather than across the data), they implicitly reject the null hypothesis that the conditions are drawn from a common distribution. As a consequence, they can no longer interpret the conclusions of statistical tests (e.g., t-tests or ANOVAs) that seek to compare the conditions. In particular, I show that within-condition exclusions inflate any random difference that was originally present between the conditions, and increase the probability of a false-positive result.

I first demonstrate this result in simulated data. I generated 243 experimental setups, orthogonally considering three possible distribution of responses (a normal distribution, a normal distribution with outliers , and a log-normal distribution), three possible samples sizes (50, 100 or 250 observations per condition), three possible methods (z-score, IQR, and Median Absolute Difference) and three possible cutoffs (1.5, 2 or 3 times the z-score/IQR distance/Median Absolute Difference) for excluding outliers, and three different statistical tests: A parametric test of differences in means (Welsch's t-test), a non-parametric test of differences in central tendencies (Mann-Whitney's U), and a non-parametric test of differences in distribution shapes (the Kolmogorov-Smirnov test) .

I simulated 20,000 experiments in each of those 243 different setups, for a total of 4,860,000 simulated experiments. In each experiment, I draw two samples at random from the same population (such that the null hypothesis is true), and observe the p-value of the difference between the two samples under three different outlier

exclusion strategies: 1. No exclusions, 2. Exclusions across the data, 3. Exclusions within each condition. These simulations reveal nominal false-positive rates (α = .5%) when no outliers are excluded, or when they are excluded across the data. In contrast, I systematically observe higher false-positive rates when outliers are excluded within conditions: They are always higher than 6%, and as high as 28%. The most severe false-positive rates are observed for parametric tests (i.e., t-tests or ANOVAs) applied to skewed data (i.e., a log-normal distribution). It is a concerning result: Outliers are most frequently excluded in the context of over-dispersed data (e.g., reaction times, willingness-to-pay, sum-scores…).

I then replicate this result using the data of an actual paper: Cao, Kong, and Galinsky (2020). This paper presents an interesting case study for multiple reasons. First, the authors have pre-registered their analysis and posted their data online, which makes it possible to measure the false-positive rates that one could observe under different outlier exclusion strategies. Second, they have excluded outliers by condition (rather than across the data). Third, it appears that the outliers were iteratively removed: After excluding outliers from their data a first time, they again applied the same procedure to the cleaned data until no new outliers were found. Such iterative procedure has occasionally been recommended to facilitate the identification of outliers in heterogeneous data (Meyvis & Van Osselaer, 2018; Schwertman & de Silva, 2007; Van Selst & Jolicoeur, 1994).

In the authors' data, I again find nominal false-positive rates when no outliers are excluded, or when they are excluded across the data. In contrast, I again find unacceptably high false-positive rates when outliers are excluded within conditions (always higher than 9%, and as high as 43%), and even higher false-positive rates when iteratively excluding outliers within conditions always higher than 58%).

Finally, the paper demonstrates a more general result: Any outlier exclusion procedure that is not blind to the hypothesis that researchers want to test may result in inflated Type I error rates. To demonstrate this result, I focus on residual-based exclusions, in which outliers are identified based on the residuals (studentized or standardized) of a linear model (Cohen et al., 2002; Judd et al., 2017). With this approach, any data point with a residual greater than some pre-determined threshold is excluded from the data. However, I show that an important subtlety of this procedure is often overlooked: The model from which the residuals are computed must exclude the predictor that researchers want to test. I provide additional simulations showing that when the model includes the predictor of interest, we again observe inflated false-positive rates.

I conclude by providing general recommendations and guidelines for outlier exclusion procedures, and offer alternatives to within-condition exclusions.

A Framework for Imputing Choice Shares from Rating Data

EXTENDED ABSTRACT

Behavioral researchers may measure preference using different elicitation procedures, such as choice and ratings. Rating data contain richer information than choice data because they can capture both the extent to which participants like a given option, as well as the participants' relative preference for one option over the other(s). In fact, researchers can readily impute choice shares from rating data by comparing the ratings of the options. Prior literature provides numerous examples where researchers imputed choice shares from rating data (e.g., Burson et al., 2009; Evangelidis & Levav, 2013; Fischer & Hawkins, 1993; Nowlis & Simonson, 1997; Shiv & Huber, 2000). In this paper, I examine when imputations of choice shares from rating data are more likely to be accurate.

I conjecture that choice shares imputed from rating data tend to deviate from choice shares obtained through a choice task because of differences in the extent to which choice and ratings are sensitive to the relative utility of the options. This can occur even when participants' evaluations (or utilities) of the options are held constant across tasks. My basic proposition is that choice is more sensitive to utility differences than rating. Consequently, choice shares imputed from rating data will underestimate consumers' preference for "advantaged" options (i.e., options that carry a higher amount of utility). In my studies, advantaged options are either alternatives that are strictly dominating or options that are favored by their relative attribute performance (as in Tversky et al., 1988).

I provide evidence for my predictions and for various moderators in 6 well-powered pre-registered experiments. Study 1 (N=400) provides evidence for my basic effect using two sets of actual products from Amazon.com. Participants were randomly assigned to one of four conditions of a 2 (stimuli: hard drives vs. water bottles) by 2 (task: choice vs. rating) between-participants design. Participants in the choice conditions were asked to indicate which hard drive (water bottle) they preferred. There was a no-choice option that stated "I have no preference between these options." Their counterparts in the rating conditions were asked to indicate how much they liked each hard drive (water bottle) (1 = not at all, 7 = very much). My data show that choice shares imputed from rating data underestimate consumers' preference for advantaged (i.e., high-utility) options (combined across products: actual choice share = 70.5% vs. imputed choice share = 55%, p = .001; p < .028 for both products). Study 2 (N=247) is a lab experiment that provides further evidence for the effect using actual purchases (actual choice share = 95.1% vs. imputed choice share = 83.9%, p = .006). Study 3 (N=301) shows that the basic effect is observed even when attribute importance is constant across tasks (actual choice share = 65.6% vs. imputed choice share = 30.7%, p < .001).

In subsequent studies, I test moderators of the basic result. Study 4 (N=778) demonstrates that the discrepancy between choice and rating is smaller in magnitude when the response scale used in the rating task is relatively more granular, such as when it consists of more scale points. Replicating previous findings, the choice share imputed from 7-point ratings represented a sizeable underestimation of the actual choice share of the advantaged option (92.2% vs. 55.1%, p < .001). This result was largely attenuated when the choice share was imputed from ratings on more granular scales (choice vs. 20-point rating: 92.2% vs. 81.8%, p = .008; choice vs. 50-point rating: 92.2% vs. 85.4%, p = .057; choice vs. 100-point rating: 92.2% vs. 79.9%, p = .002). Data of Study 4 show that participants are better able to express a weak relative preference for the advantaged option when the rating scale is relatively more granular. This can lead to better imputations of choice shares from ratings. Interestingly, data of Study 4 suggest that the mere use of 20-point rating scales (vs. 7-point rating scales) can greatly boost the accuracy of imputations. Further increases in the granularity of the rating scale (e.g., through the use of 50-point or 100-point rating scales) do not greatly affect the results.

Study 5 (N=502) tests the accuracy of imputations when rating responses are elicited through a strength-of-preference task. Strength-of-preference are rating tasks that involve an assessment of the degree to which the consumer prefers one option relative to the other. Strength-of-preference tasks elicit judgments of relative preference through a single bipolar rating scale with endpoints that indicate strong preference for one option over the other (e.g., −3 = I

strongly prefer A, 3 = I strongly prefer B). Replicating previous findings, the choice share imputed from independent ratings was a substantial underestimate of the actual choice share of the advantaged option (79% vs. 60.5%, p < .001). Importantly, the choice share imputed from strength-of-preference ratings did not differ significantly from the actual choice of the advantaged option (79% vs. 72.6%, p = .171). Further, the difference between the two rating conditions was statistically significant (72.6% vs. 60.5%, p = .019). Study 5 demonstrates that the basic effect is attenuated when the rating task involves judgments of relative (vs. absolute) preference.

Finally, Study 6 (N=602) shows that the effect is attenuated when the difference in utility between the options is relatively large. In order to manipulate the difference in utility between the two options, I varied the magnitude of the difference in attribute values. In the small difference conditions, the choice share imputed from rating data was an underestimate of the actual choice share of the advantaged option (74.3% vs. 50.3%, p < .001). In contrast, in the large difference conditions, this result was largely attenuated (96.1% vs. 93.3%, p = .291).

My data suggest that researchers should be able to impute choice shares from rating data with relatively high accuracy when (1) they employ independent ratings with highly granular scales (S4), (2), they employ strength-of-preference instead of independent ratings (S5), and (3) the options present substantial differences in utility (S6).

A Recipe for Honest Consumer Research

EXTENDED ABSTRACT

Consumer research has rightfully been criticized for p-hacking, Hypothesizing After the Results are Known (a.k.a. HARKing), and other practices that overestimate the reliability, and replicability, of results. Remedies that have been proposed, and partially implemented, have centered on making consumer research more closely approximate the ideal hypothetico-deductive method. Researchers have been urged to form, and register, one or very few Hypothesis before running experiments, test only those Hypothesis, and test each hypothesis with a single, preplanned analysis.

We argue that perfecting the hypothetico-deductive method is not the solution. P-hacking and HARKing are not the problem per se. The problem is that the research community misrepresents exploratory research as hypothetico-deductive. Authors, reviewers, and editors often force exploratory research into a hypothetico-deductive straightjacket. This leads to bad hypothesis testing. The hypothetico-deductive straightjacket also leads to bad exploration, crowding out essential, good exploration. We propose a two-part recipe for honest consumer research, in which authors first report studies in which they unapologetically lean into exploration to generate Hypothesis, followed by studies that are truly hypothetico-deductive and meant to provide strong, reliable tests of those Hypothesis.

The Recipe Part 1: Exploration and Hypothesis Generation

Authors should unapologetically acknowledge the exploratory nature of the first set of studies in a manuscript, which are meant to generate Hypothesis (or refine hunches or two- or more-sided possibilities into specific, formal, Hypothesis) rather than to test them. If authors no longer need to report exploratory studies as hypothetico-deductive, exploratory studies can be designed to maximize the probability of finding something interesting, to get the best possible view of potential moderators, to optimally uncover potential underlying processes, and to explore boundary conditions. This can be achieved by sampling broadly across multiple paradigms, stimuli, contexts, and participants, using more than one independent variable, and employing several measures of potential mediators and dependent variables.

At this stage, qualitative research can be very insightful. Listening to consumers, marketers, or public-policymakers can provide very powerful insights for the generation of Hypothesis and it is often interesting and enriching to (briefly) report these insights in an article.

We believe that exploratory analysis should be reported differently from confirmatory analysis:

Pre-registration of Purely Exploratory should be Optional. While pre-registrations do not prevent exploration (Simmons et al., 2021), they have little benefits in exploratory research.

Report Statistical Tests, Without Correction for Multiple Testing. P-values and confidence intervals are often dismissed as meaningless in exploratory analyses. One might, indeed, argue that purely exploratory analyses should not make use of statistical tests as these tests are designed to test a priori Hypothesis. The latter may be true, but we believe that traditional statistical tests still provide useful information. A classic statistical test still provides an indication how unlikely the result would be if there was really a null effect. Moreover, reporting these statistics over a series of exploratory studies will provide information about the robustness of an effect, as well as allow a reader to compute effect sizes.

Report Analyses with and without Exclusions and Covariates. It is absolutely fine to p-hack exploratory studies. As long as exploratory studies are clearly identified as such, it is good to search for strong relationships, regardless of whether the authors had an a priori hunch about those relationships. Data exclusions and using individual difference or context variables to hunt for interaction effects are extremely useful. They give us information about the people, contexts, and stimuli in which effects are stronger or weaker. The same is true for covariates. By knowing what other variables influence the dependent variable, we learn when and how an effect of the independent variable may be "crowded out" by other influences on the dependent variable. There are clear benefits to doing analyses with and without different sets of exclusions and covariates.

Report, Briefly, What Didn't Work. Suppose there is a real effect that just happens to occur only under very specific circumstances (i.e., narrow generalizability). If the authors run a hypothetico-deductive replication that employs the same, specific circumstances, the effect will replicate. The danger is in the failure to report all the other situations in which the exploratory research did not yield the effect. Even if the authors report the specific analysis that yielded the significant results, the reader does not know how narrowly the effect applies. The result is that readers overestimate the generality of the finding. This is costly because it may lead practitioners to unsuccessfully try to apply the finding in situations in which it does not apply. It might also lead other researchers to waste resources trying to conceptually replicate the effect. The narrow generalizability problem can be mitigated by briefly reporting all exploratory results in a Web Appendix.

The Recipe Part 2: Hypothesis Testing

Following the exploratory studies used to generate Hypothesis, the second set of studies in a manuscript should then be designed to test those Hypothesis. These studies should be truly hypothetico-deductive and they should minimize the probability of Type I errors through preregistration and other ways to avoid p-hacking and HARKing. These studies are designed to present real evidence for a process or a phenomenon. Thus, in addition to minimizing Type I

error, they should also safeguard against alternative explanations of processes and effects:

Pre-registration of Confirmatory Studies is Crucial. In the hypothetico-deductive section of the article, it is absolutely critical that studies are preregistered. In this stage maximum confidence is needed that the hypothesized effects are reliable.

Hypothesis Need to be Clear on What Authors Are Trying to Prove. Most Hypothesis in consumer research are underspecified. They simply indicate relationships between variables, but they do not indicate the scope of the claim the authors are trying to make. Authors should specify whether they only want to provide an existence proof or to also imply a broader scope of relevance and importance.

Authors should Test and Report the Pre-registered Analysis. If authors preregister a hypothetico-deductive study, reporting is easy. Authors should test and report the Hypothesis as pre-registered, nothing more and nothing less.

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Transparency in the Era of Algorithmic Decision-Making

Chair: Andrea Bonezzi, New York University, USA
Discussant: Massimiliano Ostinelli, Winthrop University, USA

Paper #1: Denied by an (Unexplainable) Algorithm: Teleological Explanations for Algorithmic Decisions Enhance Customer Satisfaction

Geoff Tomaino, INSEAD, France
Hisham Abdulhalim, Ben-Gurion University of the Negev, Israel
Pavel Kireyev, INSEAD, France
Klaus Wertenbroch, INSEAD, France

Paper #2: Moderators of Algorithmic Transparency and Explainability

Ipek Demirdag, UCLA, USA
Suzanne Shu, Cornell University, USA

Paper #3: The Unintended Effect of Algorithmic Transparency: Mere Access to Explanations Foster Illusionary Understanding

Andrea Bonezzi, New York University, USA
Massimiliano Ostinelli, Winthrop University, USA
Monika Lisjak, Arizona State University, USA

Paper #4: AI Can Help Counter Self-Threats

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Yael Steinhart, Tel-Aviv University, Israel
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SESSION OVERVIEW

Algorithms are increasingly replacing humans in making decisions that impact people's lives in profound ways. Although algorithms are often more accurate than humans (Grove, Zald, Lebow, Snitz, & Nelson, 2000), concerns have been raised about the black-box nature of algorithmic decision-making. In most cases, users don't have access to algorithms' inner-workings, and thus they cannot understand how an algorithm reaches a certain determination. Scholars have long recognized the need to make the inner-workings of algorithms transparent (Buchanan and Shortliffe 1984; Watson & Nations, 2019), as the inability to understand how algorithms work can discourage consumers' from relying on algorithmic determinations (Herlocker, Konstan, and Riedl 2000; Sinha and Swearingen 2002; Ye and Johnson 1995).

The four papers included in this session investigate how transparency influences consumers' acceptance of algorithmic determinations, informing this issue from different theoretical angles and utilizing different methodological approaches. In the first paper, **Tomaino, Abdulhalim, Kireyev,** and **Wertenbroch** examine the role of different explanations in providing transparency for algorithmic decisions. They propose that teleological explanations (i.e., explaining why a decision was made) can be effectively used in lieu of mechanistic explanations (i.e., explaining how a decision was made) to convey algorithmic transparency. When consumers are rejected by an algorithm, offering a teleological explanation can reassure consumers about the fairness of the process and increase acceptance of the decision. In the second paper, **Demirdag** and **Shu** examine moderators of algorithmic transparency. Transparency increases trust in algorithmic determinations more when consumers are familiar with the choice options and when the goal an algorithm optimizes aligns with the goal consumers are trying to achieve. Moreover, increasing transparency by explaining the inputs an algorithm considers increases trust more when consumers have a moderate level of expertise and when the process is demonstrated to be fair. In the third paper, **Bone-**

zzi, **Ostinelli,** and **Lisjak** document an unintended negative consequence of initiatives aimed to increase algorithmic transparency. Merely knowing that an explanation about the inner-workings of an algorithm is accessible—without actually reading it—can foster an illusory sense of understanding that yields unfounded confidence in algorithmic determinations. In the fourth paper, **Linzen, Steinhart,** and **Carmon** broaden the perspective by proposing that understanding AI can play a restorative role when consumers feel threatened. Threatened consumers perceive AI-based products as more helpful in managing their lives and thus as more appealing than comparable non-AI products, whereas users subject to low-perceived-threat prefer non-AI products.

Overall, this session provides timely insight into algorithmic transparency, an important topic given the pervasive influence of algorithmic determinations on consumers' lives. This session addresses ACR's theme of *What the World Needs Now* by providing new knowledge on what affects consumers receptivity to decisions made by artificial intelligence agents. This session should be of interest to a broad audience, spark a rich discussion and fruitful opportunities for future research.

Denied by an (Unexplainable) Algorithm: Teleological Explanations for Algorithmic Decisions Enhance Customer Satisfaction

EXTENDED ABSTRACT

With recent developments in artificial intelligence and automation technologies, firms can make complex decisions about customers at scale with increased speed, efficiency, and accuracy. Despite this potential, a major concern with decision-making algorithms is their "black-box" nature (Goodman & Flaxman 2017). While an algorithm may have been created to achieve a clear decision-making objective or goal, the evolving mechanism through which it attempts that goal is often "unexplainable." That is, the algorithm itself has developed a statistical mechanism to achieve its goal that is beyond reasonable human comprehension, improving its statistical performance at the expense of its ability to transparently account for output decisions. A lack of explainability may also arise because of legal or commercial confidentiality restrictions for otherwise explainable algorithms. We study customer satisfaction with explanations for classification decisions and find that firms can still offer a satisfying explanation in lieu of being able to offer a mechanistic explanation of their decision algorithms.

Philosophers and psychologists have long—since Aristotle—distinguished between mechanistic and teleological explanations. A mechanistic explanation describes how the parts of a system interact to cause an outcome (Craik 1943). Teleological explanations explain an outcome in terms of its purpose, that is, what goal an outcome serves (Lombrozo & Carey 2006; e.g., a consumer is told that they are shown an advertisement because the advertiser wants to maximize the consumer's purchase likelihood). These answer two key questions that consumers may ask to assess the fairness of being denied by an algorithm and how to reverse this outcome or prevent it in the future: "how?" (mechanistic) and "why?" (teleological). However, what is key to the context of unexplainable algorithms is that teleological explanations can be provided independently of understanding the underlying mechanism. Across three experiments, we

find that teleological explanations can mitigate negative consumer responses through implying that firms aim to treat consumers fairly.

Our primary contribution is to extend the management literature on human interactions with algorithms by examining the psychological effects of explaining algorithmic decisions to customers. People often trust algorithmic judgments less than humans (Burton et al. 2019; Dietvorst et al. 2015), despite the long-established greater reliability of algorithms (Dawes et al. 1989). Unlike most related prior research though, we do not compare consumer preferences for algorithmic versus human determinations, but examine consumer reactions to varying explanations for algorithmic decisions.

In Experiment 1, we tested whether providing a teleological explanation, over no explanation, would enhance satisfaction and acceptance among customers who have been denied access to desired opportunities by an algorithm. We partnered with a technology firm that offers e-commerce and other services, and processes a large number of purchases every day. Customers of this firm usually make a customer support inquiry when an algorithm blocks a purchase; we measured customer satisfaction as the absence of such an inquiry. Using a sample of N = 10,295 declined purchases, we gave every seventh rejected consumer a teleological explanation of "(The company) blocks such purchases to ensure the financial well-being of our customers." while the remaining consumers were given no explanation for their rejection. We found that being provided a teleological explanation reduced the likelihood of calling customer service by 7.4%.

We designed Experiment 2 to conceptually replicate the findings of our field experiment and also to compare the effect of teleological and mechanistic explanations on satisfaction depending on whether participants can act on the explanation, that is, whether it has instrumental value. To do this, we had participants answer a series of visual perception questions with a $.10 bonus and reduced workload for the rest of the study being awarded, depending on their responses. We then told all participants that they were rejected for this award after completing the visual perception questions and either told them they would have a second chance, or would not have a second chance. Participants were also either given no explanation for this rejection, a teleological explanation describing our selection criteria's goals, or a mechanistic explanation telling them how they answered "incorrectly." Regardless of whether a participant had a second chance, they were always more satisfied with the study when they received either type of explanation. When there was no second chance, i.e. they could not undo their rejection, participants were equally satisfied with a teleological or mechanistic explanation. When there was a second chance, a mechanistic explanation was more satisfying. These results demonstrate that when a mechanistic explanation is not instrumental, a teleological explanation can be equally satisfying to consumers.

In Experiment 3, we directly tested the psychological process underlying the beneficial effect of teleological explanations. We hypothesized that teleological explanations for negative outcomes enhance satisfaction in algorithmic decision-making settings because they convey that customers are being treated fairly, since they can imply they are being treated consistently (Dawes 1979) and according to a reference standard (Kahneman et al. 1986). Using the same general paradigm as Experiment 2, participants were again rejected for a bonus and reduced workload after a visual perception task. Participants were then either given a fair teleological explanation ("This is because the researchers are interested in data from participants with a certain type of visual perception."), a teleological explanation which conveys an unfair process ("This is because the researchers want to collect more data from certain participants while minimizing

the costs of the study."), or no explanation. We found that while an unfair teleological explanation left participants more satisfied with the study than no explanation, the fair teleological explanation was the most satisfying message. These differences between the fair teleological explanation and the other two messages were mediated by the explanation's fairness.

Overall, we find that when a firm cannot offer a mechanistic explanation for a decision due to their usage of an unexplainable decision algorithm, they can still convey fair-processes and achieve consumer satisfaction through offering a teleological explanation. However, in line with increasing political and consumer pressure to offer transparency in a firm's dealings, appeasing consumers through teleological explanations may not always be the most ethical route.

Moderators of Algorithmic Transparency and Explainability

EXTENDED ABSTRACT

Previous research shows that process transparency (i.e., a decision characteristic whereby a decision process is perceived to be understood) is a novel driver of algorithm aversion, since it predicts trust, and consequently contentment with that technology (Demirdag and Shu 2021). Decision recipients value knowing how an outcome materializes and process transparency is one of the determinants of trust. The lack of transparency of algorithmic (vs. self) decision processes lowers consumers' trust in the algorithmic decision-maker's ability to choose for them, hence lowering their satisfaction levels. Additionally, increasing input explainability (i.e., the consumer's ability to know relevant input information regarding a particular decision) has been demonstrated as an effective intervention to increase process transparency and trust, leading to higher consumer satisfaction with decisions made in the digital world (Demirdag and Shu 2021). Building on previous research and across four studies, the current paper investigates moderators for process transparency and input explainability.

Process transparency's influence on algorithm aversion is likely to be affected by the characteristics of the options in a decision, such as familiarity (i.e., the number of product-related experiences gathered by the consumer; Alba and Hutchinson 1987). Past research has shown that high familiarity leads to quicker and more confident decision-making (Park and Lessig 1981). This might be due to the processes of familiar (vs. unfamiliar) decisions being more transparent to the consumer. Accordingly, in study 1 (N = 599), we tested our hypothesis that familiarity moderates the role of process transparency in algorithm aversion, using real or fictitious drink names in a 2 (Self Choice, Algorithmic Choice) x 2 (Option Familiarity: Familiar, Unfamiliar) between-subjects design. A moderated mediation analysis using 10,000 bootstrapped samples revealed that the indirect effect of choice type on trust through process transparency was more substantial for familiar than for unfamiliar decisions: estimated difference (ACME of Familiar - ACME of Unfamiliar) was .469, 95% CI: [.273, .669]. In other words, process transparency mediated the relationship between choice type and trust more for decisions with familiar than unfamiliar options.

In study 2 (N = 958), we studied the moderating role of goal alignment on transparency. In a decision process, decision-maker's goal may or may not align with the consumer's goal in using a digital platform. For instance, the bank's goal in accepting a loan application could be to provide the consumer with the money they need to pay for their necessary expenses (transparent aligned goal). In contrast, the bank's goal could be to earn interest income (transparent misaligned goal). Accordingly, goal alignment might moderate

whether transparency increases trust and satisfaction. In a 2(Human, Algorithm) x 3(Transparent/Aligned, Transparent/Misaligned, Non-transparent) between-subjects design, in the context of a loan application, we find that goal aligned (vs. misaligned) decisions were more satisfactory (F(1, 956) = 105.30, p < .001) and trustworthy (F(1, 956) = 54.99, p < .001). Additionally, nontransparent (vs. misaligned) decisions were viewed as more satisfactory (F(1, 956) = 101.20, p < .001) and trustworthy (F(1, 956) = 57.28, p < .001). Non-transparent and aligned decisions were not significantly different. Therefore, we find that goal transparency can hurt if the goal is not aligned, but it does not help if the goal is aligned.

Study 3 (N = 387) investigated expertise as a moderator of input explainability. Past research has shown that experts rely less on algorithmic advice than lay people (Logg, Minson, and Moore 2019). Experts might find an algorithm's input explainability less valuable for increasing satisfaction with the product, as they may already know how such algorithms make decisions. We tested this prediction in an algorithmic song selection decision on a music streaming platform, Spotify. Participants were either told why the Spotify algorithm chose the songs on a playlist (explainable condition) or not (unexplainable condition). We conducted a floodlight analysis to test, which revealed two Jonson-Neyman points: 3.92 and 19.62. Input explainability had no effect for those who used Spotify more than 19.62 hours per week and for those who used Spotify less than 3.92 hours per week. The input explainability intervention was effective in increasing satisfaction for the 56.6% of participants who used Spotify more than 3.92 hours but less than 19.62 hours. Surprisingly, the mid-level users appear to benefit from input explainability the most. Nonexperts are (dis)satisfied with and experts are satisfied with the algorithmic choice similarly whether it is explainable or unexplainable: explainability had no effect on experts or nonexperts. In study 4 (N = 1,203), we addressed whether and how input explainability is moderated by procedural fairness, since input explainability increases the perceived understanding of internal processes of a human or an algorithmic decision-maker. We employed a 2(Human, Algorithm) x 2(Explainable, Unexplainable) x 2(Fair, Unfair) between-subjects design in the context of a loan application rejection. We found that input explainability increased trust for procedurally fair decisions, but decreased trust for unfair decisions (interaction: B = .168, SE = .028, t(1199) = 6.10, p < .001). Additionally, input explainability increased dissatisfaction for procedurally unfair, but not fair, decisions (interaction: B = -.132, SE = .045, t(1199) = -2.94, p = .003). Therefore, procedural fairness moderates the positive effect that input explainability has on trust and satisfaction such that if the procedures were explained to be unfair, then input explainability hurts trust and satisfaction. In contrast, if the process is demonstrated to be fair through input explainability, then trust and satisfaction could be boosted.

In conclusion, by providing important moderators, the present paper builds on previous research which shows the key roles of process transparency and input explainability. Due to the perceived insufficiency in understanding algorithmic decision processes, unfamiliarity attenuates, but does not eliminate, algorithm aversion. Furthermore, transparency of the goal can hurt satisfaction if the goal is misaligned with consumer's goal, but it does not help if the goal is aligned. Our results indicate that, companies may choose to focus their explainability interventions on their mid-level users, as those customers may benefit more from such interventions. Nonetheless, companies should ensure procedural fairness in order for explainability interventions to be successful.

The Unintended Effect of Algorithmic Transparency: Mere Access to Explanations Foster Illusionary Understanding

EXTENDED ABSTRACT

The increasing influence of algorithmic determinations on consumers' lives has brought about mounting concerns about the lack of transparency of algorithmic decision-making. The inability to access the inner-workings of algorithms poses a serious threat to consumer welfare (Martin 2019) and can discourage consumers' from relying on algorithmic determinations (Buchanan and Shortliffe 1984; Herlocker, Konstan, and Riedl 2000; Sinha and Swearingen 2002; Ye and Johnson 1995). In response to these concerns, legislators have institutionalized a "right to explanation," that is, a right to know how an algorithm works to reach a certain determination (Goodman and Flaxman 2017). And companies have begun to provide access to explanations of how their algorithms work.

These initiatives are motivated by the implicit assumption that explanations can increase consumers' understanding of how algorithms work by revealing their inner workings. Yet, although companies can make explanations for how their algorithms work accessible, evidence shows that people generally don't read transparency policies (Hart 2019). And if consumers don't read such explanations, their understanding of how algorithms work should remain unimpacted, defeating the very purpose of these initiatives.

In this research, we argue that providing access to explanations of how algorithms work can sometimes have an unintended negative effect. Across three studies, we show that merely knowing that an explanation for how an algorithm works is accessible—without actually reading it—can foster an illusionary sense of understanding. This occurs because having the potential to access an explanation fulfils people's innate desire to feel effective—a fundamental human motive referred to as *effectance motivation* (White 1959)—and this, in turn, yields a false sense of understanding. We further show that the illusory understanding fostered by the mere accessibility of an explanation can yield greater confidence in algorithmic recommendations without providing actual knowledge.

In study 1 (n=200) participants read about an algorithm that provides investment recommendations. Participants were informed that a description of how the algorithm works had been available on the company's website versus not before reporting the likelihood they would use the algorithm (1=very unlikely; 7=very likely), and their understanding of how the algorithm works (1=do not understand at all; 7=understand completely). To rule out the possibility that liking toward the company underlies the focal effect, we measure company liking (1=negative/bad/poor; 7=positive/good/excellent). Participants indicated a greater likelihood to use the algorithm when they read that an explanation for how the algorithm works was accessible (M=4.02, SD=1.66) versus not (M=3.34, SD=1.65; t(198)=2.92, p=.004). Participants also reported a greater sense of understanding when the explanation was accessible (M=3.25, SD = 1.67) versus not (M=2.23, SD=1.60; t(198)=4.40, p<.001). Liking toward the company did not differ between conditions (p=.419). A mediation analysis shows that sense of understanding mediated the effect of explanation accessibility on intentions (b=.29, 95%CI: .11, .51).

In study 2 (n=200), we test the hypothesis that the explanation accessibility effect should be more pronounced among individuals with stronger dispositional effectance motivation. Following past research (Epley, Waytz, and Cacioppo 2007), we captured differences in effectance motivation through the proxy measure of desire for control measured with three items from Burger and Cooper (1979).

Next, we manipulated explanation access for a medical algorithm as in study 2. Finally, we measured perceived understanding of how the algorithm works. The analysis revealed a significant interaction (b=.53, t(196)=2.08, p=.039). A Johnson-Neyman analysis (Spiller et al. 2013) revealed that respondents with dispositional desire for control greater than 5.51 (on the 7-point scale) displayed the explanation access effect, but not those with lower desire for control.

Finally, in study 3 (n=200), we test the entire sequential mediation model via sense of understanding and certainty. We first manipulated explanation access in the context of a medical algorithm. Participants then reported their intentions to use the algorithm, performance certainty (1=not at all certain; 7=extremely certain), accuracy (1= not at all accurate; 7 = very accurate), and sense of understanding. Accuracy was measured to rule out the possibility that perception of accuracy, rather than perception of certainty, drives the explanation accessibility effect. The measures of accuracy and certainty were presented in a randomized order.

Participants in the explanation accessibility condition reported greater intentions to use the algorithm (M=4.33, SD=1.64) than those in the control condition (M=3.51, SD=1.80; t(198) =3.37, p=.001). Explanation accessibility also increased sense of understanding ($t(197) = 3.31$, $p =.001$), and performance certainty ($t(198) = 2.58$, $p =.011$). There was no significant difference in perception of accuracy ($t(198) = 1.46$, $p =.145$). A mediation analysis (explanation accessibility→understanding→certainty→intentions) provided support for the proposed theoretical model (b=.33, 95%CI: .13, .57).

Our work contributes to the broader literature on consumers' receptivity to algorithmic versus human determinations (Dietvorst, Simmons, and Massey 2015; Bonezzi and Ostinelli 2021) and, more specifically, to research on algorithmic transparency (Bonezzi, Ostinelli and Melzner 2020). Past research has examined the effects of transparency policies from a cognitive standpoint by investigating how different types of knowledge might be more or less effective at fostering understanding and reliance on algorithmic recommendations. We depart from that tradition by proposing a motivation account of the effects of transparency policies showing that explanations can also fulfill a need for effectance without providing any knowledge. Our findings have implications for companies and public policies by showing a possible, unintended effect of algorithmic transparency initiatives: While designed to promote consumers' literacy, these initiatives can foster unfounded confidence in algorithmic decision-making.

AI Can Help Counter Self-Threats

EXTENDED ABSTRACT

In spite of the tremendous benefits that AI offers, prior research has shown that consumers tend to have reservations regarding AI-based products and services (e.g., Leung, Paolacci and Puntoni 2018; Lynskey 2019; Samuels 2020). In this research, we identify situations in which users embrace AI interactions. We argue that because AI can play a restorative role when consumers experience threat, people who feel threatened are more likely to prefer engaging with AI as a means to improve managing their everyday lives.

People experiencing threat (e.g., loss of control, loss of power, or threat to self-esteem) often seek ways to counter the threat and restore a sense of security (Campbell and Sedikides 1999; Crocker and Park 2004; Ryan and Deci 2000; Steele 1988; Steinhart and Jiang 2019). Indeed, prior research has established connections between such threats and consumption, showing that threatened individuals seek experiences or products that protect or enhance the self (e.g.,

Baumeister, Tice and Hutton 1989; Rucker, Galinsky and Dubois 2012; Shrum et al. 2014).

We argue AI's rather uncanny capacity to provide remarkably helpful recommendations and actions by leveraging insights it obtains from information that it gathers from users may help users cope with self-threats. We hypothesize that threatened consumers are likely to perceive such products as helpful in managing their everyday lives, and therefore as appealing.

Below we present four studies that support our proposition. Study 1a provides preliminary evidence that participants are more likely to prefer AI-based products if they feel threatened. Study 1b replicates and extends these findings by comparing preferences for an AI with a non-AI-based product. Study 1c replicates and further extends earlier findings using a timely threat manipulation (Covid-19). Study 2 shows that threatened participants' preference for AI-based products is mediated by the perceived capacity to help them manage their lives.

In Study 1a (n = 208) we manipulated perceived self-threat through participants' sense of control over their environment (Munichor and Steinhart 2016). Participants wrote either about an experience in which they experienced a loss of control or full control over the course of events. They then viewed a brief video clip in which an actual AI-based virtual assistant (VA) conducted a human-like phone conversation with a human service provider. Consistent with our predictions, threatened participants reported greater intentions to purchase the AI-based product that was featured in the video compared with participants in the low threat (i.e., full control) condition.

In Study 1b (n = 506) we added a non-AI version of the VA. Participants underwent the same threat manipulation used in Study 1a. They then read one of two versions of a VA description: (a) an AI-based VA that learns the user's preferences and integrates them into practical decisions and actions, and (b) a non-AI-based VA that carries out the user's requests, decisions, and orders. A 2×2 ANOVA yielded a significant interaction. As expected, threatened participants reported higher purchase intentions toward the AI version than toward the non-AI version. In contrast, participants in the low threat (i.e., full control) condition preferred the non-AI over the AI version.

Study 1c (n = 312) further replicated and extended the earlier results by utilizing a different threat manipulation. In the threat condition, participants described how the COVID-19 pandemic disrupted their lives. In the baseline condition, participants described a TV show or a movie they had watched recently (cf. Cutright 2012). A 2×2 ANOVA yielded a significant interaction. Consistent with our predictions, participants in the threat condition reported higher purchase intentions toward the AI version than toward the non-AI version. Participants in the baseline condition reported higher purchase intentions toward the non-AI version, though this preference failed to reach conventional level of significance.

Study 2 sought support for the underlying mechanism. We measured the extent to which participants experience threat by asking them to rate how well they were coping during the COVID-19 pandemic. Participants then read the same AI or non-AI VA descriptions used in Studies 1b and 1c. A regression analysis (n = 192) yielded a significant interaction between self-threat and VA versions. The results of a Johnson-Neyman "floodlight" analysis confirmed that, as predicted, threatened participants (who reported that they were not coping well during the pandemic) reported higher purchase intentions toward the AI compared to the non-AI product version. In contrast, non-threatened participants (who reported that they were coping well during the pandemic) reported higher purchase intentions toward the non-AI product. A moderated mediation analysis further showed that among threatened participants, this effect was

mediated by the product's perceived ability to help users to manage their lives, while among participants who felt they were coping well with COVID-19, the mediation effect was not significant.

Collectively, the findings support our prediction of AI's potentially restorative role for people experiencing threat.

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Biases in Consumers' Use of Numbers

Chair: David Zimmerman, University of California Los Angeles, USA
Discussant: Bart de Langhe, ESADE, Spain

Paper #1: Undersum Bias

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Adam Eric Greenberg, Bocconi University, Italy
Dan R. Schley, Erasmus University, Netherlands

Paper #2: When Metrics Matter: Elicitation Metric Influences Uncertainty Estimates

David Zimmerman, University of California Los Angeles, USA
Stephen Spiller, University of California Los Angeles, USA
Nicholas Reinholtz, University of Colorado Boulder, USA
Sam J. Maglio, University of Toronto, Canada

Paper #3: How Categorization Shapes the Probability Weighting Function

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SESSION OVERVIEW

Numbers are central to how consumers interact with products and the marketplace. Consumers sum up prices on a menu and add on tax and tip. They consider how many gallons of gas they can buy given the $20 bill in their wallet, the price of a single gallon, and their uncertainty about both. And when weighing different flight itineraries, they may consider that one option is on time 82% of the time and another only 76% of the time. From the basics of prices and quantities, to the probabilities of expectations about future consumption, numbers are intrinsic to consumer experiences. Two examples of biases are the left digit bias leading people to judge the difference between 6.00 and 4.95 to be greater than 6.05 to 5.00 (Thomas & Morwitz 2005) and increased anchoring effects in unfamiliar currencies (Mussweiler & Englich 2003). These and other heuristics and biases shape the way in which consumers evaluate and conceptualize numbers, with substantial implications for how they evaluate prices (Thomas & Morwitz 2009, Cheng & Monroe 2013). Building off these findings, the papers in this session consider three ways in which people may deviate from current theories of decision making and their ubiquitous consumer choices.

The first two papers consider how consumers deal with distributions of numbers. The first paper looks at how people fail to accurately sum numbers, which is critical for managing income and expenses. **Goswami, Greenberg, & Schley** demonstrate a systematic and substantial undercounting of sequences of positive numbers, which they call undersum bias. This bias is extremely robust and withstands both incentives for accuracy as well as for overestimation. They show that undersum bias is both a sizable and consequential cause of overconsumption and overspending behaviors. The second two papers both examine how numeric representations may shape perceptions of uncertainty. **Zimmerman, Spiller, Reinholtz, & Maglio** examine the impacts of metrics on consumer's estimates of uncertain quantities. They show that simple transformations (e.g., inverse and level shift) of the estimated metric produce predictable inconsistencies. These tendencies are driven by making relatively more symmetric estimates of uncertainty in the metric elicited and more uncertainty when the metrics are more numerous. **Schley, Ferecatu, Chan, & Gunadi** reconsider the nature of how consumers categorize uncertainty us-

ing experimental and model-based approaches. In this paper, they show that both probability sensitivity and the shape of the probability weighting function depend crucially on categorical boundaries that are an emergent property of the particular stimulus context. Just as 0% and 100% are natural and distinct boundaries, they document additional categories of probabilities that impact sensitivity.

Together, these papers highlight how biases impact consumers' interactions with numbers. This session documents a new bias, expands the implications of current biases, and adds a new conceptualization of an established theory. Understanding the ways consumers incorrectly use and understand their wealth of numeric information can greatly assist them. We expect this session to appeal to those with interest in modeling risk, consumer overspending, and consumer confidence.

Undersum Bias

EXTENDED ABSTRACT

People often need to engage in quick mental tasks. One common mental task is to keep a running tally, that is, form an estimate of the sum of positive-number sequences. A budget-conscious grocery shopper may decide about whether to add a new item to the cart based on an intuitive assessment of the total bill; someone watching their weight might decide on whether to order the tempting dessert for dinner based on their impression of calories consumed during the day, or a person may need to keep track of expenses to avoid bank overdraft fees. How well do people estimate such sums intuitively?

This paper demonstrates that people systematically underestimate sums of positive-number sequences, which we call undersum bias. Notably, this bias can lead to suboptimal consumption choices. Our research highlights a novel cognitive antecedent of overconsumption behavior that is distinct from accounts based on self-control (e.g., Muraven & Baumeister, 2000) or perceptual biases of future outcomes (e.g., Ainslie, 1975).

Studies 1a and 1b (N = 251) examine the extent to which real shoppers can estimate their total bill at checkout. Grocery store customers were asked how much they were about to spend at checkout. Study 1b additionally tested whether a $5 accuracy incentive for estimation errors within 10% improved estimates. Using 95% winsorized estimates (used throughout), we found that shoppers significantly underestimated their total bill (Δ = Estimate – Actual = -$12.73, $p<.001$). The results were similar in both high-income and medium-income stores ($p=.267$), and incentives for accuracy did not affect the outcome ($p=.567$). The field study provided initial evidence that people underestimated the sum of a sequence of positive numbers in a highly naturalistic setting (see Van Ittersum et al., 2010; Scheibehenne, 2019).

Whereas Studies 1a and 1b demonstrated undersum bias when decision-makers were explicitly provided an estimate, Study 2 examined whether evidence for the phenomenon persisted in situations in which people's intuitive estimates of the running total are input into their judgment and decisions. Prolific participants (N=585; pre-registered) engaged in a simulated shopping trip study in which they were incentivized (up to $1) to maximize the average quality for the price paid. After making choices between 10 pairs of products, participants either estimated their total bill or decided whether to add a $9.99 item to their cart under one of two different total budget condi-

tions. In the *minimum budget* condition, the budget facing the participants was *below* the sum of the minimum prices of each of the 10 product pairs; in the *low* condition, the budget was computed in real-time as the running total plus $8. In both conditions, the normative decision was not to buy (as doing so would exceed the budget; this was incentivized). The proportion of participants who decided to add the focal item to their cart was 65% and 63% in the minimum and low budget conditions, respectively (difference between conditions: p=.680). Both were significantly higher than 0% as well as 50% (a conservative H_0), suggesting that participants underestimated their running bill. Indeed, in the estimate condition, the totals exhibited significant undersum bias (Δ= -22.73, p<.001).

Studies 3-5 examined the robustness of undersum bias in controlled settings. In Study 3a, undergraduates (N=202) reported their impression of the sum of a sequence of 10 comma-separated, randomly-generated, positive numbers that were shown on the computer screen for six seconds, and participants entered their answer on the next page. Fifteen trials (counter-balanced) varied the sorting order (random, ascending, or descending), variance (low, medium, or high), and number-type (decimal, integer). Overall, the results indicated significant undersum bias both in terms of incidence (70% of the trials) and magnitude (Δ= -14.16, p<.001). Study 3b (N= 83; MBA students) replicated these findings by changing the presentation format such that the screen flashed one number at a time for 600 milliseconds before showing the next in the sequence. The results suggest that undersum bias is not an artifact of people's inability to scan all the numbers in a sequence.

Study 4 examined whether undersum bias arose merely from participants' inability to do effective memory-based processing (Hastie & Park, 1986). Prolific participants (N=400; pre-registered) reported the sum on the *same page* in which the sequences appeared, but did so in either 10 or 20 seconds. Participants completed six trials in the experimental round and were told that one of their estimates would be randomly chosen for additional bonuses (up to $5) based on accuracy. Results indicated significant undersum bias in both time-limit conditions (80% and 76% for 10 and 20 seconds, respectively), although undersum bias was attenuated when the time limit was doubled. The results suggest that the bias is not due to mere limitations of memory-based processing. Study 5 (N=185, MTurk) further replicated the bias when participants were incentivized for *overestimation* (i.e., a bonus of up to $5 for being accurate on the *higher* side of the true sum), suggesting that the results were unlikely to be on account of motivated reasoning to believe that estimates are under-budget (Ditto et al., 2009). That this very strong incentive did not arrest the bias suggests it is highly robust.

The subsequent studies examined whether undersum bias is moderated by having participants estimate the average of the sequence before estimating the sum (Study 6: N=151), choosing one of three categorical options indicating ranges before providing their estimates (Study 7a: N=297; Prolific, pre-registered), and providing a range response (i.e., low, high) or an opportunity to revise estimates (Study 7b: N=393; Prolific, pre-registered). While eliciting average and range response had no effect, an opportunity to revise or prior selection of a categorical-range response reduced (but did not eliminate) undersum bias.

Overall, the results indicate the existence of a novel bias that has implications for judgments and choices related to numerical impression formation. A survey reported that 90% of bank overdrafters did so "by mistake," indicating that decision-makers are not sufficiently able to track running totals of expenses (Pew, 2012). Undersum bias, we report in this paper, can be an important contributor to overconsumption and overspending behaviors.

When Metrics Matter: Elicitation Metric Influences Uncertainty Estimates

EXTENDED ABSTRACT

Metrics matter for a number of consumer judgments and decisions (e.g., De Langhe and Puntoni 2016; Larrick and Soll 2008; Spiller, Reinholtz, and Maglio 2020). People make different decisions and judgments when considering the same quantity in different equivalent metrics, such as a car's fuel efficiency as miles per gallon (MPG) vs. gallons per 1,000 miles (GPkM). When consumers generate prediction intervals for an uncertain quantity and two elicitation metrics are formally equivalent but numerically different, how does the elicitation metric affect prediction intervals? We focus on two properties of such prediction intervals: width (i.e., the difference between the upper and lower bounds of an e.g., 80% prediction interval) and symmetry (i.e., the ratio of (a) the difference between the upper bound and the average, and (b) the difference between the lower bound and the average). Using a standard confidence elicitation task (Soll and Klayman 2004), we find that using different but equivalent metrics can affect both width and symmetry.

We make two key predictions. First, we predict prediction interval width depends on magnitude: larger magnitudes lead to wider intervals. This is derived from two findings. People are often insufficiently sensitive to unit changes, such that $700 per week seems like more money than $100 per day (e.g., Burson, Larrick, and Lynch 2009) People often expect uncertainty scales up with magnitude, conceptualizing risk as the coefficient of variation (SD / M), rather than the standard deviation (Weber, Shafir, and Blias 2004). Together, these suggest people may think uncertainty scales up with magnitude, even if that scaling is irrelevant and the effect on uncertainty is normatively inappropriate.

Second, we predict prediction interval symmetry depends on the form of the rate elicited. People often assume a unimodal and symmetric distribution as the default distribution (Fried and Holyoak 1984). When metrics have an inverse relationship, such as dollars per hour and hours per dollar, confidence judgments that are relatively symmetric become more skewed once they have been transformed into the other metric. Thus, people may report a relatively symmetric distribution, independent of the metric, which would be more skewed in the transformed metric. For example, predicting 50 MPG as the median with a symmetric 80% interval of (20, 80) implies a prediction of 20 GPkM as the median with an asymmetric 80% interval of (12.5, 50).

Experiment 1 (n = 99; all n after preregistered exclusions) tests whether prediction intervals differ in symmetry and width when Mechanical Turk workers estimate their wage rates for the previous 100 HITs they completed in either (a) cents per minute or (b) minutes per dollar. People gave estimates for the 90th, 50th, and 10th percentiles in one of the two metrics. Symmetry in each experiment was operationalized by calculating the ratio of the 90th percentile minus 50th percentile divided by the 50th percentile minus the 10th percentile. Width in each experiment was operationalized by calculating the 90th percentile - 10th percentile estimates. We transformed all estimates into both metrics to make comparisons in equivalent metrics. Transformed estimates were significantly less symmetric than elicited estimates (ps < 0.01), regardless of which outcome metric was analyzed. The prediction interval widths did not differ between metrics. Eliciting the same rate in different metrics affected symmetry of underlying uncertainty but not width when assessed in either metric.

As a conceptual replication of Experiment 1, we used a different inverse relationship, foreign exchange rates, in Experiment 2 (n = 169). People estimated the exchange rate in US cents per Turkish

Lira or Turkish Lira per US dollar in two weeks; people were shown 11 matching rates from the past year for reference. Conceptually replicating Experiment 1, we find that the symmetry is greater in the elicited metric than in the transformed metric (ps < 0.01); the average widths did not differ based on the metric.

Experiment 3 (n = 167) asks people to estimate revenue or profit for a fortune telling carnival booth. Revenue was bounded between $0 and $3,600 with a known, fixed cost of $1,500 and no marginal costs. People estimated the 90th percentile, the average, and the 10th percentile of either profit or revenue; profit was known to be revenue less $1,500. After converting all estimates to revenue, we compared the symmetry and widths between estimation metrics. On average, prediction intervals were significantly wider when people gave (larger magnitude) estimates of revenue than of (smaller magnitude) profit (p < 0.05); symmetry did not differ (p > 0.1). Changing the magnitude affected width but not symmetry.

Experiment 3 varied magnitude while holding real quantity constant by including or excluding a fixed quantity (fixed costs). Experiment 4 varied magnitude while holding real quantity constant by changing the unit: single eggs or dozens of eggs. If people are (a) sensitive to magnitude, but (b) insufficiently sensitive to unit, we expect the implied real uncertainty to be higher for dozens of eggs than single eggs (e.g., insufficiently scaling up 1-2 dozen eggs to 10-20 eggs means greater uncertainty for dozens than singles). Experiment 4 (n = 239) asked people to estimate the sales of eggs in a particular grocery store on a single day in either individual eggs or dozens of eggs. As in Experiment 3, people estimated the 90th percentile, average, and 10th percentile of egg sales. All estimates were transformed to be in terms of individual eggs. Estimating dozens results in significantly wider prediction intervals (p < 0.01). Prediction interval symmetry did not differ by metric (p > 0.10).

Across four experiments we find estimates of uncertainty are systematically shaped by metrics. With metrics that are inversely related, elicited intervals tend to be more symmetric than formally equivalent transformed intervals, no matter which metric is elicited. As the values used in estimating intervals increases, so does the degree of uncertainty. These findings reinforce the importance of choosing metrics carefully when discussing uncertainty with consumers and managers.

How Categorization Shapes the Probability Weighting Function

EXTENDED ABSTRACT

Traditional decision-making theories have long documented that consumers predominantly overweigh low probability events and under-weigh high probability events (Kahneman and Tversky 1979). Original conceptualizations of probability weighting typically assumed that consumers have two reference points: at 0% and 100%. 0% chance is seen as "*not happening*", and 1% is perceived as categorically distinct from this. While 100% chance is akin to "*certainly happening*", 99% chance is perceived to be different. Thus, 0% and 100% are categorically distinct from the rest of the probability spectrum, and they consequently act as reference points. Consumers exhibit diminishing marginal sensitivity away from those reference points, resulting in the traditional inverse S-shaped probability weighting function (PWF) (Tversky and Kahneman 1992; Wu and Gonzalez 1996).

In this paper, while we entirely agree with the proposition that categorical distinctions produce reference points resulting in nonlinear sensitivity to probability, we aim to reconsider the nature of the PWF. We tested the tacit assumption that 0% and 100% are the only reference points, and we document *more* distinct reference points. Importantly, we show that the PWF is inherently endogenous and its form is an emergent property of the stimulus context.

In building our theoretical argumentation, we drew upon seminal work in psychophysics and signal-detection theory, which collectively posit that discriminability amongst stimuli leads to sensitivity. The ability to categorize quantities is related to sensitivity to those quantities, and it has been shown that discretization or splitting up a stimulus facilitates discrimination and is linked with greater sensitivity. If any feature that discretizes a stimulus acts as a categorical boundary, these boundaries (like 0% and 100%) serve as reference points, and sensitivity increases near these reference points. But *where* might these reference points be located? In the domain of decisions under risk, risks are predominantly expressed with the use of numbers. Base-10 system of Arabic numerals exhibits a simple nested property: 0 to 9 are nested under sets of 10, and sets of 10 are nested under sets of 100. Relatedly, left-digit effects have been identified in riskless value-based judgment and choice domains (Thomas and Morwitz 2005). Since numbers are used to express risk, and those numbers serve for efficient categorization of the probability space, the PWF may exhibit greater sensitivity when risks cross these left digits. Though, the left digit need not *always* be a categorical boundary. In fact, the shape of the PWF is rather an emergent property of the particular context.

In most studies, we used a modification of Wu and Gonzalez's (1996) laddering paradigm to demonstrate that consumers represent probabilities just below and above the left digit as categorically distinct. If categorical perceptions drive probability sensitivity, we expect higher sensitivity for probabilities that cross these boundaries, and lower sensitivity for probabilities within categories. For example, if Gamble A presents "*1% chance of winning $20 and 12% chance of winning $5*" and Gamble B presents "*16% chance of winning $5*", the probability of the common outcome does not cross a categorical boundary (12% and 16% are in the same 10-20% category). If Gamble C is "*1% chance of winning $20 and 18% chance of winning $5*" and Gamble D is "*22% chance of winning $5*", the probability of the common outcome for Gamble C resides in a different categorical space (10-20% category) than Gamble D (20-30% category). We expect probability sensitivity for the $5 outcome to be greater between Gamble D and C than between Gambles B and A. This greater probability sensitivity will result in the PWF exhibiting additional reference points. We demonstrate this empirical observation in 5 preregistered experimental studies and in a model-based approach. Study 1 applied a fine-grained approach by examining the probability spectrum from 0% to 100%. We found that preference for the riskier option was significantly lower when the probabilities of the common outcome had different left digits. This suggests increased probability sensitivity when the probability of the common outcome crosses a categorical boundary.

In Study 2, we tested whether these boundaries were fixed within the probability space using two gamble ladders. Because categorization is an emergent property of the stimulus context (Rosch, 1999), we surmise that the boundaries are not necessarily fixed at every left-digit jump. We observed probability sensitivity when crossing categorical boundaries. Importantly, our results indicate that the shape of the PWF changes dramatically based on the where the left-digit jumps occur across the probability shape. This implies that the shape of the PWF is not fixed, rather it can have multiple discontinuities that depend on the particular context.

Studies 3, 4a, and 4b demonstrated the robustness of our previous findings. Study 3 tested this categorical-based account in an incentive-compatible context. Consistent with the previous studies,

we observed a similar dip in preference for riskier options (i.e. increased probability sensitivity) when the common payout probabilities crossed categorical boundary.

Whereas all other studies involve choices between risky gambles, Studies 4a and 4b employed certainty equivalents. Specifically, in Study 4a, the probabilities we used clustered around the 50% range. Importantly, results from this study suggest that 50% was treated as a categorical boundary, and probabilities below 50% would be subjectively perceived to be substantially less likely to occur than those just above the 50% boundary. Further demonstrating the robustness of this finding, we replicated this when the probabilities were clustered in the 30% range in Study 4b.

Supplementing our experiments, we also introduced a novel two-parameter model of the probability weighting function that parsimoniously accounts for our empirical findings.

The shape of the PWF is one of the most well-known empirical observations in judgment and decision-making research, with important implications for a host of topics within consumer research. Our key contribution is that we reconsidered the nature of how consumers categorize uncertainty, our results put forth a simple but powerful point: the PWF is crucially shaped by categorical perceptions, and the function needs not be inverse S-shaped.

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Different Uncertainties Matter: Examining Attribution, Probability Judgment, and Risk-Seeking Under Different Types of Uncertainty

Chairs: Xiang Wang, University of Florida, USA
Amin Shiri, Texas A&M University, USA

Paper #1: Attributions of Credit, Blame, and Luck Depend on Perceived Nature of Uncertainty

Craig R. Fox, University of California Los Angeles, USA
David Tannenbaum, University of Utah, USA
Gülden Ülkümen, University of Southern California, USA
Daniel Walters, INSEAD, France
Carsten Erner, Alexandria, VA, USA

Paper #2: When Preference Uncertainty Meets Outcome Uncertainty: Inflated Probability Estimates of Favorable Outcomes

Xiang Wang, University of Florida, USA
Amin Shiri, Texas A&M University, USA
Chris Janiszewski, University of Florida, USA

Paper #3: When Inconsistency is Good: Consumers' Risk-Seeking Response to Attribute Ratings

Katie S. Mehr, University of Pennsylvania, USA
Joshua Lewis, New York University, USA

Paper #4: Risky Consumer Decision Making in Costly Participative Pricing

Robert Zeithammer, University of California, Los Angeles, USA
Lucas Stich, Ludwig-Maximilians-Universität München, Germany
Martin Spann, Ludwig-Maximilians-Universität München, Germany
Gerald Häubl, University of Alberta, Canada

SESSION OVERVIEW

Will Bitcoin keep going up? How good is this restaurant with mixed reviews? Will the owner of the house accept my price offer? We frequently face uncertainty and risk in various aspects of our lives. However, not all types of uncertainty are equal – decisions and judgments under uncertainty often diverge in different contexts. The papers in this session offer a nuanced perspective on certainty by investigating and disentangling the effect of different types of uncertainty on consumer judgments, inferences, and decision making. They further look at consumer risk taking tendency in important marketing contexts that involve uncertainty and show how consumer behavior may deviate from the predictions of standard decision-making models.

In the first paper, **Fox, Tannenbaum, Ulkumen, Walters, and Erner** investigate attributions of credit, blame, and luck associated with (in)correct predictions about the outcomes of uncertain events by distinguishing two dimensions of uncertainty, namely, *epistemic* (knowable) and *aleatory* (random). They show that epistemic uncertainty is associated with attributions of credit or blame for correct or incorrect predictions, while aleatory uncertainty is associated with attributions of good or bad luck for correct or incorrect predictions. This difference in attributions has important implications for choice of compensation schemes and how people communicate better or worse than expected outcomes.

In the second paper, **Wang, Shiri, and Janiszewski** differentiate between product outcome uncertainty (e.g., uncertain of what color this hair dye will result in) and preference uncertainty (e.g., uncertain of what hair color I want). Contrary to prior findings that preference uncertainty makes consumers reluctant to commit to a single option, the authors find that when the product option has uncertain outcomes, preference uncertainty inflates the perceived probability of preference match and thus increases purchase intention.

The next two papers examine consumer risk-seeking tendency under uncertainty in important marketing contexts. **Mehr and Lewis** investigate the uncertainty regarding product quality when customer ratings are inconsistent. By disentangling the effect of rating dispersion from the frequency of 1-star ratings, they show that consumers are risk-seeking with respect to attribute ratings and prefer experiences with inconsistent (vs. consistent) ratings across reviewers.

Lastly, **Zeithammer, Stich, Spann, and Häubl** examine another important context that involves uncertainty – participative pricing (i.e., consumers making price offers to sellers). When deciding whether to submit an offer, consumers experience uncertainty regarding the seller's secret threshold price and need to trade off the risk of offer rejection (given the participation cost) and the potential gain of offer acceptance. The authors find that consumers' entry decision not only deviates from the predictions of a risk-neutral model but is also inconsistent with the level of risk aversion implied by their submitted offer amounts. Instead, most participants show prospect-theoretic preferences with downside neglect – the opposite of loss aversion.

Taken together, the four papers in this session present distinct yet synergistic findings that advance our understanding of consumer judgments, inferences, and risk-taking tendency under different types of uncertainty, with implications for marketing strategy, communication, word of mouth, pricing, and policy making.

Attributions of Credit, Blame, and Luck Depend on Perceived Nature of Uncertainty

EXTENDED ABSTRACT

People routinely make predictions concerning the outcomes of uncertain events. For instance, financial analysts predict whether the price of a stock will increase, consumers predict whether a product will perform to their satisfaction, and doctors predict whether a treatment will be successful. The outcomes of these forecasts naturally trigger observers to interpret why the forecast was right or wrong and judge the forecaster accordingly.

In this paper we argue that the perceived nature of uncertainty plays a key role in these attributions. We distinguish between two dimensions of subjective uncertainty: *epistemic* uncertainty in which future events are seen as inherently knowable in advance (e.g., the answer to a trivia question) and *aleatory* uncertainty in which future events are seen as inherently random (e.g., the outcome of a dice roll). In six studies we demonstrate that people distinguish uncertainty along these two distinct dimensions. Epistemic (knowable) uncertainty is associated with attributions of credit for correct predictions and blame for incorrect predictions, whereas aleatory (random) uncertainty is associated with attributions of good luck for correct predictions and bad luck for incorrect predictions.

In Study 1 participants are presented with prediction scenarios involving a chance event, a trivia contest, or a hurricane trajectory. We show that a six-item scale concerning the nature of uncertainty loads reliably on these two distinct dimensions. Higher epistemicness ratings are associated with stronger attributions of credit or blame for correct or incorrect predictions, respectively (but are not associated with luck attributions). Meanwhile, higher aleatoriness ratings are associated with stronger attributions of good or bad luck for correct or incorrect predictions, respectively (but are not associated with credit or blame attributions).

Study 2 replicates this finding in an experimental context where we prompt participants to see predictions of the spread of COVID-19 through an epistemic lens (by asking participants to summarize a news story about contact tracing) or an aleatory lens (by asking participants to summarize a news story about biostatistics). We find that people attribute greater credit or blame to the health minister of a country when they are prompted to see the uncertainty around the spread of COVID-19 in that country as epistemic in nature, and good or bad luck when they were prompted to see it as aleatory in nature.

In Study 3 participants act as managers designing a compensation scheme for others making forecasts for different sporting events. When participants perceive uncertainty to be more epistemic (knowable) they allocate a greater proportion of compensation to performance-based pay (versus base pay), and when participants perceive uncertainty to be more aleatory (random) they choose longer (versus shorter) windows of evaluation.

In Study 4 participants evaluate two forecasters—one who makes a prediction using epistemic language (e.g., "I'm 80% sure that sales will increase") and another who makes the same forecast using aleatory language (e.g., "I'd say there's an 80% chance that sales will increase"). When both forecasters are correct, participants are more likely to promote the forecaster who uses epistemic ("sure") language than aleatory ("chance") language; however, when both forecasters are incorrect, participants are also more likely to lay off the forecaster who uses epistemic language. This finding suggests participants' perceptions of credit/blame are amplified by epistemic language whereas their perceptions of luck are amplified by aleatory language.

Switching from listeners' to speakers' perspective, in Study 5 we ask participants which type of language they would choose to express their own uncertainty—epistemic-related words (e.g. "I'm 80% sure) or aleatory-related words (e.g. "I'd say there's an 80% chance"). We find that participants are more likely to choose epistemic words when they are hoping for a promotion (and therefore presumably seeking an opportunity for more credit) but they are more likely to choose aleatory words when they are were worried about being laid-off (and therefore presumably seeking to avoid greater blame).

Finally, in Study 6 we examined 13,092 quarterly earnings report transcripts spanning almost three fiscal years (11 quarters), including 1,439 firms across different major stock indices. We coded each transcript for the proportion of epistemic and aleatory linguistic markers. We find a higher frequency of epistemic words (e.g., "assess," "predict," "model") when earnings exceed the consensus analyst forecast (and they are therefore presumably looking to claim more credit), and a higher frequency of aleatory words (e.g., "chance," "random," "black swan") when earnings fall short of the consensus analyst forecast (and they are therefore presumably looking to deflect blame and appeal to bad luck).

Taken together our findings suggest that perceived nature of uncertainty critically determines attributions of credit, blame, and luck by managers and consumers observing others' forecasts. Recognizing this, forecasters attempt to influence managers' and consumers' impressions of the nature of uncertainty through the language they choose to express their forecasts. We conclude with discussions of broader implications of our work and promising directions for future research.

When Preference Uncertainty Meets Outcome Uncertainty: InflatedProbability Estimates of Favorable Outcomes

EXTENDED ABSTRACT

Consumers regularly experience uncertainties in product choice and purchases (Duke, Goldsmith, and Amir 2018). Generally speaking, there are two types of uncertainties consumers often experience (Maier, Wilken, and Dost 2015). One is product outcome uncertainty (Grant and Tybout 2008; Rust et al. 1999), referring to the uncertainty associated with product performance or functioning (e.g., what color my hair will look like after using this hair dye) or the uncertainty involved in marketing offerings or promotions (e.g., probabilistic selling, mystery box, uncertain gifts). The other type is preference uncertainty (Payne, Bettman, and Johnson 1992; Salisbury and Feinberg 2008), referring to the uncertainty associated with one's preferences, needs, or desires (e.g., what hair color I want). Note that these two types of uncertainty differ in their sources, where outcome uncertainty comes from the external products while preference uncertainty is more associated with the self (Van den Bos and Lind 2002).

Contrary to prior findings that preference uncertainty makes consumers reluctant to commit to a single option (Dhar 1997), we suggest the opposite happens when the product option involves outcome uncertainty. Specifically, when there is outcome uncertainty (e.g., a coffee pack without a clear intensity indicator), consumers with uncertain (vs. certain) preference (e.g., uncertain about their preferred intensity level), perceive a higher probability that the product outcome would match their preferences (e.g., getting a pack of coffee at their most preferred intensity level). Consequently, a consumer with an uncertain (vs. certain) preference is more likely to purchase a product bearing an uncertain outcome. Building on the sampling model of probability judgment (Sloman et al. 2004; Zhu, Sanborn, and Chater 2020), we suggest this occurs because the subjective probability of preference match (under outcome uncertainty) is a function of the number of unique "samples" of preference match people can mentally simulate. Specifically, when preference is certain, only one unique "sample" could be drawn (e.g., I like low-intensity coffee most→preference match happens only when the coffee turns out to be low-intensity). On the contrary, when one's preference is uncertain, more unique "samples" could be drawn (e.g., if I like low-intensity coffee most and the coffee turns out to be low-intensity => match, if I like moderate-intensity coffee most and the coffee turns out to be moderate-intensity => match). As a result, the subjective probability of preference match is higher when preference is uncertain (vs. certain), although, normatively, this probability should be independent of preference uncertainty.

Study 1 (N=101) tests the association between preference uncertainty and perceived likelihood of preference match for a typical product involving outcome uncertainty – blindbox. Participants saw six styles of Bearbrick figurines from a blindbox series. Each blindbox contains one figurine randomly selected from six styles. Then, participants rated the likelihood of getting a figurine they liked most if they purchased a blindbox, preference uncertainty among the 6 figurines, and overall attractiveness of the figurines. As expected, perceived likelihood of preference match was positively associated

with preference uncertainty (p=.008), controlling for the attractiveness of the figurines.

Studies 2a and 2b manipulate preference uncertainty and outcome uncertainty (between-subjects) and show that preference uncertainty increases (decreases) the perceived likelihood of preference match and purchase intention for products with uncertain (certain) outcomes. In study 2a (N=198), participants imagined that their favorite coffee brand just released a new collection, involving coffees with different intensity levels (from level-5 to level-9). The only buying option available at the time was either a coffee pack randomly selected from the 5 intensity levels (the uncertain outcome condition) or a level-7 coffee (the certain outcome condition). To manipulate preference uncertainty, we either told participants that they felt uncertain which intensity level they would like given that this was a new collection (uncertain preference condition), or that they usually liked level-7 given their prior experience with coffees from this brand (certain preference condition). Results showed that when the intensity level of the coffee (the outcome) was uncertain, participants with uncertain (vs. certain) preference were more likely to purchase the coffee pack (p=.002). Perceived likelihood of preference match mediated this effect (p=.031; 95%CI=[.01,.82]). When the intensity level of the coffee is certain, however, preference uncertainty reduced perceived likelihood of preference match, which in turn reduced purchase intention (95%CI=[-.02,-.73]). Study 2b (N=200) replicated the findings in a different context where participants imagined buying teal hair dye for Halloween. First, they saw different shades of teal color from light to dark and were led to feel either certain or uncertain which shade would look best on them. Then they saw a hair dye product and learned that it was available in one of the shades (certain outcome condition) or that it could result in different shades depending on the hair textures (uncertain outcome condition). As in study 2a, we found preference uncertainty increased (decreased) perceived likelihood of preference match and purchase intention when the outcome was uncertain (certain).

Study 3 (N=320) provides evidence for the underlying mechanism. Specifically, we argue that preference uncertainty inflates perceived probability of preference match by increasing the number of unique "samples" of preference match people could draw. If so, this effect should be more pronounced as the number of possible outcomes a product could result in increases (i.e., the number of unique samples increases). Study 3 used the same product as in study 1 except that we manipulated the number of figurine styles in the blindbox series (3 vs. 9). Participants imagined buying a gift for a friend and feeling either certain or uncertain which style their friend would love most. As expected, in the 9-style condition, preference uncertainty increases the estimated probability of getting the figurine their friend would like most (p<.001) and willingness to purchase the blindbox instead of looking for other stores (p<.001), and these effects were attenuated in the 3-style condition.

In sum, this research investigates the joint effect of preference uncertainty and outcome uncertainty and provides novel insights into probability judgment and consumer decision-making under the two types of uncertainty. In addition, it pinpoints the conditions where marketers can benefit from (creating) consumer preference uncertainty.

When Inconsistency is Good: Consumers' Risk-Seeking Response to Attribute Ratings

EXTENDED ABSTRACT

How do consumers think about consistency in ratings? Previous work is mixed: some work suggests that consumers prefer consistency (He and Bond 2015; Moon, Bergey and Iacobucci 2010; Sun 2012; Zhu and Zhang 2010), while other work suggests that consumers prefer inconsistency (Clemons, Gao and Hitt 2006; Moe and Trusov 2011; West and Broniarczyk 1998). Why are there conflicting results? We suggest that previous literature has confounded rating dispersion with the frequency of 1-star ratings. Because consumers take 1-star ratings most seriously, consumers prefer a product with a given average rating when the ratings are less dispersed (so there are fewer 1-star ratings). In our work, by showing participants *attribute* ratings (e.g., ratings of the service, food, value, and ambiance of a restaurant), we can manipulate the consistency of how each attribute is rated while controlling for the overall frequency of ratings of each star value. We find consumers largely prefer inconsistent ratings. This is because they have high expectations and, consistent with risk-seeking in losses (Kahneman and Tversky 1979; West and Broniarczyk 1998), are risk seeking with respect to low ratings.

Study 1 tested whether consumers prefer experiences with consistent or inconsistent attribute ratings. Participants (N=1,186) saw ratings for two of six experiences, pretested to include both pleasurable (e.g., reading a book) and unpleasurable (e.g., going to the dentist) experiences. For each experience, participants saw ratings from two users and were randomized to either the consistent or inconsistent condition. In the consistent condition, the user reviews were similar; both users rated one attribute particularly negatively, and another attribute particularly positively. In the inconsistent condition, the user reviews differed; one user rated one attribute particularly poorly (and the other attribute particularly positively), and the other user provided the opposite ratings. We counterbalanced which attribute was rated poorly and measured preferences via three 7-point scale questions that were standardized and averaged for analyses. Participants found the consistently rated option less favorable (M = 5.42, SD = 1.78) than the inconsistently rated option (M=5.67, SD=1.43; b=-.13 t(1185)=-3.43, p<.001).

Our proposed explanation is that consumers are risk seeking in losses (Kahneman and Tversky 1979). Inconsistent ratings are less diagnostic of the experience, and thus more uncertain or risky. If consumers have high reference points, then they are in the loss domain when ratings are below 5 stars and prefer the riskier inconsistent ratings. If this were true, then inducing a lower reference point should reduce the preference for inconsistent ratings. In Study 2, participants (N=1,560) were randomly assigned to one condition in this 2(rating consistency: consistent vs. inconsistent) x 2(expectations: low vs. high) between-subjects experiment. To manipulate expectations, all participants read that the average rating of dentists in a town was either low (e.g., 1.33/5 stars) or high (e.g., 4.67/5 stars). Participants then saw one experience, either with consistent or inconsistent ratings (as in Study 1). We found a significant interaction between expectations and ratings type (b=.43, t(1,555)=4.22, p<.001). Participants within the high expectations condition preferred inconsistent (M=4.42, SD=1.56) to consistent ratings (M=3.80, SD=1.65; t(784.69)=-5.10, p<.001, d=-.36), while there was no significant difference by condition within the low expectations condition (consistent: M=3.93, SD=1.63; inconsistent: M=3.86, SD=1.53; t(768.22)=.93, p=.35, d=.07).

Why do our results suggest consumers like inconsistent ratings, while some previous work suggests the opposite? If consumers perceive 1-star ratings as particularly diagnostic and thus aversive, then previous work confounding dispersion and the frequency of 1-star ratings could have mistaken aversion to 1-star ratings for preferences for consistency. Study 3 tests this hypothesis. Participants (N=1,049) were randomly assigned to either a consistent, inconsistent, or consistent-middling condition. The consistent and inconsistent conditions

were as in Study 2. In the consistent-middling condition, both users rated every attribute as 3-stars (so the average attribute rating was 3 stars in all conditions). Participants found the consistent-middling condition (M=4.60, SD=1.36) more favorable than the consistent condition (M=4.06, SD=1.61; t(686.33)=4.10, p<.001, d=.31), supporting the possibility that consumers perceive ratings non-linearly, and 1-star ratings are particularly disliked. Participants also found the inconsistent condition (M=4.92, SD=1.36) more favorable than both consistent conditions (vs. consistent: t(689.66)=7.95, p<.001, d=.60; vs. consistent-middling: t(694.71)=4.15, p<.001, d=.31), consistent with previous risk seeking behavior.

Lastly, Study 4 tests one key facet of our proposed mechanism: that participants are risk-seeking with respect to ratings. To achieve this, we included a pure-risk condition in addition to our usual consistent and inconsistent conditions; participants were randomly assigned to one of these three conditions. We used the stimuli from the dentist experience in Study 1, which showed ratings of staff helpfulness and staff friendliness. In all conditions, participants (N=1,019) viewed ratings from two users. In the inconsistent condition, participants viewed inconsistent ratings for one staff member with whom they would interact if they went to this dentist. In the consistent condition, participants viewed consistent ratings, also for one staff member with whom they would interact if they went to this dentist. The pure-risk condition stimuli showed that one user rated both attributes positively for one staff member, while the other user rated both attributes negatively for a different staff member. Participants in this condition learned that there was a 50% chance that they would interact with each staff member if they went to this dentist. Thus, this condition reflected a 50%-50% lottery between a bad and good experience. Participants preferred the pure-risk (M=4.76, SD=1.51) and inconsistent ratings (M=4.66, SD=1.52) conditions to the consistent condition (M=4.14, SD=1.73; vs. pure-risk: t(671.31)=3.53, p<.001, d=.27; vs. inconsistent: t(669.05)=3.99, p<.001, d=.31); there was no significant difference between the pure-risk and inconsistent conditions (t(678.93)=.64, p=.65, d=.04). These results are consistent with consumers preferring inconsistent ratings due to risk-seeking preferences.

Overall, controlling for the number of 1-star ratings, consumers prefer inconsistent (vs. consistent) ratings due to a high reference point and consequently risk-seeking preferences.

Risky Consumer Decision Making in Costly Participative Pricing

EXTENDED ABSTRACT

Consumers make price offers to sellers in a variety of domains, including buying cars and houses, buying used household goods in physical and virtual garage sales, naming hotel-room prices on Priceline.com, making offers to buy trendy items on StockX.com, and bidding in auctions for art or collectibles. Participative pricing—i.e., consumers making price offers that sellers then either accept or reject—occurs in many markets and has recently expanded in scope due to increased digitalization.

Sellers and intermediary platforms may provide consumers with decision aids to assist them in deciding how much to offer, and whether to make an offer in the first place. One of the reasons why consumers might not submit offers on products that they are interested in buying is that preparing and submitting such offers is associated with mental and physical costs, which are a key source of friction in participative-pricing markets. Indeed, prior research has identified several sources of such participation costs—the cognitive and physical effort associated with offer preparation (e.g., Krasnokutskaya and Seim 2011; Samuelson 1985), the hassle associated with submitting the offer and waiting for the outcome (e.g., Fay 2009; Hann and Terwiesch 2003), and the accounting cost arising from various fees and commissions charged by marketplace intermediaries (e.g., Bernhardt and Spann 2010; Moreno and Wooders 2011; Palfrey and Pevnitskaya 2008).

Price offers represent a key feature of participative pricing whereby consumers actively participate in determining their purchase price (e.g., Haruvy and Popkowski Leszczyc 2018; Spann et al. 2018). An essential yet widely unexplored aspect of this form of pricing is that participation is often costly. In this paper, we examine the impact of participation costs on consumers' entry and offer behavior across four incentive-compatible experiments, each of which used extensive within-subject designs. The behavior of interest consists of two nested consumer decisions—(1) how much to offer (or "bid"), and (2) whether to make an offer at all, a decision that is typically referred to as an "entry decision" in the auction literature (e.g., Ertaç et al. 2011; Levin and Smith 1994; McAfee and McMillan 1987; Palfrey and Pevnitskaya 2008)

In our experiments, participants were buyers of "widgets" (imaginary products) in a market with only one seller. The widget seller was computerized and entertained offers, effectively allowing buyers to name their own price. To decide whether an offer was accepted, the seller drew a secret (to participants) threshold price. Offers that exceeded the threshold price were accepted, whereas offers below it were rejected.

In a (typical) round of one of our experiments, the consumer could submit a binding price offer to the simulated seller, and the seller's threshold price determined whether the bid was accepted. This single-agent decision is an ideally tractable setting for gaining insight into consumer decision making in connection with price offers and costly entry, because the analysis does not need to consider strategic interaction among multiple endogenously determined bidders as it would in a multi-bidder auction with entry costs, as in those analyzed by Samuelson (1985) or Menezes and Monteiro (2000).

Nevertheless, participants in our experiments faced strategic uncertainty because they did not know the threshold price set by the seller. Therefore, they did not know a priori whether their offer would be successful (i.e., accepted by the seller). Consumers could make offers that were too low (resulting in a failure to purchase the product), or they could make offers that exceeded the seller's secret threshold prices (thus spending more than would have been necessary).

The offer amount affects both the probability that an offer is accepted and the consumer surplus. While a higher offer increases the probability that an offer is accepted, it also reduces consumer surplus if it is accepted. Thus, consumers must decide how to trade off their potential surplus and the probability of offer acceptance. Moreover, in the presence of participation costs, deciding whether to submit an offer involves comparing the expected utility of the payoff from bidding to the utility of neither getting nor losing anything.

Overall, evidence from our experiments reveals that consumers not only deviate from the predictions of a risk-neutral model (that is often employed for its tractability), but that their behavior also cannot be explained by the standard risk-averse expected utility model. In particular, entry is excessive given the level of risk aversion implied by consumers' submitted offers. We develop and estimate a heterogeneous flexible utility model to parsimoniously connect the entry and offer-amount decisions. The model estimates suggest the majority of participants exhibited prospect-theoretic preferences with downside neglect—the opposite of loss aversion.

Our experiments also examine the potential of various decision aids and decision architectures to shape consumer behavior in costly-participative-pricing settings, in terms of both decision processes and outcomes (i.e., consumer surplus). We find that decision aids help consumers achieve a higher surplus only when the decision architecture entails two stages—i.e., when the offer-amount and entry decisions are distinct and made sequentially. The most beneficial decision architecture asks the consumer to make the decision following backward induction, starting with the contingent offer amount. However, this theoretically appealing architecture only helps when consumers have access to a decision aid. Overall, decision aids reduce downside neglect. Moreover, they reduce probability misperception and are a substitute for learning from experience. Finally, we show that framing the entry decision as a choice to play a payoff-equivalent lottery aligns consumers' entry decisions with the risk-aversion evident from their offers.

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Perception of Time and Its Implications for Productivity and Well-Being

Chair: Iuliana Iuras, University of Southern California, USA

Paper #1: Gained Time is Expanded

Gabriela N. Tonietto, Rutgers University, USA
Selin A. Malkoc, The Ohio State University, USA
Sam J. Maglio, University of Toronto, Canada

Paper #2: I Don't Have Time for This: How Self-Talk Following Goal Failure Affects Control and Future Goal Achievement

Luis Abreu, Duke University, USA
Holly Howe, Duke University, USA
Jordan Etkin, Duke University, USA

Paper #3: Extension Request Avoidance Increases Time Stress Among Women

Ashley V. Whillans, Harvard Business School, USA
Jaewon Yoon, Harvard Business School, USA
Aurora Turek, Harvard Business School, USA
Grant E. Donnelly, Fisher College of Business, USA

Paper #4: Detachment from Work During Non-Work Time and Its Implications on Workers' Evaluation

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Elisa Solinas, University of Southern California, USA
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SESSION OVERVIEW

Time is a precious and scarce resource (Mogilner et al., 2018), so understanding how to efficiently manage time is key to building a healthier and happier life, both personally and professionally.

This session brings together four papers that examine different aspects of time and its implications for productivity and well-being using a variety of methods. The first two papers provide insights into how gaining and talking about time affect productivity. The last two papers examine how asking for extensions during work and choosing how to spend time outside of work impact real and perceived productivity, worker evaluations, and well-being.

Tonietto et al. investigate how consumers perceive and consume time windfalls; time gained from cancelled tasks. Gained time could be used as productively as any other time. Yet, the authors show that consumers move at a slower pace during gained time, because they perceive it as longer than equivalent intervals that were always free. Consequently, consumers may fail to maximize the use of gained time.

Abreu et al. examine how consumers talk about time following goal failures. They show that consumers tend to attribute goal failure to lack of time instead of considering that they could have "made time". The authors highlight that self-talk about time in response to failures such as "*I did not make (vs. have) time…*" can induce greater feelings of control and thus increase future goal achievement.

Whillans et al. examine how frequently women (vs. men) *ask* for time can cause gender disparities in work-related success and well-being. Despite women experience greater time stress than men, when working under adjustable deadlines, they are less likely to ask for extensions. This may have implications for gender inequalities in the workplace and for well-being. The authors propose that introducing formal policy requests for extensions can help women to be less fearful of social repercussions when asking for extensions.

Buechel et al. focus on how consumers spend their free time influences worker evaluations. They show that lay people and managers acknowledge the benefits of detachment during non-work time for productivity, yet they penalize workers who detach from work

during non-work time when evaluating them. Workers seem to be aware of this penalty and tend to detach less from work when evaluation is salient, and also signal non-detachment when sharing information about spare time with managers. Like Whillans et al., they test how company policy interventions can a) attenuate this detachment penalty and b) encourage detachment from work during free time.

Taken together, these four papers provide novel, diverse, and complementary insights via a variety of methods. Moreover, the current set of papers session provides an excellent fit for the conference theme "What the World Needs". Our session speaks to work-life balance, gender disparities in the workplace, and how to maximize productivity in our professional and personal lives. We believe that our session would be of interest to consumer researchers from all backgrounds and will produce a fruitful interdisciplinary discussion that will encourage more research in the area.

Gained Time is Expanded

EXTENDED ABSTRACT

Scheduled tasks get cancelled, and even global pandemics can lead quarantined consumers with unexpected windfalls of free time. While prior research has examined how gained money is spent (Arkes et al., 1994; Soman and Cheema 2001), and the subjective value of gained time (Festjens and Janiszewski 2015), we examine the perception and consumption of windfalls of time.

Importantly, having plans and then losing them constitutes a change to the status quo in which the consumer gains free time. Separately, because the Weber-Fechner function attests to diminishing subjective magnitude with greater deviation from the status quo (Fechner, 1966/1860), we propose that because windfalls of time register as a change from a reference point of no free time, gained time intervals feel subjectively expanded compared to intervals that were always free.

Further, because time perception can drive behavior within intervals (Tonietto, Malkoc, and Nowlis 2019), we predict that people will slow down during gained intervals. Just as "work expands to fill the objective time available" (i.e., Parkinson's Law; Parkinson 1957), we propose behavior will expand to fill the *subjective* time available.

As an initial foray into examining whether gained time feels expanded, a pilot study revealed that the time earmarked for a cancelled class felt longer the more that students thought of the time as a gain (r=.17, p=.052).

Building on this, Study 1 utilized a 4-cell (gained, free, scheduled, control) between-subjects design. Participants in the gained condition read that they had plans during the next hour that were cancelled, leading them to unexpectedly gain an hour of free time. Those in the free condition instead read that they had the next our free, and those in the scheduled condition read that they had plans for the next hour. They then indicated how much time the next hour felt like (0=very little time, 100=a lot of time). In the control condition, participants simply indicated how much time an hour feels like. The gained hour (M=57.53) felt significantly longer than an hour that was always free (M=43.91), always scheduled (M=40.06), or an hour in general (M=35.43, all *p*s<.001).

In Study 2, we tested whether the subjective expansion of gained time is robust to consumers' affective reactions toward the windfall in a 3-cell (gained-relieved, gained-disappointed, free) between-subjects design. Participants in the gained conditions imagined that

their scheduled plans for the next hour had been cancelled and that they either felt relieved or disappointed by the cancellation of the task accordingly. Those in the free condition imagined that they had the next hour free. Compared to free time (M=46.91) gained time felt subjectively longer both when participants felt relieved (M=66.05, *p*<.001) and when they felt disappointed at the cancellation of the task (M=60.39, *p*<.001). The two gained conditions did not significantly differ (*p*>.1). Thus, emotions towards the cancellation of the activity cannot account for the full effect.

Study 3 explicitly tested whether the elongation of windfalls of time are due to the salient comparison to no free time with a 2 (gain, free) x 2 (control, zero reference) between-subjects design. Participants imagined either that they gained two hours or that they had the next two hours free. In the control conditions, participants were asked: "How much time does the next two hours feel like?" while those in the zero reference point condition were instead asked "Compared to no free time, how much time does the next two hours feel like?" We found the predicted interaction (*p*<.01). In the absence of a reference point, the gained interval once more felt expanded (M_{Gained}=60.55, M_{Free}=46.62, *p*<.01). However, when zero was given as a reference point, both the free and gained intervals felt expanded, (M_{Gained}=63.09, M_{Free}=59.80, *p*>.10). Thus, explicitly comparing to zero led free time to feel like gained time, supporting our proposed framework.

The final three studies examined whether individuals alter their pace of movement during gained intervals. Participants in Study 4a responded to questions about how they behaved on the Sunday that daylight saving ended (in which Americans gained an hour). They indicated whether they took their time and moved more slowly (0=took my time much less/much faster pace, 100=took my time much more/much slower pace) compared to an average Sunday. Compared to the scale mid-point, participants reported moving more slowly (M=55.64, *p*<.001) on a Sunday they gained time. In Study 4b, we examined another naturally occurring time gain: the CO-VID-19 pandemic in which many people's everyday routines were disrupted, leading them to feel they gained time (as confirmed by a pretest). Participants reported perceived time and pace of action for a "typical Tuesday afternoon" both before and after the U.S. began to shelter-in-place. Overall, a typical Tuesday afternoon felt longer (M_{After}=64.32, M_{Before}=52.66, *p*<.001) and was marked by a slower pace of action (M_{After}=67.51, M_{Before}=53.15, *p*<.001) after compared to before shelter-in-place. Further, these effects were exaggerated the more that participants were adhering to quarantine, and thus the more their routines were disrupted by the pandemic.

Study 5 manipulated gained time by having participants sign up for a 30-minute experimental session that was actually designed to take 20 minutes. Participants were either told at the start of the session that they would end early (free) or were told at the end of the session that they had finished early and thus gained time (gain). All participants were then informed that on their way out, there were boxes from which they could take items (e.g., candy, toys) if they wanted. A research assistant recorded the time it took for each participant to leave the lab and reach the elevator at the end of the hall and whether participants stopped at the box.

Participants took significantly longer to leave the lab in the gained (M=29.99 seconds) than free condition (M=25.20 seconds, *p*=.011). Those in the gained condition (65.79%; 100/152) were also more likely to search the box of items compared to the free condition (54.61%; 77/141; *p*=.051).

Taken together, our results indicate that gained intervals feel subjectively expanded, and consumers' behavior expands to fill the subjective time available.

I Don't Have Time for This: How Self-Talk Following Goal Failure Affects Control and Future Goal Achievement

EXTENDED ABSTRACT

For many consumer goals, spending time is a prerequisite for goal achievement. Goals related to physical health, professional success, and personal wellbeing all require substantial investments of time to achieve. But because time is limited (Etkin, 2019; Spiller, 2011) and prone to mismanagement (Fernbach, Kan, & Lynch, 2015; Memmi & Etkin, 2021), people often fail to spend time on goals as intended. Might the way consumers talk about such goal failures matter? Might the language people use influence their understanding of these lapses and propensity to achieve the goal in the future?

Recent work suggests that self-talk (i.e., a conversation with oneself; Senay, Albarracín, & Noguchi, 2010) has important effects on goal achievement. Self-talk can improve athletic performance (Hatzigeorgiadis et al., 2011), help avoid temptation (Patrick & Hagtvedt, 2012), motivate goal-directed behavior (Senay et al., 2010), and improve self-regulation (Kross et al., 2014). Building on this prior work, we examine self-talk following goal failure (vs. prior to goal pursuit) that references a lack of resource—namely, time. We contrast the phrase "I didn't *have* time to pursue my goal" with the phrase "I didn't *make* time to pursue my goal", exploring effects on what people talk about (i.e., what topics or reasons they cite) and implications for feelings of control and future goal achievement.

We suggest that when confronted with goal failure, consumers naturally attribute the failure to a lack of the resource (not "having" time) rather than a mismanagement of the resource (not "making" time). This occurs because doing so is self-protective: it prevents consumers from negative emotions related to being at fault for the failure.

But importantly, we propose that this attribution has a downside, prompting people to talk about the lapse in a way that undermines subsequent goal achievement. This is because saying they didn't "have" time for the goal encourages consumers to think about what they *did* spend time on—that is, other goals or activities that also require time to pursue. Saying they didn't "make" time for the goal, in contrast, reduces attention to competing uses of time and focuses people on actions that could be changed or improved (e.g., procrastination, being lazy, not using time efficiently). Consequently, compared to saying "I didn't have time", saying "I didn't make time" increases people's sense of control over outcomes and makes them more likely to achieve their goal in the future. Six studies support these ideas.

In studies 1A and 1B, we examine the prevalence of "have time" (vs. "make time") using data from Twitter and a large corpus of text containing over one billion words (Davis, 2008). In Twitter, we scraped all tweets within the last seven days with the phrases "I didn't have time" or "I didn't make time" and counted the number of occurrences. In the large corpus, we searched for all the verbs that appear immediately before the word "time" ("have" was the most prevalent). In both the Twitter, $\chi^2(1) = 3571.4$, *p* <.001, and corpus data, $\chi^2(1) = 11471.1$, *p* <.001, consumers were far more likely to use the phrase "have time" versus "make time."

In study 2, we explored why consumers might prefer "have time" (vs. "make time") framing. We asked participants ($N = 500$) to imagine saying they didn't have or make time for a goal. Then, they reported the negative emotions they anticipated feeling (i.e., guilty, blameworthy, bad, discouraged, nervous, tense). Consistent with the idea that "have-time" (vs. "make-time") is self-protective, compared to saying "I don't have time" ($M = 3.91$, $SD = 1.45$), participants anticipated saying "I don't make time" would be more emotionally aversive ($M = 4.31$, $SD = 1.34$, $t(498) = 3.20$, $p = .001$, $d = .29$.

In studies 3 and 4, we test whether "have time" (vs. "make time") framing affects how people understand a prior failure to spend time as intended and resulting feelings of control. Study 3 is a meta-analysis of 10 studies using similar methods ($N = 3,168$). In all studies, participants described a goal that they currently held but that they had not made progress on last week. Then, they wrote a sentence based on the prompt "I did not make time for my goal because…", or "I did not have time for my goal because…". We text analyzed the responses to this prompt using structural topic modeling. Controlling for study fixed-effects, "make time" (vs. "have time") led to fewer references to competing demands on time (e.g., topics related to home, work, and busyness) and to more references related to procrastination, laziness, and not using time effectively (all $ps < .001$). In study 4 ($N = 301$), we again framed a recent goal failure as not having (vs. making) time and measured perceptions of control over goal outcomes. Participants in the "make time" (vs. "have time") condition perceived significantly more control ($M = 3.90$, $SD = .69$ vs. $M = 3.72$, $SD = .65$), $t(299) = 2.24$, $p = .025$, $d = .30$.

In study 5, we test behavioral consequences of "have time" vs. "make time" self-talk in the field. Participants ($N = 600$) were recruited on a Friday and asked to meditate three times over the weekend. On Monday, we recontacted participants. Participants who failed to meditate on at the least one of the three days ($n = 221$) wrote about why they didn't make or have time to meditate over the weekend. On each of the three days following the manipulation, participants reported whether they had meditated that day or not. 208 participants responded to at least one of the three follow-up surveys. Controlling for behavior before the manipulation, participants in the "make time" (vs. "have time") condition meditated significantly more during the next three days ($M = 2.45$, $SD = .85$ vs. $M = 2.30$, $SD = .99$), $F(1, 160) = 4.81$, $p = .029$, $\omega^2 = .02$.

Together, our findings advance understanding of how self-talk shapes goal achievement and has implications for how managers, coaches, and consumers can overcome prior failures to spend time.

Extension Request Avoidance Increases Time Stress Among Women

EXTENDED ABSTRACT

Women experience greater time stress than men: they are more likely to feel like they have too many things to do and not enough time to do them. Given the association between time stress, burnout, and poor work performance, this difference may have implications for gender disparities in work-relevant success and well-being (see Whillans et al., 2020).

Time stress at work results in part from tight deadlines (Buehler et al., 2002). Some deadlines are strict: once a deadline has passed, taking any action related to the task is impossible or costly. However, many everyday work tasks are subordinate tasks—smaller actions that must be completed to achieve a larger goal (Cropanzano et al., 1993), which are less likely to incur deadline adjustment costs. Initial research suggests that asking for more time on adjustable deadlines at work can reduce feelings of time stress (Yoon et al. under review). Given that women juggle more tasks, requests to extend deadlines could be a particularly beneficial option.

Despite the potential benefits, women could be especially likely to avoid requesting extensions due to heightened interpersonal concerns. Women tend to be more relationally oriented and sensitive to the needs of others as compared to men. Relationally oriented individuals tend to be more attuned to social costs, which can deter such individuals from requesting additional resources, such as monetary compensation (Amanatullah et al., 2013). Due to these concerns, women should be less willing to make extension requests than men.

We further propose a means to alleviate women's discomfort towards making extension requests at work: introducing formal policies for requesting an extension. Removing ambiguity can reduce gender differences in negotiation (Bowles et al., 2005). Building on this research, we propose that reducing ambiguity by establishing a formal policy around extension requests could mitigate the proposed gender differences in asking for more time on adjustable deadlines. To explore these Hypothesis, we conducted eight studies (three pre-registered) using a variety of methods including two field studies and a total of 5,142 working adults and students.

Study 1. We recruited adults who worked at least 21 hours a week outside the home ($N=575$; 42.1% female). As predicted, women felt less comfortable making extension requests on adjustable deadlines at work than men, $\beta = -0.38$, $P < 0.001$, 95% CI (-0.55, -0.21). This gender difference held controlling for covariates including with comfort with delegating tasks, age, tenure, and industry, $\beta = -0.40$, $P < 0.001$, 95% CI (-0.56, -0.23). As expected, women also reported experiencing more burnout than men, $\beta = 0.27$, $P = 0.001$, 95% CI (0.11, 0.44). A serial mediation revealed that gender differences in burnout were partially explained by women's greater experience of time pressure (from $\beta = 0.27$, $P = 0.001$ to $\beta = 0.21$, $P = 0.015$), 95% CI IDE (0.05, 0.30), which in turn was explained by their discomfort with requesting extensions for adjustable deadlines (from $\beta = 0.27$, $P = 0.001$ to $\beta = 0.11$, $P = 0.158$), 95% CI IDE (0.004, 0.14).

Studies 2a-c. Working adults imagined feeling highly pressed for time on a work task and being able to ask for an extension from their direct supervisor. Based on this imagined interaction, participants answered how comfortable they would feel requesting an extension. In Study 2a ($N=651$), women felt less comfortable requesting a deadline extension than men, $d = -0.24$, $P = 0.002$, 95% CI (-0.40, -0.09). Women were more relationally oriented ($p < 0.001$). Thus, they expected that requesting a deadline extension would result in greater impression costs, $d = 0.26$, $P = 0.001$, 95% CI (0.12, 0.43). These findings held regardless of the lower vs. higher work status of the employee (Study 2b; $N=599$) or manager gender (Study 2c; $N=600$).

Study 3. Participants ($N=872$) took on the role of the supervisor and imagined themselves in the scenario from Studies 2a-2c. To enhance the ecological validity of our design, participants imagined being a manager and having this interaction with a direct report that they actually worked with at their current jobs. Supervisors evaluated female and male employees who requested a deadline extension as equally competent and motivated, $d = -0.05$, $P = 0.418$, 95% CI (-0.19, 0.08). These results suggest that, contrary to female employee's expectations, supervisors do not disproportionately judge women more negatively for requesting an extension.

Study 4a-5. First, we conducted Studies 4a&b ($N=103$; $N=467$)—two correlational field studies. In these studies, women were more likely to ask for more time when a formal policy was in place. Building on these results, we experimentally examined whether formal policies could reduce gender differences in extension requests among college students ($N=975$). Depending on condition assignment, participants were given no additional information (Control), reminded that they may ask for more time by sending the instructor an email (Informal Request), or reminded of a school-wide policy that would allow them to ask for more time by sending the instructor an email (Formal Policy Request). We then measured students' willingness to ask for an extension, their predicted impression costs, and their trait relational orientation.

Female students who were assigned to the Informal Request condition were significantly less willing to ask for an extension as compared to male students, $d = -0.47$, $P = 0.002$, 95% CI (-0.69, -0.24). Female students who were assigned to the Control condition also reported being less willing to request an extension than the male students, $d = -0.45$, $P = 0.001$, 95% CI (-0.67, -0.22). Critically, when students were informed of a formal policy, female students were equally likely as male students to make an extension request, $d = 0.10$, $P = 0.959$, 95% CI (-0.13, 0.33). Once again, having a formal policy allowed relationally oriented individuals to be less fearful of social repercussions when asking for extension requests.

These findings shed light on a previously unstudied contributor to women's experience of time stress: their reluctance to ask for more time. Compared to men, women feel less comfortable asking for more time, as they believe it will be more interpersonally costly.

Detachment from Work During Non-Work Time and Its Implications on Workers' Evaluation

EXTENDED ABSTRACT

The ongoing pandemic has further highlighted the importance of employee well-being via work-life balance. Among academics, work-life balance is operationalized as psychological detachment (i.e., the state of mentally disconnecting from work; Etzion et al., 1998).

Research on psychological detachment has documented its various benefits for employee productivity (e.g., higher work engagement and proactivity; Sonnentang et al., 2010; Sonnentang, 2003; Chong et al., 2020) and well-being (e.g., increased life satisfaction, lower burnout; Haun et al., 2018; Kuhnel et al., 2009; Fritz et al., 2010). At the same time, however, ingrained in our culture is the protestant work ethic (Weber, 1905). Western societies idealize long working hours (Bellezza et al., 2017) and labor is highly rewarded (Moreau et al., 2011; Morales, 2005; Schrift et al., 2011). For example, workplace surveys suggest that time spent at work– even not working– is associated with better job-related outcomes (Elsbach et al., 2010). Given these opposing forces, we test how managers perceive and evaluate workers who detach from work during non-work time, along with relevant consequences, in three parts:

A first set of studies suggest that people acknowledge the benefits of detachment during non-work time on productivity, yet those same people also penalize workers who detach in worker evaluations. In a 3(detachment vs. non-detachment vs. control) between-subject design, participants in Study 1 (N=311), evaluated a worker who went on a weekend get-away (control; no further information) and either left their work devices at home (detachment) or brought them along (non-detachment). Participants rated the worker on two dimensions: productivity (how relaxed, energized, motivated and productive the worker would be on Monday) and worker evaluation (likelihood of hiring, promotion, pay-raise, perceived commitment, and hard-work). They also indicated the extent to which they perceived the worker identified with their job (mediator). The detaching worker was rated as more productive than the non-detaching one ($M_{Detached}=5.63$, $M_{Non-deatched}=5.14$, $p=.002$), yet was evaluated more negatively ($M_{Detached}=4.67$, $M_{Non-deatched}=5.45$, $p<.001$). The control condition resembled the detaching condition for both ratings. The penalty on detaching workers was mediated by perceptions of being connected to their job (CI [.109;.389]). A replication with real managers (Study 1B; N=201, no control condition) shows similar awareness of the benefits of detachment for productivity ($M_{Detached}=5.80$, $M_{Non-deatched}=5.50$, $p<.001$), along with the penalty for worker evaluations ($M_{Detached}=5.00$, $M_{Non-deatched}=5.60$, $p<.001$).

Study 2 (N=301) uses the same scenario to test the strength of this effect by comparing a superior detaching worker (8/10 worker rating) to two inferior (7/10) detaching or non-detaching ones. Again, detaching workers were perceived as more productive than the non-detaching one ($M_{Detached\ 8/10}=5.79$, $M_{Detached\ 7/10}=5.59$, $M_{Non-deatched\ 7/10}=5.16$), yet they were both evaluated more negatively than the non-detaching one ($M_{Detached\ 8/10}=4.90$, $M_{Detached\ 7/10}=4.70$, $M_{Non-deatched\ 7/10}=5.50$). That is, a non-detaching, inferior worker received higher evaluations than a superior detaching one ($p<.001$).

A second set of studies examine whether workers are aware of the detachment penalty, and its implication for how they plan and communicate their free time. Study 3A (N=200) and 3B (N=200) manipulated whether participants have an upcoming evaluation or not (between-subject). Study 3A asked participants to select 3 out of 12 available detaching and non-detaching activities they'd like to plan for their weekend. Participants chose fewer detaching activities when the evaluation was imminent/salient ($M_{no-evaluation}=7.82$ $M_{evaluation}=7.07$, $p<.001$). Study 3B asked participants about the number of paid vacations they would request, which was lower when an upcoming evaluation was available ($M_{no-evaluation}=21.9$ $M_{evaluation}=17.6$, $p=.001$). Study 4 (N=200) manipulated whether participants' Instagram followers included their supervisor (yes vs. no; between-subject). Participants were presented with four pictures that depicted either detaching or non-detaching activities. They indicated their likelihood of posting each picture and chose one to post among them. A significant interaction emerged ($p=.002$), such that participants indicated higher (lower) likelihood of posting non-detaching (detaching) pictures when their supervisor was among the followers (Non-detach: $M_{supervisor}=4.00$ $M_{no-supervisor}=3.58$; detach: $M_{supervisor}=4.72$ $M_{no-supervisor}=5.12$). Similarly, more participants chose one of the non-detaching pictures if their followers included their supervisor (33% vs. 17%, $p=.007$). Thus, workers are aware of the detachment penalty and change their behavior accordingly.

These findings have important implications for worker evaluations and signaling behavior of employees. It is therefore critical to know if these effects can be mitigated. A final set of studies tests debiasing strategies. For both studies, we manipulated whether the company requires detachment (strong intervention), encourages detachment (weak intervention) or not (control; between subject). In study 5 (N=305), using the same procedure and evaluation measures as Studies 1-2, we replicate the difference in evaluation as a function of detachment in the control condition ($M_{detachment}=4.53$ $M_{nodetachment}=5.51$ $p<.001$) and in the weak intervention condition ($M_{detachment}=4.77$ $M_{nodetachment}=5.60$ $p<.001$), but not in the strong intervention condition ($M_{detachment}=4.99$ $M_{nodetachment}=5.31$ $p=.131$; interaction with control $p=.033$), suggesting only the latter intervention is successful in attenuating the effect. In study 6 (N=186), we use the same interventions of study 5 and sharing measures of study 4 for the condition that includes the supervisor. We see a significant interaction ($p=.007$), such that the presence of the strong intervention decreases the likelihood to post one of the non-detaching pictures, compared to both the control condition ($M_{nointervention}=4.04$ $M_{strong\_intervention}=3.09$ $p=.004$) and the weak intervention condition ($M_{weak\_intervention}=3.91$ $p=.014$).

Results suggest that both lay people and real managers recognize the benefits of detaching for productivity, yet they penalize workers who detach from work during non-work time when evaluating them. Workers are aware of this detaching penalty and thus tend to detach less and to hide their detaching activities. We advance a potential intervention to attenuate this effect on both sides.

While previous work has pointed out many benefits of psychologically detaching from work, our research highlights potential, and serious, negative consequences for worker evaluations. Our findings

have significant implication for how companies interact with their employees, and suggest concrete and implementable steps to create a better workplace and ensure employees' well-being.

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Like It and Not: Multi-Method Approaches to Understanding Ambivalence in Consumption

Chair: Cristel Antonia Russell, Pepperdine University, USA
Discussant: Cristel Antonia Russell, Pepperdine University, USA

Paper #1: Ambivalent Social Processes in Virtual Support Communities: A Mixed-Method Inquiry of Facebook Groups

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Paper #2: Ambivalence and Brand Trust in Consumer Adoption of Artificial Intelligence-Enabled Applications

George Dagliyan, Pepperdine University, USA

Paper #3: "Hasty or Hesitant? The Interplay between Ambivalence and Social Norms on Consumers' Product Use Intentions

Anne Hamby, Boise State University, USA
Cristel Antonia Russell, Pepperdine University, USA

Paper #4: Distrust towards Institutions Reduces Attitudinal Ambivalence

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SESSION OVERVIEW

This session offers a multi-method, interdisciplinary perspective on the many facets of ambivalence in the consumption domain, its underlying processes, and its outcomes. Ambivalence, the coexistence of positive and negative attitudes or beliefs towards a target, is common in consumers' lives. The large body of research on substances has long documented the coexistence of positive and negative beliefs about substances, whether legal (e.g., alcohol, cigarettes) or illegal (e.g., drugs). From meat to ugly fruits and vegetables, ambivalence is common across many food choices, which often entail both favorable and unfavorable consequences: great taste but highly caloric; poor taste but great health benefits (Buttlar & Walther, 2018). Further, many of the environmentally-related attitudes towards targets such as plastic, or organic or bio-based products, are laden with ambivalence.

Despite the prevalence of ambivalence across consumption contexts, consumer research related to ambivalence is surprisingly scant (notable exceptions include Nowlis, Kahn, & Dhar, 2002; Otnes et al., 1997; Roster & Richins, 2009). Given ambivalence's relevance to and prevalence across many of the big challenges that we face today, understanding how consumers experience and deal with ambivalence may offer novel solutions to affect positive behavioral change.

This session assembles four research programs focused on the many types of ambivalence that consumers encounter: ambivalence inherent to social dynamics in virtual communities (paper 1), ambivalence that underpins the factors facilitating or inhibiting consumers' decision to adopt new technologies (paper 2), the effect of ambivalence on consumers' interest in using risky products (paper 3), and attitudinal ambivalence in a context of distrust (paper 4). The session emphasizes diversity in the methodological approaches, with qualitative research (paper 1), cross-sectional survey research (papers 1 and 2), and experimental research, including neuroscientific laboratory as well as field studies (papers 3 and 4). We aim to show the value and complementarity of these approaches in enriching our understanding of the antecedents, processes, and outcomes related to ambivalence.

The session brings together scholars at multiple stages of their careers, including doctoral students (papers 2 and 4), recently minted PhDs (paper 1) as well as more seasoned researchers. All projects are at advanced stages but not yet published. Hence, the findings presented at ACR will be fresh and ready for discussion, feedback, and audience engagement.

Because there are four papers, we will dedicate the discussion portion to audience engagement. The session chair will invite questions from the audience and moderate the ensuing discussion.

Ambivalent Social Processes in Virtual Support Communities: A Mixed-Method Inquiry of Facebook Groups

EXTENDED ABSTRACT

Perhaps because support communities are usually defined as places where "one is loved and cared for by others, esteemed and valued, and part of a social network of mutual assistance and obligations" (Taylor, 2011, p. 192), research on Virtual Support Communities (VSCs) has primarily focused on their benefits (Bradford et al., 2017; Seraj, 2012). Yet, consumer research contains hints of negative social dynamics within communities, with reports of toxic, off-putting environments (De Almeida et al., 2014) and tensions that threaten community belonging (Thomas et al., 2013). In online contexts characterized by anonymity, invisibility, and asynchronicity (Niemz et al., 2005), people are disinhibited and less able to read social cues and respond to them appropriately (Wright, 2002). Because VSC members do not necessarily know each other personally and/or can 'hide' behind their online profile, comments and reactions are less filtered (Brown et al., 2007; Kozinets, 1999). Thus, it is no surprise that a recent Forrester survey indicates that as many as 37% of U.S. adults believe social media may be more harmful than beneficial (Forrester, 2020).

Our research intersects with the growing scholarly evidence of the duality of VSCs' social processes and with research on technology-related paradoxes to explore whether and how such processes coexist within VSCs and how they impact relational and engagement outcomes (Mick & Fournier, 1998).

Studies

We report the findings of two interrelated studies in the context of Facebook VSCs geared specifically toward health- and wellness-oriented goals. Goal-oriented VSCs are on the rise as people with similar interests "gather and communicate via digital technologies to support one another" (Bradford et al., 2017, p. 9).

Study 1 is a qualitative exploration of a goal-oriented nutrition-focused VSC made up of netnography and in-depth interviews with eleven members of the VSC (Kozinets, 2020). Supported by tacking back and forth to the relevant literature (Russell & Levy, 2012; Strauss & Corbin 1998), this first study informed a conceptual model of the processes through which members become socialized into a VSC that accounts for both the beneficial and harmful forms of support they may encounter therein. The emerging conceptual model of ambivalent social dynamics in which positive and negative com-

munity perceptions affect the three mediating processes of social empathy, social pressure, and social angst. In turn, these three affect the VSCs' informative value, the relationships members forge and maintain with the community, as well as the degree to which they engage within it. The ambivalent social dynamics experienced are captured via multiple paths from positive and negative perceptions of the community toward the relational and engagement outcomes of VSCs. We identify the multiple roles of the social pressure inherent in social communities. It may increase social empathy and the community's informational value as well as its engagement but also contribute to social angst.

In Study 2, we tested this model of social dynamics with cross-sectional survey data from 287 members of Facebook groups focused on health and wellness. Structural equations modeling of survey data reveals two alternative paths through which social dynamics unfold toward their ultimate outcomes in community engagement and relationships. A positive path driven by positive group perceptions and mediated through social empathy leads to a VSC's greater informational value and to stronger relational and behavioral outcomes. A negative path driven by negative group perceptions and mediated through social angst leads to weaker community relationships and to reduced engagement. However, these paths do not operate independently. A serial mediation path reveals the paradoxical role of social pressure in its association with both greater social empathy and VSC's informational value as well as greater social angst. Peer-to-peer pressure is beneficial when it contributes to a feeling of empathy that all members of a community are striving toward the same goal, but if this pressure contributes to social angst, it can hurt bonds with the community.

Discussion

Collectively, the two studies provided empirical evidence of ambivalent social dynamics within VSCs. The data reveal the especially paradoxical role of social pressure which can generate both distress, a form of negative stress that we capture as social angst, as well as positive stress or eustress which appears to be beneficial in social settings if it increases engagement in the community. However, the very relationships members establish within a community can generate pressure that leads members to transform an otherwise pleasurable experience into a distressful one. In fact, constantly being pushed too hard is more likely to be perceived as overly stressful and may result in community defection (Snodgrass et al., 2016). As organizational studies reflect, monitoring the levels of eustress and distress experienced in a group is crucial to ensure that the climate remains balanced in terms of its stress (Kozusznik et al., 2015).

Given the ambivalent nature of social dynamics within VSCs, perhaps the most surprising finding from this research is that self-disclosure is not necessary for those communities to yield informational and emotional benefits. Study 1 revealed that many members do not want to open their vulnerabilities to the virtual (and often large) group. Whenever individuals disclose their transgressions to a collective, they make themselves vulnerable to potentially harmful social dynamics (Boardley & Grix, 2014; Hutchinson et al., 2018; Merton, 1968). We find that even silent members fill their informational and emotional needs by vicariously relying on the existing exchanges and still genuinely feel a part of the community. Vicarious disclosure allows members to cope with the VSC's ambivalent dynamics as it prevents any angst from surfacing as a result of self-disclosure while still enabling positive community bond outcomes. We discuss these implications of ambivalence for research on consumption communities (Algesheimer et al., 2005; Schau et al., 2009).

Ambivalence and Brand Trust in Consumer Adoption of Artificial Intelligence-Enabled Applications

EXTENDED ABSTRACT

From autonomous vehicles to smart home assistants, Artificial Intelligence enabled (AI-enabled) technologies are increasingly available in the market. Whether considering the adoption of such technologies or living with them, consumers are often saddled between their benefits and risks. On the one hand, AI-enabled technologies provide tangible benefits in the form of convenience, customization, and efficiency. On the other hand, consumers may also worry about the risks of privacy invasion, decision-related uncertainties, and loss of control. This research addresses whether and how do these coexisting inhibitory and facilitatory factors affect consumers' intention to use AI-enabled technology. We also assess whether the dynamics of these factors differ as consumers become users.

Building on extant frameworks of technology adoption, this research adds two new dimensions to the understanding of consumer adoption of AI applications. First, and in line with this session, it accounts for ambivalence, the feeling of conflict experienced toward an attitudinal object (Priester & Petty, 1996). Surprisingly, technology acceptance research has not accounted for ambivalence, despite its likely existence in an often-paradoxical domain of consumption (Mick & Fournier, 1998). Second, the research examines the role of brand trust, and its different facets, on consumer adoption of AI applications. Trust represents "the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party" (Mayer, Davis, & Schoorman, 1995). Trust is an important construct in the domain of AI technology (Choi & Ji, 2015). A review of 150 empirical studies addressing human trust in AI (Glikson & Woolley, 2020) underscored the important role of AI's tangibility, transparency, reliability, and the dynamic nature of trust. Indeed, many studies have confirmed that trust is a major construct for the adoption of automation (Carter & Belanger, 2005; Gefen et al., 2003; Lee & Moray, 1992,1994; Lee & See, 2004; Parasuraman et al., 2008; Pavlou, 2003). The uncertainty and ambiguity inherent to AI-enabled technology is likely to raise doubts that may constrain the adoption, and trust mitigates such constraints (Brown et al., 2004). Building on this large body of research, we posit that consumers' trust in the brand associated with the AI-application will affect both the adoption related decision-making process as well as the ways in which consumers feel toward AI applications, once they become users.

We conducted four studies to test the relationships between ambivalence and brand trust with facilitators and inhibitors of adoption and intention to use AI-enabled technology. We obtained different samples for each study sampling a population in the US with distinct categories of AI. Studies 1-3 focused on the perceptions of the non-users of Autonomous Vehicles (AVs; n=1,237), Smart Home Virtual Assistants (SHVA; n=894), and Telemedicine (TM; n=903), representing the Robotic AI, Virtual AI, and Embedded AI, respectively. Study 1 focuses uniquely on the adoption of innovation because AVs are not yet available on the market. Studies 4(a) and 4(b) consisted of current users of SHVA and TM, with a sample of n=344 and n=346, respectively, enabling us to examine difference between users (studies 2 and 3) and non-users of Virtual AI and Embedded AI categories.

The models were tested using structural equation modeling. With regards to adoption, the findings based on non-users (studies 1-3) reveal that facilitators of adoption have a strong relationship with intention to use, and they mediate the relationships of inhibitors, ambivalence, and brand trust. Surprisingly, inhibitors of

adoption do not directly affect intention to use; however, they are negatively related to facilitators. As predicted, brand trust is an antecedent of facilitators (positively related) and inhibitors (negatively related). Interestingly, ambivalence is related positively and significantly to both facilitators and inhibitors although its relationship is much stronger with inhibitors than with facilitators (AV=.49 vs .30, SHVA=.45 vs .22, TM=.55, vs .37).

The dynamics of inhibitors, facilitators, ambivalence and trust differ once usage begins. Facilitators remain the only variable associated with consumers' intentions to continue usage. Brand trust becomes an anchoring factor for users: with findings from studies 4a-b showing a greater relationship between brand trust and facilitators than with non-users and brand trust has a non-significant or much weaker relationship to inhibitors. Ambivalence's role is also different amongst users: amongst SHVA users, the relationship between ambivalence and facilitators is stronger (.30 in study 4a; whereas in study 2 it was .22***) and amongst users of TM, the relationship between ambivalence and facilitators is negative (-.30*** in study 4b whereas it was positive and .37*** in study 3). Although across both studies 4a-b, the relationship between ambivalence and inhibitors increases (from [4a].45*** to .80***, and [4b] .55*** to .82***), the inhibiting factors are not related to consumers' intentions to continue usage for TM.

General Findings

The main takeaways from all four studies are that facilitating factors of adoption mediate the relationships between inhibiting factors, brand trust, and ambivalence on consumers' intentions to adopt AI-enabled applications. Once usage begins however, brand trust increases but ambivalence decreases consumers' perceptions of the technology's benefits, which, in turn, affects their intentions to continue usage. We discuss implications of these dynamics for understanding consumers' adoption and retention of novel technologies and offer suggestions for further research to explore the interplay of ambivalence and brand trust.

Hasty or Hesitant? The Interplay between Ambivalence and Social Norms on Consumers' Product Use Intentions

EXTENDED ABSTRACT

Ambivalence (the coexistence of positive and negative attitudes towards a target) is common in consumers' lives, yet past research examining the consequences of ambivalence for consumer behavior yields conflicting findings. Ambivalence has been connected to *approach* behavior (Nowlis, Kahn, & Dhar, 2002; Roster & Richins, 2009; van Harreveld, van der Pligt, & de Liver 2009) and to *avoidance* behavior (Foster et al., 2016; Oser et al., 2010). One important factor overlooked by past research is the nature of the focal product: specifically, are the positive (negative) aspects experienced immediately?

The current work examines the consequences of ambivalence for consumer behavior specifically with respect to products that feature immediate positive benefits (such as energy drinks, electronic cigarettes, and cognitive enhancers) and yet also carry negative health consequences that worry policymakers. Understanding the effects of ambivalence in consumption contexts that may be immediately appealing but have negative lifelong consequences for consumers is particularly relevant and important from a policy and consumer bell-being perspective.

We propose that ambivalence, and the arousal that it triggers, increases approach tendencies behavior in the context of consumption choices that feature immediate positive consequences. We base this prediction on research showing the relationship between ambivalence and arousal and research examining the consequences of arousal for information processing and consumer behavior: Past research suggests that ambivalence is experienced as unpleasant when the positive and negative components are simultaneously accessible, which produces physiological arousal (Van Harreveld et al., 2009). Past research on the experience of arousal, in turn, suggests that it causes people to focus on immediate consequences; particularly those make them feel better (Noseworthy, Di Muro, & Murray, 2014). As previously described, ambivalent attitude targets are characterized by a mix of positive and negative components or consequences; consequences that may manifest immediately, or after a delay. If a consumer experiences ambivalence and arousal in a context in which the immediate consequences associated with consumption are positive, the short-term focus may cause the positive components to loom larger and enhance approach behavior. We propose that consumers' ambivalence towards products that feature immediate positive benefits enhances interest in and intention to approach these products, and that this effect is mediated by arousal.

We provide further evidence for our proposed process by examining the role of social norms—one's perceptions of what other people think and do (Cialdini, Reno, & Kallgren, 1990) – in moderating the relationship between ambivalence and approach behavior. We have proposed that ambivalence influences behavior through arousal, a condition which fosters heuristic (versus deliberative) processing. Normative information is prevalent and serves as a powerful heuristic cue in a number of marketing contexts (Abrams & Hogg 2010; White, Habib, & Hardisty 2019). We propose that norms moderate the relationship between ambivalence and product interest: when perceptions of group usage norms are higher, ambivalence is related positively to interest in and intentions to use the product. Conversely, lower perceptions of usage norms lessen the relationship between ambivalence and interest in and intentions to use the product.

Studies

We tested our Hypothesis across four studies. Study 1a was a controlled experiment in which we used the incentive-compatible Becker Degroot Marschak (BDM) paradigm (Becker, Degroot, & Marschak, 1964; Wertenbroch & Skiera, 2002) to activate ambivalence among current consumers energy drinks to assess the influence of ambivalence on willingness to pay (WTP) for a new brand of energy drink. This first experiment showed that ambivalence is linked to greater risk-seeking behavior among current users of a product category, as indicated by more (vs. less) ambivalent participants' willingness to pay more for a new product in that category.

Study 1b complements 1a by examining a context where individuals did not have preexisting attitudes; cognitive enhancers. Participants viewed statements about a new product that were mixed valence (high ambivalence condition) or positive valence (low ambivalence condition). After a delay, participants were reintroduced to the focal product. Participants in the high ambivalence condition were more aroused (as measured by skin conductance) than participants in the low ambivalence condition. Arousal, in turn, enhanced attention to subsequent positive (but not negative) information about the product, as measured by eye tracking. This study provides indirect support that ambivalence supports approach tendencies in the context of products that feature immediate positive benefits, and that arousal is an underlying mechanism.

Study 2 is cross-sectional study conducted in another population (French teenagers), which replicates the effect of ambivalence on interest in products that provide immediate benefits (e-cigarettes

and cigarettes). The study also documents the moderating role of normative social norms: the positive relationship between ambivalence and intention to use a risky product is enhanced when teens perceive higher usage norms among an associative reference group.

Study 3 assessed whether a public health norms intervention can reduce the influence of ambivalence on risky intentions. Building on the cross-sectional results of Study 2, we manipulated teens' perceptions of the prevalence of e-cigarette usage among their peers to assess whether this changes the relationship between ambivalence and intention to use e-cigarettes. Thus, Study 3 is a two-condition design in which participants received an intervention message (designed to reduce perceptions of associative group vaping norms) or a control message. Results showed that reducing the perceived normativity of substance use among an associative group attenuates the effect of ambivalence toward e-cigarettes on intention to use them.

We have two additional studies planned and can report the results of these studies at ACR. The first is a field study in which we manipulate the immediate positive (negative) consequences of a product towards which consumers are ambivalent. The second is a lab study designed to test our entire model (manipulating ambivalence, arousal mediator, social norms moderator).

Distrust towards Institutions Reduces Attitudinal Ambivalence

EXTENDED ABSTRACT

Trust is fragile. As the year 2020 has illustrated, distrust can pervade our lives in many ways. While the COVID-19 pandemic was unfolding, the levels of trust of citizens around the world fluctuated sharply regarding the capacity of governments to manage the crisis (Edelman, 2020). Another example occurred at the 2020 U.S. presidential election. After the Trump camp issued claims of voting fraud, Trump voters' trust in the government and the media plunged 15%, at half of Biden voters' trust level (Edelman, 2020). Therefore, one important question is about the broader implications of distrust for society. In this research, we propose that a state of distrust entails reduced levels of subjective attitudinal ambivalence about topics unrelated to the context of distrust.

Extensive research shows that distrust elicited in one domain can affect cognitive processes in another domain (e.g, Mayo, 2015). In particular, a repeated finding is that a mental state of distrust spontaneously activates incongruent thoughts (e.g., Mayer & Mussweiler, 2011; Schul, Mayo, & Burnstein, 2004). For example, Schul et al. (2004) showed that distrust led participants to generate semantically opposite words in a free association task (e.g., "dirty" for "clean"). Mayer and Mussweiler (2011) showed that distrust enhances cognitive flexibility and thus creativity. One question that remains unexplored is the impact of distrust on attitudes and more specifically on subjective ambivalence toward topics that can be unrelated to the context of distrust. Although one prediction based on the literature could be that distrust triggers opposite views on a topic thereby increasing ambivalence, we propose that distrust entails reduced levels of subjective attitudinal ambivalence.

Drawing on the Meaning Maintenance Model (Heine, Proulx, & Vohs, 2006), we argue that distrust threatens one's sense of meaning, the need for expected and predictable relations in one's representation of the world. In turn, one might compensate by reducing its subjective ambivalence toward given topics (Heine et al., 2006). We see several reasons why distrust could reduce meaning. First, by triggering incongruent thoughts, distrust creates unexpected links between concepts or ideas, which can disrupt one's existing mental representation on a cognitive level (Mayer & Mussweiler, 2011;

Schul et al., 2004). Second, while trust is associated with a feeling of security (Ainsworth et al., 2014), distrust implies uncertainty regarding the trustworthiness of a target (Weiss et al. 2020), thereby reducing the perception of predictability in one's environment. Finally, trust ties the self with the target of trust (Weiss et al. 2020), a relationship that is compromised under distrust. The resulting threat to the self could reduce the sense of meaning.

We further argue that one way to cope with the meaning threat posed by distrust is by reducing one's attitudinal ambivalence. Research suggests that through its attitudes, one can restore the self-esteem critical to the sense of meaning (McGregor & Marigold, 2003; McGregor et al., 2001; Steele, 1988). Furthermore, a lower level of subjective ambivalence toward a target topic implies the perception of less conflicting reactions. Therefore, reducing one's ambivalence could provide a feeling of reconciliation restoring a sense of meaning on a cognitive and affective level (Priester & Petty, 1996, 2001). Note that in this research we investigate the subjective perception of ambivalence rather than the objective amount of opposite thoughts (Priester & Petty, 1996). We conducted three preregistered studies in the context of distrust in institutions.

Studies

In study 1, we established the relationship between distrust and lower subjective attitudinal ambivalence. Participants (N = 200) indicated their level of trust in a series of institutions. Then, following Priester and Petty (1996, 2001), we asked them for their positive and negative thoughts and feelings about three societal topics (e.g., drinking alcohol, Genetical Modified Organisms). For each topic, we measured subjective ambivalence, that is the extent to which they felt conflicted, indecisive, and one-sided or two-sided about the topic. Consistent with our prediction, there was a significant relationship between distrust and subjective ambivalence ($F(1, 198) = 43.88$, $p < .001$), such that the more participants distrusted institutions, the less they were ambivalent about topics.

In study 2, we provided evidence for causality. We manipulated distrust in institutions through a writing task. Participants (N = 700) were randomly assigned to one of three conditions: distrust, trust or a control condition. They had to recall a time when they distrusted or trusted a governmental institution, or something they did the day before. The manipulation was followed by a measure of affect and the same measure of subjective ambivalence as in study 1 with three different topics (e.g., use of animals in medical research). Results showed that distrust (vs. trust and control conditions collapsed) reduced subjective ambivalence, controlling for negative affect as preregistered ($F(1, 697) = 5.08$, $p = .025$).

Study 3 extended our findings in an ecologically valid setting, the 2020 U.S. presidential elections. In the weeks following the elections, American participants (N = 622) indicated their trust in the U.S. election system and democracy. We then measured subjective ambivalence about nine topics (e.g., nuclear power) as in studies 1 and 2. Finally, we asked participants to report their vote and their political preferences. A mediation analysis revealed a significant indirect effect (indirect effect = -0.41, bootstrapped 95% CI = [−0.57, -0.26]) supporting a relationship between vote (Donald Trump vs. Joe Biden) and subjective ambivalence driven by trust in democratic institutions when controlling for political preferences. Trump voters had less trust in democratic institutions ($b = -1.38$, $t(619) = -7.71$, $p < .001$), which, in turn, was linked to less subjective ambivalence ($b = 0.30$, $t(618) = 6.47$, $p < .001$). When trust was controlled for, the effect of vote on subjective ambivalence was no longer significant. Ancillary analyses showed that the indirect effect was significant for all topics taken separately.

In summary, these studies enhance our understanding of the relationship between distrust and subjective attitudinal ambivalence, with evidence in a real-world setting. This research has implications for marketing as it suggests that exposure to distrust cues (via media for instance) could affect product attitudes and thus consumption.

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Mental Accounting Advances: How Mental Accounting Influences Purchases, Patience, and Well-being

Chair: Kellen Mrkva, University of Bath, School of Management, UK
Discussant: Eric J. Johnson, Columbia University, Columbia Business School, USA

Paper #1: Effort Accounting: People Prefer to Spend Hard-Earned Money on Long-Lasting Purchases
> Kellen Mrkva, University of Bath, UK
> Jesse Walker, Ohio State University, USA
> R.A. Farrokhnia, Columbia University, USA

Paper #2: Early Cost Realization and College Choice
> Haewon Yoon, Indiana University, USA
> Yang Yang, University of Florida, USA
> Carey K. Morewedge, Boston University, USA

Paper #3: The Role of Similarity in Mental Accounting
> Ellen Evers, University of California Berkeley, USA
> Alex Imas, University of Chicago, USA
> Christy Kang, University of Chicago, USA

Paper #4: Waste Not, Wait a Lot: The Mental Accounting of Sunk Costs Leads to Delayed Consumption
> Tyler Fraser MacDonald, Boston University, USA
> Jesse Walker, Ohio State University, USA
> Michael Silverstein, University of Oregon, USA

SESSION OVERVIEW

Normative theories of consumer choice suggest that money should be treated as fungible, regardless of the source of the money or the current account it is in. Yet, beginning with research by Richard Thaler and others (1985, 1999) on "mental accounting," scholars have demonstrated that people do not treat their money from different sources as interchangeable, but deviate from this standard in predictable ways. For example, people are more willing to spend money on fun experiences if this money was obtained because of a happy event rather than a sad event (Levav and McGraw 2009).

The proposed session explores other important implications of mental accounting as well as the precursors that determine whether people group events (or money) into separate mental accounts. Papers in this session investigate how mental accounting influences college choice, well-being, charitable donations, and spending. All four papers share the theme of mental accounting, and three of the four also share an emphasis on patience or timing, whether focused on timing as a precursor of mental accounting or as an outcome.

Mrkva, **Walker**, and **Farrokhnia** study how consumers allocate money into different mental accounts based on the amount of effort exerted to acquire the money. Compared to easily-acquired money, they find that consumers prefer to spend hard-earned money on long-lasting items, such as computers with warranties, durable goods, and donations with long-term impact. They test this using experimental manipulations of effort and with real-world data from financial transactions and lotteries.

Yoon, Yang, and **Morewedge** investigate how mental accounting influences an extremely important consumer decision—college choice. They find that people mentally integrate the costs from each year of college and psychologically experience those costs very early (prior to making their first payment, even if they have loans that delay payments) whereas the benefits of college are not psychologically experienced until after graduation. As a result, present-oriented people are more likely to choose low-cost, low-return colleges.

Evers, **Imas**, and **Kang** develop an elegant theory of the precursors of mental accounting, which explains when and why people group events together rather than separating them into different mental accounts. They suggest that the similarity of two events (along salient dimensions; Tversky 1977) is the primary precursor that determines whether people mentally group two events together or separately. They test and support this model across 5 experiments and also show that it accounts for several seemingly contradictory findings in the prior mental accounting literature.

MacDonald, **Walker**, and **Silverstein** suggest that mental accounting often causes people to delay consumption. They find that consumers mentally categorize expensive products with special occasions and thus wait longer to consume expensive products. This is a new development, because previous sunk costs research suggests people consume expensive products earlier due to the psychology of sunk costs (Arkes and Blumer 1985). All four papers are in the late stages of development.

Effort Accounting: People Prefer to Spend Hard-Earned Money on Long-Lasting Purchases

EXTENDED ABSTRACT

Consumers sometimes earn money through hard work and other times acquire money effortlessly. Previous research suggests that the source of money influences how it is spent, however little is known about how the amount of effort exerted to attain money influences spending. Across 5 studies, we demonstrated that acquiring money through higher effort influences spending. Specifically, consumers prefer to spend hard-earned money on long-lasting items, such as computers with warranties, durable goods, and donations with long-term impact (rather than only short-term impact).

We first examine financial transaction data from 392,564 consumers and 1,547 small-stakes lotteries to show that lotteries increase spending on non-durable goods more than durable goods. In Study 2, we manipulated whether economic stimulus payments were framed as easily-acquired gifts vs. hard-earned money, showing that people are more willing to spend money on computers without warranties and donations with only short-term impact when the stimulus money is framed as easily-acquired. Then, we conceptually replicated these results with money earned in high-effort vs. low-effort laboratory tasks and other effort manipulations. These effects were driven by consumers' subjective perceptions that they had less resource slack after earning money through substantial effort (though participants were aware their objective slack and future earning potential was equivalent).

In Study 1, we analyzed financial transaction data that tracks all bank account transactions from over 390,000 users and conducts small-stakes lotteries ($40 to $1000 per lottery win) among users. We predicted that people would be more likely to spend money attained via these lotteries (easily-acquired) on transitory non-durable goods rather than longer-lasting durable goods. As expected, we observed an increase in spending in the days following a windfall (i.e. lottery win). Critically, this increase in spending was much larger for non-durable goods (e.g., food from restaurants) than for durable goods (e.g., household appliances and electronics). We used the Bureau of Labor Statistics' definition of durable and non-durable good catego-

ries to classify each transaction. Then, we computed a mixed effects model (Mrkva et al., 2021; Westfall et al. 2014) estimating the increase in durable and non-durable purchases after a lottery windfall, while adjusting for variance associated with each user's spending patterns and for seasonal and weekly differences in purchases across users.

In Study 2, we directly manipulated effort framing and isolated the extent to which the dependent variable involved long-lasting vs. short-term outcomes. To do so, we manipulated whether an upcoming economic impact (stimulus) payment was described as easily acquired (similar to a "gift" sent from the U.S. government) or as hard-earned money that was earned through hard work, paid to the federal government via taxes, and then returned to eligible taxpayers ("hard-earned" condition). Following this manipulation of perceived effort, participants completed two dependent variables assessing their willingness to use the money on items with long-lasting vs. short-term outcomes. One dependent variable consisted a choice between donating $20 to a charity focused on long-term impact vs. a charity focused on short-term impact (both would address an ongoing humanitarian crisis in Yemen, but with resources devoted more towards long-term vs. short-term relief). The decisions from a random subset of participants were implemented. The second dependent variable asked participants to choose whether they would prefer to use some of the stimulus money to purchase a $1000 computer with no warranty but premium features (Intel i7 processor; 1 TB storage) or a $1000 computer with a 3 year warranty but two features that were less advanced (Intel i5 processor; 0.5 TB storage). Participants completed both scenarios in random order to increase power in this and all subsequent studies.

Participants were more likely to donate to a charity with long-lasting impact in the "hard-earned condition" than in the "easily-acquired condition," $z=2.79$, $p=.005$. Those in the "hard-earned condition" were also more likely to choose to spend $1000 of their stimulus on a computer with a warranty but less premium features than were participants in the "easily-acquired condition," $z=2.07$, $p=.038$.

In Study 3, we manipulated experienced effort using a "real effort task" commonly used in experimental economics (Gill and Prowse 2013). Participants were randomly assigned to the "high effort" or "low effort" task, which entailed moving sliders as fast as possible to a predetermined location (high effort condition) or fewer sliders at a leisurely pace to a predetermined location for the same amount of time (low effort condition). Following this effort manipulation, participants completed the same long-term vs. short-term impact donation decision as in Study 2. Participants were more likely to donate to a charity with long-lasting impact in the "high effort condition" than in the "low effort condition," $z=4.61$, $p<.001$, conceptually replicating Study 2.

In Study 4, participants were randomly assigned to the "hard-earned" or "easily-acquired" condition. They imagined they worked hard overtime at work. In the "hard-earned condition" they received $1,000 from this hard work. In the "easily-acquired condition", their employer paid the same amount regardless of overtime, but they won a $1,000 lottery. Then, participants completed the computer choice as in Study 2. Participants in the "hard-earned" condition were more likely to choose the computer with a warranty (53%) compared to those in the "easily-acquired" condition (44%), $z=3.66$, $p<.001$.

Study 5 investigated the proposed mediators. It was similar to Study 4, except that both conditions involved money earned at work (through very hard work vs. easy work). Following the effort manipulation and computer choice, we added measures of three potential mediators (perceived slack, wastefulness, and self-connectedness of

the money) and included items to assess alternative explanations of our results (mood, unexpectedness, perceived wealth, future earnings potential).

Participants in the "high effort" condition were more likely to choose the computer with a warranty (50%) compared to those in the "low effort" condition (33%), $t(222)=6.19$, $p<.001$. According to a parallel mediation model testing the three potential mediators, these effects were partially mediated by perceived slack and desires to avoid waste (but not self-connectedness).

Consumers sometimes earn money through hard work and other times acquire money effortlessly. We argue that consumers put hard-earned and easily-acquired money into separate mental accounts and spend hard-earned money differently.

Early Cost Realization and College Choice

EXTENDED ABSTRACT

A college education is an economic ladder that can boost human capital (Becker 1962), but it is an expensive investment that led many students to pay the tuition using student loans. Currently, 43 million Americans have active student loan accounts for federal student loan programs (e.g., Stafford loans and Perkins loans; National Student Loan Data System 2021). We examine how people make college choices based on their financial ramifications when they can make use of student loans.

Student loans change the temporal dynamics of financial costs and benefits of a college education. With a student loan, attendance costs are no longer due while attending college. Loan payments are usually deferred until after graduation, and these payments are spread over many years (National Center for Education Statistics 2018). Student loan repayments are usually 8-11% of income after graduation (Avery and Turner 2012). Suppose students recognize financial costs and benefits when they earn income and pay back the student loans (i.e., after graduation). In this case, students should not worry about the immediate cost of higher education, and thus prefer High-Cost High-Return colleges (HC-HR, hereafter), such as expensive private schools that promise higher income after graduation, over Low-Cost, Low-Return colleges (LC-LR, hereafter), such as state schools or for-profit colleges. In reality, however, students exhibit substantial debt aversion before enrollment, even with student loans, and often choose LC-LR schools that will yield a lower lifetime income (Sallie Mae 2017).

We hypothesize that students psychologically realize the financial costs of college earlier than the financial returns, even though they will actually realize the costs and returns at the same time after graduation. The asymmetric psychological realization of costs and benefits frames college choices as intertemporal tradeoffs between a smaller short-term investment with smaller long-term returns (i.e., LC-LR colleges) and a larger short-term investment with larger long-term returns (i.e., HC-HR colleges), even when there are no actual short-term transactions. Thus, present-oriented students are more likely to choose LC-LR colleges because short-term financial cost is weighted heavily over long-term gain, whereas future-oriented students are more likely to choose HC-HR colleges because long-term financial gain is weighted heavily over short-term financial cost.

Using model simulations, we tested whether the asymmetric psychological realization of costs and benefits indeed leads to intertemporal tradeoffs in college choices. We created two mathematical models, a cash-flow model and a tuition myopia model, that calculate the present value of college education considering financial costs and expected income after graduation. Two models are identical except the cost recognition timings. The cash flow model recog-

nizes costs after graduation when the loan repayment is due, while the tuition myopia model recognizes costs during college when the tuition is due. A simulated decision maker evaluated 123,753 HC-HR and LC-LR college pairs from the College Scorecard database (https://collegescorecard.ed.gov/; Department of Education) using the two models, and listed colleges that yielded higher present values. The results demonstrated very different predictions depending on the cost recognition timing. When the simulated decision maker recognizes costs after graduation (i.e., cash-flow model), HC-HR colleges dominated college choices (85.36%, across all conditions). However, when costs were recognized while attending (i.e., tuition myopia model), most college choices became intertemporal tradeoffs (90.02%, across all conditions) such that the dominant college option was influenced by the individual discount rate of the decision maker (that is, impatient prefers LC-LR colleges, whereas patient prefers HC-HR colleges). The model simulation suggested that the timing of cost recognition may significantly impact how people make choices between HC-HR and LC-LR colleges.

In Study 1, we directly compared when students actually and psychologically realized the costs and returns associated with college. Undergraduate students from a large non-profit state university were asked to imagine that they secured a student loan that can cover all college expenses. Then then indicated when the financial costs and returns of college education would be realized, psychologically and actually. The results demonstrated the misalignment between the psychological and actual realization timings for the financial costs but not for the financial returns. Participants psychologically realized financial costs earlier than actual loan payment dues ($t(387) = 12.01$, $p < .001$; Wilcoxon Signed-Ranks Test: Z = 10.37, $p < .001$). However, we did not find such a misalignment for the financial returns ($t(387) = 1.34$, $p = .18$; Wilcoxon Signed-Ranks Test: Z = 1.07, $p = .28$). The result provides preliminary evidence for the tuition myopia model that recognizes costs ahead of returns, leading to intertemporal tradeoffs for college choice.

Studies 2 and 3 tested whether people make intertemporal tradeoffs when making college choices. Study 2 tested our hypothesis against a simple student debt aversion account, whether people simply avoid expensive schools. Study 3 tested our hypothesis against a Return on Investment account (ROI), whether people use the ROI principle when making college choices. In both studies, we presented a series of college financial information (annual attending costs & expected income after graduation). We analyzed the choice patterns of participants to see if the pattern can be explained by intertemporal tradeoffs or by alternative Hypothesis. Study 2 supported our tuition myopia account (F(2,166) = 130.24, $p < .001$, ηp2 = .61) over the debt aversion account (F(2,166) = 2.28, $p = .11$). Study 3 also supported our tuition myopia account (F(1,96) = 85.98, $p < .001$, ηp2 =.47), over the ROI account, (F(1,96) = .35, $p = .55$).

In Study 4, we tested whether an alternative way of presenting information that can align the psychological cost timing with actual payment timing can increase the preference for HC-HR colleges. Instead of providing college cost information based on annual costs, we presented college costs based on loan payment amount after graduation. This alternative information increased preference for HC-HR colleges, ($t(178) = 5.57$, $p < .001$, d = .83), as predicted by the cash-flow model.

Together, the current investigation provides insights regarding how people make college choices with student loans. We suggest that people asymmetrically recognize the financial cost and benefit timings, which make college choices as intertemporal tradeoffs between LC-LR colleges and HC-HR colleges.

The Role of Similarity in Mental Accounting

EXTENDED ABSTRACT

The evaluation of sequential outcomes—good and bad—is inherent to daily life. A professor teaches a great lecture in the morning, a fine graduate seminar in the afternoon, but a much-anticipated dinner at a fancy restaurant disappoints. A stock trader starts the morning with heavy losses on one asset, sees positive returns on another in the afternoon, and ends the day arguing with her partner. Are these experiences evaluated jointly as a good (or bad) day, or is the pain and pleasure of each outcome evaluated separately, as distinct experiences? And as a result, would the person prefer to combine the experiences on the same day or spread them over time?

We present a categorization based model of mental accounting, in which consumers are more likely to categorize and evaluate similar outcomes as one larger "event," whereas dissimilar outcomes are categorized and evaluated as separate, smaller "events." The professor in the above example would be much more likely to combine the class and the seminar into one event as compared to the dinner and either of the earlier outcomes. Analogously, the trader would be more likely to view the workday as a wash followed by a bad night, compared to viewing the morning as a loss followed by a lukewarm rest of the day. This categorization in turn affects preferences over the timing of outcomes; due to the shape of prospect theory, consumers prefer to experience similar negative outcomes together, while preferring to separate dissimilar negative outcomes over time. For positive outcomes, we predict and find the opposite. Similar positive outcomes are preferred to be spread over time while dissimilar positive outcomes are preferred to be experienced at the same time.

In Study 1 (N = 400), we investigate the premise of our model; how do consumers categorize experiences. We presented participants with a total of 6 different negative outcomes (e.g., breaking a glass, finding out their milk is sour, finding out the cost of internet has increased by $10) that varied in their degree of similarity to other events. Participants then were asked to organize these outcomes into "events" combining outcomes together that they perceived to be part of one larger event. Consistent with our expectations, we found that participants were a lot more likely to combine similar outcomes into the same event as dissimilar ones.

In the next 4 studies (all N > 100 per cell) we turn to our models' main predictions, investigating preferences over the timing of outcomes. For example, in Study 5, participants were informed they had to complete 3 tasks in total; one questionnaire as well as tasks A and B. They were told they had to complete task A right now and would have to complete the questionnaire 1 week from now. Then they could choose whether they also wanted to complete task B right now, or whether they would rather complete it one week later together with the questionnaire. While both task A and B were unpleasant tasks, depending on the condition they were framed as being similar tasks or dissimilar tasks. Consistent with our model's predictions, we found that participants preferred to experience both negative tasks at the same time when they were framed as similar tasks, whereas when the differences between the tasks were emphasized they preferred to spread the experiences over time by opting to complete task B a week later. We also measured perceived similarity and found that perceptions of similarity mediated this effect. Across Studies 2-5 we varied both the valence of the outcomes and the degree of perceived similarity of the outcomes. We consistently find that increasing similarity for negative outcomes increases preferences to experiences those outcomes on the same day while for positive outcomes increased similarity increases preferences to segregate these outcomes over time.

Combining mental accounting with prospect theory, Thaler (1985) derived a logical prediction termed hedonic editing; because of the shape of prospect theory, consumers should integrate negative outcomes and segregate positive outcomes. So far, evidence for hedonic accounting has been mixed, with some work finding preferences consistent with these predictions and other scholars finding consumers behaving differently (e.g., Linville & Fisher, 1991; Thaler, 1999; Thaler & Johnson, 1990). We propose, and find evidence consistent with, the importance of similarity in mental accounting. The degree to which outcomes appear to be similar or dissimilar constrains the degree to which consumers are able to book outcomes to the same or different mental accounts and as such affects preferences over the timing of these outcomes.

Waste Not, Wait a Lot: The Mental Accounting of Sunk Costs Leads to Delayed Consumption

EXTENDED ABSTRACT

Imagine purchasing a high-priced bottle of wine. Would you feel compelled to drink it right away, or would you save it for a later time? Like many people, you might consider saving it for an upcoming anniversary or dinner party (Shu and Sharif 2018), especially if you paid more for it.

These kinds of decisions to delay the consumption of expensive products stand in opposition to previous findings in the sunk cost literature. Prior research has shown that consumers tend to engage in greater, immediate consumption of products as sunk costs increase (Thaler 1980). For example, consumers who pay full price (compared to a discount) for season theater tickets attend more plays early in the season rather than waiting until later in the season (Arkes and Blumer 1985). Why in some instances might higher sunk costs compel consumers to consume more now and in other instances to wait?

We argue that when consumers are free to choose when consumption occurs, higher sunk costs will not lead consumers to consumer more immediately. Instead, consumers who incur high sunk costs will delay consumption until a time that is psychologically commensurate with that cost. We find that this effect emerges because consumers' want to avoid feeling wasteful. By delaying consumption of a high cost product to a moment in the future that feels worthier, consumers can reassign the cost of the product to a more commensurate mental account, thereby reducing feelings of waste.

In 6 studies, we examined how the ability to delay consumption changes how sunk costs influence consumption decisions. In Study 1 (N=162), we examined this effect using a paradigm with real consumption and spending. Participants completed a task in exchange for either a voucher (no sunk cost) or cash ($4; sunk cost), which they could exchange for unlimited chocolates. Unlike previous sunk costs paradigms, participants were allowed to consume both in the moment *and* in the future by taking chocolate home. In contrast to previous findings, immediate consumption did not differ by condition ($t < 1$). However, participants with high sunk costs took more chocolates home ($M = 3.18$) than those with low sunk costs ($M = 1.66$), $p = .003$; d = .49). This effect persists when controlling for perceived quality, income, liking, hunger, and mood.

In Study 2 (N=260), we examined the effect of sunk costs on consumption of a non-durable product. Make-up users imagined purchasing a cosmetic product at either full price (high sunk cost) or a discount (low sunk cost). Consistent with our predictions, those with higher sunk costs preferred to delay their consumption of the more expensive product to a more special occasion ($M_{Higher SC} = 4.88$; $M_{Lower SC} = 3.44$), $p < .001$; $d = .56$.

In Study 3 (N=302), consumers imagined purchasing a bottle of wine at either full price (higher sunk cost) or a discount (lower sunk cost). Participants indicated when they would drink this bottle of wine using a sliding scale with endpoints labeled "Today (now)" to "Many days from now (much later)." Participants also completed a 3-item scale measuring feelings of wastefulness ($\alpha = 0.91$). Consistent with our predictions, consumers indicated that they would wait longer to consume the wine when sunk costs were higher than when sunk costs were lower ($p = .021$; $d = .27$). Critically, feelings of waste mediated this effect (95% CI [10.07, 20.11]).

In Study 4 (N=404), we examined the role of mental accounting in consumers' decisions to delay consumption of products with high sunk costs. Participants chose which of two frozen meals they would eat for lunch and which they would save for either dinner or a late afternoon snack. One meal was said to have cost $8 (higher sunk cost) while a second identical meal was said to have been on sale for $3 (lower sunk cost). Most consumers are more comfortable paying more for dinner than lunch and paying more for lunch than a snack, so we predicted that consumers would prefer the more expensive meal for dinner when choosing which meal to eat for lunch vs dinner, but would prefer the more expensive meal for lunch when choosing which meal to eat for lunch vs a snack. Consistent with our preregistered hypothesis, 59% chose to consume the more expensive meal for dinner than for lunch, and, in the other condition, 31% chose to consume the more expensive meal for lunch than for a snack, χ^2 (1) = 31.27, $p < .001$. Thus, in order to better justify their spending, consumers shifted consumption of the higher sunk cost purchase to the more commensurate mental account.

In Study 5a (N=403), participants imagined visiting a pizza buffet with either high ($21.95) or low ($6.95) sunk costs. In the *bounded* condition, participants could only consume pizza while at the buffet, while in the *unbounded* condition participants could also save pizza for later. We observed a significant interaction between sunk cost and boundedness on immediate consumption ($p = .042$). Participants indicated that they would consume more pizza immediately at the higher cost buffet when they could not take pizza home with them ($M_{Lower SC} = 4.41$; $M_{Higher SC} = 5.92$; $p = .001$). However, there was no difference in the amount consumed immediately when pizza could be saved ($t < 1$). Instead, when unbounded, consumers preferred to save more for later at the higher cost buffet ($M_{Higher SC} = 8.61$; $M_{Lower SC} = 6.35$), $p = .001$. Study 5b (N=495) replicated the results of Study 5a using an all-you-can-eat sushi buffet – a product unlikely to evoke anticipated utility for future consumption.

This research provides new insight into how sunk costs influence consumption. Although prior literature suggests that higher sunk costs cause greater immediate consumption, we demonstrate that when consumers can choose when to consume a product, they prefer to save high-priced products for more commensurate occasions in order to better justify the expense and feel less wasteful.

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The Psychology of Financial Resource Allocation

Chairs: David Dolifka, University of California, Los Angeles, USA
Nicholas Herzog, University of Chicago, USA
Discussant: Abigail Sussman, The University of Chicago Booth School of Business, USA

Paper #1: Chasing Consumer Surplus: Average Value Attracts Budget Allocations

David Dolifka, University of California, Los Angeles, USA
Stephen A. Spiller, University of California, Los Angeles, USA

Paper #2: Price Expectations and Spontaneous Opportunity Cost Consideration

Nicholas Herzog, University of Chicago, USA
Daniel M. Bartels, University of Chicago, USA

Paper #3: The Ironic Effect of Budgeting Anxiety and Increased Spending on Payday

Laura Goodyear, University of Toronto, Canada
Chuck Howard, Texas A&M University, USA
Marcel Lukas, University of St. Andrews, Scotland
Avni Shah, University of Toronto, Canada

Paper #4: Believing in a Brighter Future: Optimism Boosts Savings for the Poor but Not the Rich

Joe Gladstone, University of Colorado Boulder's Leeds School of Business, USA
Justin Pomerance, University of New Hampshire's Paul College of Business and Economics, USA

SESSION OVERVIEW

This session explores the psychological factors influencing how consumers think about and engage in financial resource allocation. The papers come together in three themes. First, we focus on how feelings of optimism, anxiety, and surprise influence the allocation process and spending decisions. Second, we consider whether—and when—consumers consider tradeoffs when allocating between different options. Third, we consider budget strategies that may lead to worse financial outcomes. Using data from government surveys, a financial application, a simulated budgeting game, and many experiments, these studies provide a rich, multi-method exploration into the psychology of financial resource allocation.

How might a consumer's feelings influence their allocation decisions? Starting with the thought processes that precede resource allocation, Herzog and Bartels find that surprising prices influence the likelihood of considering opportunity costs. Using survey data from the US and UK, Gladstone and Pomerance uncover a positive association between optimism and savings. Furthermore, they find manipulated optimism—incidental to finances—increases savings intentions. Relatedly, Goodyear et al. use data from a financial application to identify consumers who are likely to feel anxious exhibit larger 'payday effects' (Gelman et al. 2014; Olafsson and Pagel 2018). In controlled experiments, they show anxiety about financial planning leads consumers to perceive their ordinary paychecks as windfalls, which are more readily spent (Arkes et al. 1994).

Consumers must carefully consider trade-offs to effectively allocate their limited resources. Gladstone and Pomerance discuss how rich and poor consumers experience trade-offs differently. They propose a "boost" of optimism may be especially important for consumers with lower incomes who will need to forgo more competing causes. Herzog and Bartels find that consumers are more likely to spontaneously recall similarly priced options for comparison when a focal option's price is unexpectedly high. Even when alternatives are fully known, do consumers allocate resources properly? Dolifka

and Spiller find that consumers over-allocate to budgets with higher average values at the expense of trade-offs at the margin. Feedback about such trade-offs may improve allocation decisions, highlighting an approach for possible interventions.

Budgeting can be a beneficial strategy when allocation decisions are complicated or consumers lack self-control (Thaler 1985, 1999). However, this session acknowledges some reasons why budgets may lead people astray. Dolifka and Spiller suggest consumers are especially sensitive to the average values of the purchased set, rather than the entire consideration set. A consequence is that past budget allocation decisions can reinforce future errors if people attend to the average value of their prior purchases. Goodyear et al. highlight that budgeting anxiety (having intent without a certain plan) leads to an ironic failure of budgeting, as measured by excessive payday spending. These insights remind us that budgeting alone may not improve consumer welfare; we should be concerned with—and attempt to improve—*how* budgets are used.

Together, these projects offer new insights into the psychological factors that shape how consumers allocate their scarce resources in complex environments.

Chasing Consumer Surplus: Average Value Attracts Budget Allocations

EXTENDED ABSTRACT

Consumers use budgets to allocate resources between competing uses (Zhang and Sussman 2018). Once allocated, funds within budgets are no longer fungible (Hastings and Shapiro 2013; Heath and Soll 1996; Soman and Cheema 2011). Therefore, spending directly reflects prior allocation decisions. What drives budget allocations?

Prior research highlights many key inputs into how budgets are set. Consumers allocate in accordance with anticipated spending, which may lead to misallocations when expenses are mispredicted (Howard, Hardisty, and Sussman 2019), ignored (Sussman and Alter 2012), or uncertain (Ülkümen, Thomas, and Morwitz 2008). Budgets may be set as self-control devices to curb anticipated spending and limit consumption (Krishnamurthy and Prokopec 2010; Thaler 1985, 1999). Incidental factors—such as the arbitrary partitioning of accounts—may guide allocations (Bardolet, Fox, and Lovallo 2011). But how does the value of possible purchases influence budget allocation? That is the question we seek to address.

Normatively, resources should be allocated to equate the marginal value of purchases across budgets. But might consumers also be sensitive to average values? Prior research on melioration (Herrnstein and Prelec 1991) and the matching law (Rachlin and Laibson 1997) suggests people make distributed choices in proportion to the average benefits of those choices. We extend this work to budgeting, in which consumers allocate resources in advance of spending. In two preregistered experiments, we find that holding constant the normative marginal value, consumers allocate more funds to budgets with higher average values.

In experiment 1, $N = 100$ participants repeatedly allocated budgets between two lunch vendors for 10 simulated pay periods. By varying the lunch offerings available while holding the budget fixed (7 vouchers each 10-day pay period), we separately varied the

number of supramarginal options offered by each vendor (number of offerings in the top 7) and the average value across the two vendors. We regressed budget allocated to vendor 1 on (a) number of supramarginal vendor 1 options, (b) number of submarginal vendor 1 options (number of offerings in the bottom 3), and (c) the difference in average value of vendor 1 and vendor 2 options. Controlling for the number of supramarginal and submarginal goods and accounting for clustering, increasing the difference in average value induced a greater allocation to vendor 1 ($b = 0.14$, $se = 0.05$, $t(84) = 2.68$, $p = .009$).

In experiment 2, we used an incentivized budgeting game in which participants repeatedly set and spent from budgets. In this game, participants allocated a token currency between budgets for two kinds of goods: blue and red tiles. Tiles earned known numbers of points, from 5 to 100, and total points determined bonus payments. In each simulated game week, the total number of tiles (80) exceeded the total number of tokens (23). The challenge was to set budgets that would allow for the subsequent purchase of the highest-value tiles.

For all participants in all conditions, there were 40 blue tiles (9 worth at least 60 points) and 40 red tiles (14 worth at least 60 points). Participants faced the same 80 tiles each week, which were equally distributed across five days. Given a weekly budget of 23 tokens, the point-maximizing budget allocation was always 9 tokens for blue tiles and 14 tokens for red tiles, and the point-maximizing spending rule was always to buy every tile worth at least 60 points.

The number of blue or red tiles worth at least 60 points was held constant; but we independently varied the two distributions of supramarginal and submarginal values. In the supramarginal region of the distribution with values of at least 60 points, we manipulated either the 9 blue tiles or the 14 red tiles to have a higher average value. In the submarginal region with values below 60, we manipulated either the 31 blue tiles or the 26 red tiles to have a higher average value. Participants were informed they would see the same distribution of 80 tiles for the entire session and had five practice weeks to become familiar with the game and the distribution of tiles. Following the practice weeks, participants played the incentivized six-week game. We pre-set optimal budget allocations in the sixth week, allowing us to test whether participants maximize their points given an optimal budget allocation.

$N = 402$ participants (391 after preregistered exclusions) were randomly assigned to one cell in a 2 (supramarginal distribution: blue high, red high) x 2 (submarginal distribution: blue high, red high) design. Though the normative marginal value was held constant, participants in the blue-high-supramarginal condition allocated significantly more tokens to blue ($M = 10.8$, $SD = 1.8$) than did those in the red-high-supramarginal condition ($M = 9.9$, $SD = 1.8$; $t(387) = 4.83$, $p < .001$, $d = 0.49$). Neither the effect of submarginal distribution nor the interaction was significant. Follow-up analyses indicated these results were not attributable to asymmetric costs of allocation errors.

Participants earned more points with better budgets. Comparing earned points in the sixth week (with a pre-set optimal budget) to the fifth week (with a self-allocated budget), scores were an average of 23.4 points higher with the optimal allocation ($se = 4.5$, $t(387) = 5.58$, $p < .001$). These results highlight the importance of budget allocation on subsequent spending and demonstrate how allocating based on average values can conflict with maximization goals.

In two rich experiments using distinct paradigms, we document consistent robust evidence that consumers allocate more to budgets with higher average purchase values. Our research contributes to the budgeting literature by demonstrating that budgets are driven by average value in a way that incurs a loss of value at the margin. This research also suggests a potential strategy for budgeting tools aimed at improving consumer welfare: recoup value at the margin. Highlighting the marginal purchase value over the average purchase value could help consumers to both budget and spend better.

Price Expectations and Spontaneous Opportunity Cost Consideration

EXTENDED ABSTRACT

Before deciding how to best allocate their resources, consumers must become aware of their available options. Although this process may often involve contemplating alternatives that are immediately available, it may also require recalling outside options, which can be both difficult and costly due to limitations on attention and memory (Mehta, Rajiv, and Srinivasan 2003; Nedungadi 1990; Posavac, Sanbonmatsu, and Fazio 1997).

Because of these limitations, consumers may not spontaneously consider opportunity costs while deciding whether to purchase a focal option (Frederick et al. 2009; Jones et al. 1998). Among consumers who do not regularly think about a purchase as a choice between alternatives, Spiller (2011) proposed that they are more likely to consider opportunity costs under budget and resource usage constraints. Given that neglecting outside options often implies a narrow focus on the focal option, we investigated whether some salient features of the focal option itself can also prompt opportunity cost consideration. Specifically, we investigated whether unexpectedly high (low) prices make the spontaneous consideration of opportunity costs more (less) likely.

Unexpected prices can influence choices across a variety of purchasing contexts (Mazumdar et al. 2005), but the thought processes triggered by unexpected prices have been understudied. While it is clear from research on transaction disutility that consumers likely recall typical prices or cheaper substitutes when prices seem high (Thaler 1985), they may also be more likely to recall more reasonable alternatives at the same price point.

In Study 1a, we tested if spontaneous opportunity cost consideration is more likely when prices are higher than (vs. similar to) expected. Study 1b served as a direct replication and extension to study unexpectedly low prices. In a hypothetical purchase context, participants from Prolific (Study 1a $N = 577$; Study 1b $N = 879$) observed focal options and completed a thought-listing task. They first observed an image of one of ten possible products from a variety of product categories and estimated its price. These estimates were multiplied by values (determined by a pretest) such that the listed price was either similar to, lower than (Study 1b only), or higher than the expected price. Participants were asked to imagine that they were shopping and considering purchasing the focal product. The price was then revealed along with a textbox and instructions to describe their thoughts about the product and their decision process. Three research assistants coded whether participants considered the possibility of using a similar amount of money for something else instead of the focal product that they were presented with. Participants who observed prices that were higher than expected were slightly more likely to spontaneously consider opportunity costs (higher = 9.72% vs. expected = 6.27%, $p = .130$ in Study 1a; higher = 8.63% vs. expected = 4.48%, $p = .029$ in Study 1b). In addition, participants who observed prices that were lower than expected were slightly less likely to spontaneously consider opportunity costs (lower = 3.11% vs. expected = 4.48%, $p = .215$; lower = 3.11% vs. higher = 8.63%, $p = .003$). The incidence rate of explicitly mentioning opportunity costs is modest, but the observed patterns are consistent with our predictions.

In Study 2, we ran a conceptual replication by using consumer decision scenarios with more context, clearer motivation, and clearer instructions about what should be discussed in the open-ended responses. Participants from Prolific (*N* = 884) were randomly assigned to one condition in a 3 (price: lower than expected, similar to expected, higher than expected) x 2 (scenario: painting vs. data recovery) design. They read a scenario about deciding whether to purchase a painting they liked or a data recovery service to retrieve their lost pictures and videos. We elicited an expected price that was manipulated to be either lower than, similar to, or higher than expected. Participants read that they had plenty of money available for the purchase and wrote down thoughts that came to mind while contemplating spending that amount on the focal option. In this study, participants were asked to self-code their open-ended responses. They were presented with their responses and asked if they mentioned using that amount of money for something else instead of the focal option. Consistent with Studies 1a and 1b, participants who observed prices that were higher than (27.78%), versus similar to (17.16%), expected were more likely to spontaneously consider opportunity costs (*p* < .01). Further, participants who observed prices that were lower than (8.73%) (vs. similar to) expected were less likely to spontaneously consider opportunity costs (*p* < .01).

This project builds on existing behavioral theories (e.g., Nedungadi 1990; Spiller 2011). about when consumers spontaneously consider outside options from memory in purchasing decisions by studying an important aspect of consumer decision-making: price expectations. These findings help further our understanding of when consumers might be more or less likely to appreciate the full scope of their potential costs by considering forgone options in addition to out-of-pocket costs (Becker, Ronen, and Sorter 1974; Frederick et al. 2009; Thaler 1980). It also sheds light on which thoughts come to mind when actual prices deviate from expected prices. In addition to considering typical category prices and cheaper substitutes when faced with unexpectedly high prices, consumers may also be more likely to consider outside options at similar price points for comparison.

The Ironic Effect of Budgeting Anxiety and Increased Spending on Payday

EXTENDED ABSTRACT

In contrast to predictions of standard economic theory (e.g. Carroll 1997), research has documented a "payday effect" whereby consumer spending spikes following the receipt of predictable income like a paycheck (e.g. Olafsson and Pagel 2018). Some suggest that this effect is driven by consumers who are financially illiquid (Kaplan and Violante 2014). However, others demonstrate that the effect also occurs for those with substantial liquid assets (Olafsson and Pagel 2018). A natural question emerges: Why are consumers spending more on paydays?

To gain greater insight into the payday effect, we used real income and spending data (*N*=67,360) provided by a financial application, Money Dashboard, to examine whether certain groups were more prone to this effect. The data allows us to observe the timing and amount of each user's paychecks and spending, *before* they began using the budgeting application. To measure the payday effect, we perform panel regression analysis:

$$Y_{ick} = \sum_{k=-7}^{7} \beta_{kc} I_i (Paid_{t-k}) + X'_{it} + \varepsilon_{it} \quad \textbf{(Eq. 1)}$$

Where is the spending ratio of user *i* on day *t* in category *c*, *Paid* is a dummy equal to 1 if the user receives a paycheck on day *t-k*, and is a vector of control variables. All consumers in our sample display significantly greater spending in response to getting a paycheck. However, we found that this effect is significantly stronger among women (=0.15, =0.08; *p*<.001), younger consumers (=0.13, =0.08; *p*<.001), and lower-income consumers (=0.23, =0.05; *p*<.001). It could be argued that women, younger, and lower-income consumers experience greater financial constraints. However, we suggest that anxiety could be driving this effect. Research shows that anxiety is higher amongst these groups (Armstrong and Khawaja 2002; Mirowsky and Ross 1999; Lindemann 1996). Financial constraint is also associated with anxiety (e.g. Hayhoe et al. 2012). This is consistent with past work that finds financial constraint drives the payday effect. This could also explain why the effect is present for higher income individuals, as experiencing anxiety is not limited to those with low incomes (e.g. FPSC 2018). Finally, past research indicates that anxiety leads individuals to construe money differently, like overestimate the size of money (Zaleskiewicz et al. 2013), which could increase payday spending.

To determine whether anxiety could be driving the payday effect, we conducted three experiments. In Experiment 1 (*N*=744), we examined what types of anxiety are experienced throughout the pay cycle. Participants read a hypothetical scenario about a week in their life where they received a paycheck. We asked participants to indicate their current level of anxiety about several financial concerns. We also asked participants to indicated how much their paycheck felt like a "bonus" to determine if anxiety changed how individuals construed their income. We found that anxiety about planning one's income was higher before and on payday than after payday (M_{PrePay}=4.34; M_{Payday}=4.45; M_{PostPay}=4.08; *p*=.03) and anxiety about making one's paycheck last until the next paycheck was higher before and on payday than after payday (M_{PrePay}=4.30; M_{Payday}=4.45; M_{PostPay}=3.98; *p*=.018). However, anxiety related to money in general did not differ over the pay cycle (*p*=.12). Further, we found that anxiety about planning one's income (*β*=0.23, *p*<.001) and anxiety about making one's paycheck was associated with construing income as a bonus (*β*=0.18, *p*<.001), but not anxiety related to money more generally (*p*>.1).

In Experiment 2 (*N*=246) we manipulated financial constraint. This allowed us to determine if the payday effect is due to financial constraint or anxiety about one's ability to plan income. All participants read a scenario where prior to payday they received a $50 parking ticket. Participants were randomly assigned to one of two conditions that manipulated financial constraint. Participants in the constrained condition were told they cut back on their spending whereas those in the unconstrained condition were told they did not make any changes. Next, participants were told they received their paycheck. We tested payday spending by asking participants to order a meal at a restaurant after receiving their paycheck. We found that though experiencing financial constraint increased anxiety ($M_{\text{Constrained}}$=4.61, $M_{\text{Unconstrained}}$=3.39; *p*<.001) and concerns about planning one's income ($M_{\text{Constrained}}$=5.11, $M_{\text{Unconstrained}}$=3.37; *p*<.001), it did not impact spending (*p*>.1). However, higher anxiety was related to increased spending at the restaurant (*β*=1.48; *p*=.02).

In Experiment 3 (*N*=293), we tested the full model. Using the same manipulation as Experiment 2, we asked participants to indicate their preference for a cheap versus expensive restaurant. We found that experiencing financial constraint increased anxiety ($M_{\text{Constrained}}$=4.88, $M_{\text{Unconstrained}}$=3.32; *p*<.001) and concerns about planning one's income ($M_{\text{Constrained}}$=5.02, $M_{\text{Unconstrained}}$=2.88; *p*<.001). However, experiencing financial constraint did not impact restaurant prefer-

ence (p>.1). Using a path analysis, we found that financial constraint led to higher concern about planning one's income (p<.001), concern over planning one's income led to higher levels of anxiety (p<.001), experiencing higher levels of anxiety led to construing income as a windfall (p<.001), which led to preferring more expensive restaurants (p<.001).

If anxiety about income planning concerns is driving the payday effect, then we should expect a reduction in payday spending when uncertainty about planning one's income is reduced. One way to reduce this uncertainty is to use financial planning applications. To examine if a finance application could reduce uncertainty, we conducted a pilot study (N=99). We asked participants to indicate their level of agreement with statements regarding the purpose of an application. We found that individuals believed that finance applications restore a sense of control (M=5.75), reduce uncertainty (M=5.54), and reduce anxiety (M=4.84). As such, using Equation 1 we examined the difference in payday spending before consumers using the financial application and after they began using the application. We found that there is a significant reduction in the payday effect after using the application. Consistent with our anxiety account, we found that those most likely to experience greater anxiety display the greatest reduction in payday spending after using the application.

In sum, these results demonstrate that, ironically, experiencing anxiety about planning income can lead individuals to increase the amount they spend on payday. Also, this work begins to provide some insight into practical interventions that can be used to curb overspending behaviors on payday.

Believing in a Brighter Future: Optimism Boosts Savings for the Poor but Not the Rich

EXTENDED ABSTRACT

Having money saved fulfils basic psychological and economic needs for consumers (Deaton 1989; Ruberton, Gladstone and Lyubomirsky 2016), yet many people lack sufficient savings to cope with life's ups and downs (Demirgüç-Kunt and Klapper 2012). Past work has focused on factors such as financial literacy and self-control as drivers of savings (Baumeister 2002; Fernandes, Lynch, and Netemeyer 2014; Laibson et al. 1998; Lusardi 2008). We investigate another potentially important influence on saving: whether a person feels optimistic or pessimistic about the future (Scheier, Carver, and Bridges 1994).

How might optimism influence savings? It is plausible that optimism could reduce the desire to save. For example, a generalized belief that the future will be positive may reduce the perceived need to stash money away 'just in case' (Puri and Robinson 2007). However, we argue that optimism increases the perceived efficacy of saving, which will increase the amount people save overall. After all, people are more motivated toward goals that feel attainable and valuable (Wigfield and Eccles 2000).

Furthermore, we predict that the role of optimism on saving will be moderated by a person's current financial state: optimism will have a greater effect on the poor than on the rich. We note that saving among the poor is a discretionary act—there are always needs or wants that compete with saving, meaning people with lower incomes need optimism to boost the perceived efficacy and value of saving. In contrast, because wealthier people have more money to spare, they can save regardless of whether their disposition leads them to see savings as effective. We provide evidence that optimism increases savings, especially among lower income individuals, in 4 studies (3 additional studies are not reported for brevity).

In study 1, we test for an association between optimism, income and savings in cross-sectional survey data from The National Longitudinal Study of Adolescent to Adult Health, a nationally representative study of U.S. adolescents. Our sample includes respondents who completed the Wave 4 interview in 2008 ($N = 4,443$), the only wave to measure optimism. Participants answered four items measuring optimism, and indicated their income, total savings, and demographics. Using an ordinal logistic regression, we predicted saving from optimism, income, and their interaction, while controlling for demographic covariates to increase power (income, education, age and gender). As predicted, we find a positive effect of optimism on savings ($\beta = .265$, $z = .027$, $CI_{95\%} = [.21, .32]$, $p < .001$, OR = 1.30), and that the effect of optimism on savings is lower among wealthier individuals ($\beta_{interaction} = -.002$, $z = -2.12$, $CI_{95\%} = [-.004, -.0001]$, $p = .034$, OR = .998).

In study 2, we test our Hypothesis using survey responses from a nationally representative sample from the United Kingdom ($N = 4,170$). Participants answered four items measuring optimism as in study 1, indicated their total amount of savings (binned), their total income (binned), and demographic characteristics. Participants additionally answered whether they set savings goals, allowing us to probe whether optimism and income interact to predict the perceived efficacy of savings. We first predicted whether participants had a savings goal (binary) from their level of optimism, their income, and the interaction of the two (optimism and income were mean-centered). As predicted, more optimistic participants saved more ($\beta = .20$, $z = 4.13$, $p < .001$), and the effect of optimism decreased at higher income levels ($\beta_{interaction} = -.05$, $z = 2.71$, $p = .007$). Controlling for optimism and income, participants with savings goals saved more than participants without savings goals ($\beta = .70$, $t(3,298) = 3.46$, $p < .001$).

In studies 3 and 4, we replicate these patterns in the lab. In study 3, we randomly assigned 439 participants into one of four conditions in a 2 (optimism, pessimism) x 2 (high income, low income) experiment. To manipulate optimism, participants wrote down things they were looking forward to (optimistic condition) or not looking forward to (pessimistic condition) over the next week, year, and 5–10 years. To manipulate wealth, participants read brief vignettes. Participants indicated what percent of their income they wanted to save over the next year. As predicted, optimistic participants wanted to save a higher percent of their income than pessimistic participants ($M_{optimism} = 31.18$, $M_{pessimism} = 27.71$, $\beta = 3.45$, $t(418) = 1.78$, $p = .077$). Wealth had no influence on savings ($M_{lowWealth} = 30.36$, $M_{highWealth} = 28.55$, $t(418) = .89$, $p = .374$), and we did not observe an interaction between the two manipulations ($\beta_{interaction} = -3.89$, $t(418) = 1.00$, $p = .317$). This suggests the possibility that it is not a *psychological* difference between higher and lower income households that drives the difference in the effect of optimism, but perhaps structural factors (e.g., that higher income households tend to save by default).

Given that lower income households are more in need of saving, in study 4 we recruited only participants with self-reported household income lower than $50,000 ($N = 402$). We manipulated optimism with a short vignette accompanied by a cartoon illustration, measured the perceived efficacy of saving, and measured behavioural intentions to save. As predicted, optimistic participants perceived saving to be more effective ($M_{optimistic} = 8.86$, $M_{pessimistic} = 6.65$; $t(400) = 9.35$, $p < .001$), and intended to save a higher percentage of their next paycheck ($M_{optimistic} = 32.33\%$, $M_{pessimistic} = 26.58$; $t(400) = 2.50$, $p = .013$). The effect of optimism on behavioural intentions to save was mediated by the perceived efficacy of saving ($CI_{95\%} = [6.51, 11.75]$).

Promoting saving is a critical step to helping people improve their lives and compound wealth. Despite a large amount of research into its antecedents and consequences, we are far from a comprehensive understanding of how to increase saving. The present research suggests that manipulating optimism can be one critical way to help people ascend from poverty, and buffer themselves from financial shocks that perpetuate poor life outcome.

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Consuming the Sociality of Place

Chairs: Meredith Rhoads Thomas, Florida State University, USA
Discussant: Alexander I. Mitchell, California State Polytechnic University, Pomona, USA

Paper #1: Branded Home: Working it Out in Capitalistic Spirituality

Kelley Cours Anderson, Texas Tech University, USA
Ashley Hass, Texas Tech University, USA
Debra A. Laverie, Texas Tech University, USA
William Humphrey Jr., Florida International University, USA

Paper #2: Chateau DIY: Consociality and the Consumption of Place

Kimberley D. Preiksaitis, Siena College, USA
Alexander I. Mitchell, California State Polytechnic University, Pomona, USA

Paper #3: Consuming Neighborhood Sociality

Meredith Rhoads Thomas, Florida State University, USA
Alexander I. Mitchell, California State Polytechnic University, Pomona, USA
Albert M. Muñiz Jr., DePaul University, USA

Paper #4: Sociality and the City: A Model for Consumer-Driven Problem Solving

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Devan Leavins, City of Tallahassee, USA

SESSION OVERVIEW

Marketing and consumer research have largely overlooked the consumption of housing and neighborhoods, despite their ubiquity and importance in the lives of consumers. The purpose of this session is to redress this curious omission through the ways in which the sociality of place is constructed, experienced, and maintained in conjunction with market forces. To further explore the multifaceted nature of sociality and its connections to consumption and place, this session features four projects that present the construction of the sociality of place at different levels of analysis, from the level of the individual home through neighborhoods to the level of cities. We also feature a presentation by experienced members of a city planning department to complement the research presentations, in order to present a rich perspective on sociality, consumption, and place.

Conceptually, sociality refers to forms of attachments, interactions, and relationships that exist between individuals and groups (Perren and Kozinets 2018; Russell and Schau 2014; Wittel 2001). These social components come together to form a unique form of social life, and significantly contribute to consumer behavior and social change. Marketing and consumer research is increasingly bifurcating studies of sociality into those that explore more dispersed forms, so-called *network sociality* (Wittel 2001), versus those that focus on more communitarian forms (Bradford and Sherry 2015; Cova and Pace 2006; Muñiz and O'Guinn 2001; Schau, Muñiz, and Arnould 2009). More generally, regardless of the form, extant consumer research suggests that sociality: 1) is linked with the marketplace (Muñiz and O'Guinn 2001; Schouten and McAlexander 1995; Thomas, Price, and Schau 2013); 2) is reflected in forms of infrastructure, both digital and physical (Castilhos 2019; Kozinets, Patterson, and Ashman 2017; Perren and Kozinets 2018); 3) is connected with individual self-concept (Russell and Schau 2014); 4) is connected with individual values and beliefs (Arsel and Bean 2013; Kates 2002); and 5) influences opportunities, social mobility, and access to different lifestyles (Grier and Perry 2018). Experiences and meanings of place occur at many different levels (Gieryn 2000), leaving an opportunity

to extend our understanding of sociality while exploring the diversity inherent in consumption of housing and neighborhoods.

In this session, our projects explore sociality of place at the micro (e.g home), the meso (e.g. neighborhood), and macro (e.g. city) in order to develop understanding of the forms sociality intended for a place, and the links to consumption dynamics. The first project discusses the ways the Peloton brand community members create forms of public space to be shared with the group, but within the domestic realm. Project 2 examines evolving restructuring of sociality shaped by consumption of place through a dispersed Chateau community consisting of emplaced members as well as a global audience of loyal fans. Project 3 explores the way neighborhood socialites are created and consumed by resident consumers. Project 4 features insights from city planners who discuss how sociality is considered in the decisions that shape a city's growth, infill, and future planning. Together these projects enrich our understanding of sociality and contribute towards disciplinary explorations of homes and neighborhoods.

Branded Home: Working it Out in Capitalistic Spirituality

EXTENDED ABSTRACT

Spaces within the family home are becoming ever-increasingly reminiscent of public spaces, such as home theatres, gourmet kitchens, man caves (e.g., bars), and work-out rooms. Traditionally, branded spaces reside in the public domain, yet these spaces are moving into domesticated spaces. The home is soundly recognized as a proximal environment for not only individuals' identity but also negotiated familial identities (Epp and Price 2010). Yet space is conceptualized and designed not by the individuals solely living within the space, but as a result of location, wider social groups, and artifacts available to the residents. Consumers' transition of geography and new social groups can change the meaning of home, impacting the design of domestic space (Cruz and Buchanan-Oliver 2020). Materiality and sociality work recursively to impact public spaces, such as coffee houses (Karababa and Ger 2011) and tailgating (Bradford and Sherry 2015). Public spaces also imbibe an attachment that mimics that of a domestic space (Debenedetti, Oppewal, and Arsel 2014). Yet, domestic spaces offer complex environments in which to understand identity work housed within wider social expectations, including the curation of masculinity in man caves (Moisio and Beruchashvili 2016). While prior literature has investigated some of these unique spaces, lesser research has investigated the impact of brand-ecosystems on these newly-defined spaces in the home. As such, we investigate the following research question: *How are brand-ecosystems influencing the design of branded domestic spaces?*

This study leverages assemblage theory (DeLanda 2006; Deleuze and Guattari 1987) to explore the context of home-gyms for consumers within the Peloton-brand ecosystem. Assemblage theory enables exploration of the wider socio-materiality of the Peloton ecosystem, where social actors and artifacts are investigated as ontologically equivalent in the development of home gym aesthetic. Our netnographic approach (Kozinets 2015) recognizes the wider technoculture of Peloton, and data collection is comprised of online exploration within Facebook and Instagram brand communities and interviews with 30 Peloton riders. We also engaged in a photo-elicitation approach where informants were asked to supply images of

their workout spaces. Additionally, we collected images from social media posts and Peloton blogs. The images were analyzed leveraging critical visual content analysis techniques as guided by Rose (2016). The hermeneutic analysis of the interviews, photographs, and netnographic review of the branded communities was analyzed iteratively to reveal the elements within the assemblage that impact the branded domestic space.

Findings reveal that the branded home gym emerges from the wider socio-material assemblage, including not only the rider but also the branded material (e.g., Peloton bike, rider nameplates, accessories), non-branded material (e.g., weights, lighting, plants, art), instructors, and social circle that takes place online and offline. Ultimately, riders craft their domestic spaces with influence from this assemblage, with significant sway from the blended socio-materiality.

Visual analysis revealed that Peloton riders' spaces include dedicated gym spaces or space entanglements, residing within other domestic spaces. The spaces themselves range from modes of productivity to spiritual entanglements, with many residing in a complimentary manner. In spaces focused on productivity, this is demonstrated by riders emulating the studio aesthetic, including fluorescent lighting and prominent placement of commonly instructor quotes: "*Don't stop, get it. get it.*" Bikes are also stitched into existing modes of productivity, next to office desks and enabling multitasking (e.g., working, taking care of dependents). Spirituality is a common occurrence through the sacred display of branded materiality, but others denote a feeling of tranquility. These spaces are used as a temple to give thanks to the body, and services recovery and well-being beyond the physical. Spirituality is highlighted within riders' spaces through the use of serene colors, an interstitial with nature, the traditional spiritual figurines (e.g., Buddha) and deified brand, instructor, and community elements.

We identify four agential groups associated with the rider that influence the nature of the space, including branded and non-branded materiality as well as branded and non-branded sociality. Embedded within the blended materiality, social structures shape common expectations within these branded domestic spaces, or Peloton shrines. While the materiality alone shapes and constrains the base of the space, the affective atmosphere (Anderson 2009) takes shape as a result of branded and non-branded socio-materiality. For instance, Sherry's space comes to life from branded socio-materiality:

> "On the smart TV, you can put a picture on it. We have a picture of Alex Toussaint on there. He's both me and my husband's favorite instructor...but Alex is just really motivating. We like having him on the screen there, it kind of helps you get into your workout more." (Sherry)

In this case, the parasocial relationship (Dibble et al. 2016) shapes the space's aesthetic. Alex's prominent placement is but one example of the embodied nature of the instructor's influence that creates a deified productivity.

The design of the branded domestic space also emerges from blended sociality. The strength of the social connections within the brand ecosystem, including ties in the online communities, can heavily influence the design of the domestic space. Amanda describes the blended sociality influence, despite physical space constraints:

> "I have my Peloton corner; I have all of my, things. I have Peloton things I've collected across the years... I have a milestone board that one of my Peloton friends got me for my birthday up on the wall..." (Amanda)

The study offers insights into the social and material forces that influence space, and more pertinently, the understudied branded domestic space. The dynamics of the technoculture assemblage reinforce symbolic expectations of the brand meanings inherent within this capitalistic spirituality. With the assemblage of the community, we also gain insight into how brands more readily influence dedicated domestic spaces beyond consumption, but desired sacred devotion. Recognizing the sacred artifacts (Belk, Wallendorf, and Sherry 1989), and in this case, co-opted transcendental domestic spaces, social cohesion and brand loyalty are strengthened. Despite post-modern appeals toward transient experience (Arnould and Price 2004) and liquid consumption (Bardhi and Eckhardt 2017), we see this potential dichotomy of virtualized sacred and profane identity work can be mitigated through materialization in domesticated spaces.

Chateau DIY: Consociality and the Consumption of Place

EXTENDED ABSTRACT

Marketing and consumer research have long been attentive to the ways in which technological media play a role in the sociality of consumer collectivities and their dynamics. Studies of brand communities (Muñiz and O'Guinn 2001), tribes (Kozinets, Hemetsberger, and Schau 2008), consumption communities (Thomas et al. 2013), and subcultures (Kates 2002; Schouten and McAlexander 1995) are all sensitive to differences in sociality present in different contexts, especially in terms of emplaced versus virtual modalities. A significant trajectory to this work has been a growing appreciation for the more dispersed forms of sociality that exist in virtual spaces, such as social media (Arvidsson and Caliandro 2016; Cocker and Cronin 2017) and blogging (Kozinets et al. 2017; McQuarrie, Miller, and Phillips 2013).

To account for more dispersed forms of sociality presented by digital technologies and modern life (Wittel 2001), the concept of consociality offers greater utility (Perren and Kozinets 2018). Consociality refers to forms of sociality that emerge when groups of individuals are "copresent in space and time" (Perren and Kozinets 2018, 23). While research leveraging consociality perspectives is attentive to the interplay of emplaced and more dispersed community members, it attends less to the ways the uniqueness of a place informs these community dynamics. For example, Russell and Schau (2014) find evidence that views of diegetic brands alter consumer behaviors in response to the show's viewing schedules, such as engaging in communal viewing with friends. Further, retailers are working to better engage with their customers' journeys and facilitate online connectedness within physical retailing environments (Thomas, Epp, and Price 2020). However, places have unique emplaced qualities, which may include features of the built environment, or specific linkages with their geographical region (Gieryn 2000). We seek to understand the role of consuming place in the dynamics of an evolving consociality.

To explore consociality and its connections to consuming place, we examine a contemporary consumption community (Thomas et al. 2013) based around Chateau de Lalande, a 16th century chateau located in the Indre department of France. Presently, Lalande operates as a full-time residence and seasonal Bed-and-Breakfast. Since 2018, the property has gained publicity through the British television series, "Escape to the Chateau DIY" and, more significantly, through subsequent creation of a YouTube channel, "The Chateau Diaries" which has grown to more than 130,000 subscribers in less than two years. On this channel, Stephanie, one of Lalande's owners, produces two to three weekly "vlogs" involving scenes of daily life, renovation projects, social gatherings, and problem-solving amongst

herself and the current "cast" of residents, which range from permanent residents, semi-permanent residents, short-term guests, and volunteers who work on site in exchange for room and board. As a result of a sharp increase in viewership throughout 2020, Stephanie now manages one of the top 400 Patreon accounts globally, and has a monthly income of more than $29,000, generated from more than 3,100 individual monthly Patreon contributors. These funds are now a central driving force in the ongoing restoration of Lalande. In tandem, Stephanie created a second YouTube Channel in August 2020 which exclusively comprises "gift opening" videos which serve as a way for Lalande residents to appreciate the items that their audience send to the property while also providing a way for Lalande to contribute to charitable causes as all advertising revenue from this channel is donated to charitable causes. Our data set for this project encompasses Digital Methods (Rogers 2013), supplemented with depth interviewing, analyzed using an iterative, constant-comparative model consistent with grounded theoretic approach (Glaser and Strauss 2017; Spiggle 1994).

We find a heterogenous 'Lalande' community (Thomas et al. 2013) that varies by its degree of closeness to the unique location that is Chateau de Lalande. This familial sociality is rooted in notions of friendship as chosen family, as well as a growing professionalism amongst those involved in the chateau's social media efforts. Our findings illustrate several practices undertaken by members of the Lalande community linked with the uniqueness of the physical place. These practices allow community members to leave their mark, in a material sense, on Chateau de Lalande. This connects with the current owner's view that they are stewards of the place, whose role is to enhance the historical and cultural value of Lalande for future generations while also fostering a place that is simple, cozy, and comfortable – i.e. lived in – and not a "museum" for the dispassionate display of objects.

Further, we observe three broad sets of practices by which consumers transform their relationship to Chateau de Lalande through connecting with unique aspects of Lalande's physical location. In turn, each of these attempts at connection alters the physical reality of Chateau de Lalande and its emplaced sociality. Through *gifting*, consumers send material objects either to enhance Lalande's interiors or grounds, or for the emplaced members of the Lalande community (e.g., clothing, jewelry, etc.). Consumers submit letters outlining the heritage of the items sent, as well as an explanation for how the items might 'fit' with Lalande or suit the people who live there. *Laboring* involves consumers exchanging their own labor for the ability to visit the Chateau in-person and contribute to the ongoing development of the property. Here, consumers transform their role within the community from viewers into closer knit familial members. Once consumers have visited, the emplaced members of Lalande refer to them as family members, often with invitations to revisit Chateau de Lalande in the future. Finally, *partnering* is a form of exchange whereby Lalande owners cede some amount of control over the prioritization of ongoing renovation projects to consumers in exchange for financial resources. Through varying degrees of monthly subscription, Patreon members become more active participants in the physical development of Lalande. Overall, our findings contribute to the ongoing development of perspectives on heterogeneous consumption communities through the lens of consociality as a conceptual framework for interpreting the dynamic interplay between dispersed members of a community.

Consuming Neighborhood Sociality

EXTENDED ABSTRACT

Neighborhoods have been a focal point in sociological literature for well over a century. Sociologists have studied neighborhoods to understand how people form collective identities, defend themselves in the face of outside threats, and negotiate collective meaning in the midst of societal change (Gans 1967; Keller 2003; Whyte 1943). However, this literature has paid little attention to the marketing of these neighborhoods and to residents' roles as consumers. In the consumer research domain, the consumption of neighborhoods and housing is understudied as well, despite their ubiquity and importance in consumers' lives (see Grier and Perry 2018; Saatcioglu and Ozanne 2013 as noteable exceptions).

Consumers are increasingly choosing to live in neighborhoods to gain far more than housing style and location (Gwyther 2005; Katz, Scully, and Bressi 1994; Rosenblatt, Cheshire, and Lawrence 2009); socially inspired design matters as well. Preferences and tastes are shifting to neighborhoods offering walkability, sustainable design, and an emphasis on different forms of sociality (Brass 2018; Katz et al. 1994; Montgomery 2013). Consumers are also considering the intended lifestyle of the place and the sociocultural preferences of the people who live (or are going to live) there and are choosing neighborhoods inhabited by others who share similar lifestyles, tastes, political orientations, and ideologies (Crockett and Wallendorf 2004).

In this research, we demonstrate how these intended forms of social interaction shape approaches to building, changing, and maintaining neighborhoods and their unique culture. We explore the creation, maintenance and consumption of neighborhood sociality in four new construction neighborhoods in a medium sized city in the southeastern United States: Celestial Pines, Arboretum, Lenox Hill, and Magnolia Trace. We define neighborhood sociality as the emergent forms of affiliative interactions and relationships within a neighborhood. Each neighborhood in our study is planned and developed by a single developer/builder, and all have unique design styles and respective socialites. We use ethnographic approaches to observe daily social life, supplemented with depth interviewing and participant observation at neighborhood social events, to understand the ways consumers experience and work to contribute to their neighborhood's sociality, as they understand it.

Our findings identify characteristics of neighborhood design and philosophies resident consumers use to interpret sociality. We also examine different ways resident consumers develop and maintain shared practices that establish normative forms of interaction and social life in efforts to preserve or change sociality. In our interviews with neighborhood developers, we find that the idea for the desired or intended sociality comes first, and then the built environment reflects/reifies that. Developers describe their neighborhood in terms of its design, how it compares with other local neighborhoods and their own previous projects, and the experience they envision for the residents who will live there.

Aesthetics and the built environment act to influence how people interact. For example, Celestial Pines was inspired by a cohousing philosophy, and the design is intended to foster sociality through frequent interaction and a focus on communal care and maintenance. Elizabeth is a long-time resident and a founding member who closely worked with the developers. She describes the design and reliance on communal work:

> *We also wanted community. That's why we didn't want our homes to have garages. We wanted kind of the park-*

ing area separate so that when you walked in from the parking area, we would be passing each other's homes and possibly we would have constant connection to each other rather than driving into a garage and then closing the door and not seeing each other. We really wanted that community. And that sense of community-involved responsibility is for the upkeep of everything. It meant that you were hands-on all the time. You know, in the very beginning, there were four of us so we really had to, like, be hands-on all the time.

Elizabeth makes clear her beliefs about the built environment (i.e., location and nature of parking) on social engagement. By contrast, the sociality in Lenox Hill is more about residents being freed from other responsibilities to pursue their social lives. Sarah, who was a realtor, so enjoyed selling Lenox Hill and its sociality that she bought a house there and became a resident:

If you're gonna spend the money on a house like [her previous very large house], you better have enough money to pay people to do all that shit [clean the pool and mow the yard], and that's a lot of money. And at that point it's like what's the trade-off? Where if you could have the same amenities and not have to maintain any of it, and spend your days off doing whatever you want ... rather than feeling guilty because you haven't mowed your yard in two weeks.

For Sarah, the sociality of Lenox Hill offers her therapeutic value (Higgins and Hamilton 2019). By living in Lenox Hill, she is able to free herself from many of the responsibilities of home ownership, such as cleaning a pool or mowing a yard. This allows her to have more time to pursue her own interests, such as connecting with her neighbors. On an emotional level, Lenox Hill offers Sarah freedom from the psychological burden of guilt she would experience in a neighborhood where she was responsible for this sort of maintenance. Contrasting these two examples allows us to see the varying approaches to producing spaces that facilitate an intended form of sociality.

Our findings contribute to an understanding of how neighborhood sociality is planned, developed, interpreted, and maintained in conjunction with consumption practices. Through greater attention to neighborhood sociality as a meso level of social analysis, we can understand how consumers make sense of the place where they spend the majority of their time, as well as how they form relationships there. Our ongoing efforts aim to afford researchers, as well as community advocates and urban planners, a greater understanding of the power of sociality in transforming human lives, positively (Montgomery 2013) and negatively (Grier and Perry 2018).

Sociality and the City: A Model for Consumer-Driven Problem Solving

EXTENDED ABSTRACT

What makes for a great city? A city's physical environment, including buildings, bridges, parks, streets, sidewalks, and transportation provides the infrastructure for people to move and interact. In addition to the physical environment, the connections and transitions within and between infrastructure are equally important, and it is the combination of places and people that make a functional, attractive, comfortable, and safe framework for social life (Amin 2014; Montgomery 2013; Sim and Gehl 2019).

Urban designers strive to balance vision and reality, aesthetics and function, heritage and change, to make people-centered places that are sustainable and enhance the property values of their surroundings. To accomplish this, city planning departments consider the forms of sociality – the interactions and lived experiences – that contribute to the sense of place they would like to create and foster for residents, businesses, and other groups served throughout the city. A sense of place typically includes commercial elements, such as retail shops and places of employment, as well as plenty of ways for people on the move or stopping to chat, a public park or square, and possibly some planned events or activities.

Successful cities require people who are invested and engaged with their environment and the community. However, different constituent groups have varying priorities, further compounded by the complexity of the issues facing cities, which blend economic, social, and cultural concerns (Castilhos 2019; Philips 2020; Sim and Gehl 2019). City planning and growth management departments must weigh priorities and the feasibility of possible interventions, in order to determine whom and what will be served by proposed initiatives.

In this presentation, we will discuss strategies for creating spaces that encourage and foster sociality in all its forms. Drawing on nearly 30 years of combined experience in city planning we will discuss community engagement practices that encourage community involvement and influence in the city's approaches to growth and change. We manage the city planning and growth management departments for the city of Tallahassee, Florida. Our department uses an agency model within the city government structure to streamline our services in working with neighborhoods, property owners, community organizations, and developers in conceptual site planning, and assists architects and engineers to produce their professional work throughout the city.

Through exploring approaches to community engagement and community driven problem solving, cities can more clearly define the priorities of the city as well as acquire buy-in and support from citizens. The goal is to foster community vitality where people feel a strong stake in their communities and a commitment to making things better. We use a model of community engagement that we call community driven problem solving. This process addresses local concerns in ways that respect the particular contingencies and sociality of the communities involved. Further, it works to leverage existing assets, personal inspiration, and larger potential, ultimately creating good public spaces that promote people's health, happiness, and well-being. Our approach revolves around three practices that use community engagement to inform city planning in effort to encourage an intended form of sociality with a particular subregion of the city, namely: Eliciting, Contextualizing, and Guiding.

In the first stage of our community-driven process, Eliciting, we seek out problem identification from the local community members in their respective neighborhoods or areas of interest in the community. This helps to collectively identify the focal issues but comes with a caveat to also offer up solutions. Common issues that arise range from elicitation efforts are beautification initiatives, preservation of historic districts, economic inequality, and affordable housing. Our goal is to ensure articulation of the issues is rooted in the community who identifies the problem, rather than imposing an outside perspective. To gather these insights, we offer platforms for feedback and information sharing that align with the sociality of the particular context, such as holding town hall meetings, or instigating pop-up events in relevant local venues in areas where citizens may be skeptical of electronic surveys.

After identifying the local issues and some possible directions for solutions, we begin Contextualizing. During this phase of the

process, we work to prioritize issues and determine their feasibility. This often involves evaluating the allocation of resources to projects in a region of the city with particular forms of sociality against redistributing those resources for radically different projects in another region with a very different sociality. Working through these kinds of trade-offs often requires very real conversations and honesty with community stakeholders about our prioritization process and our mandate to reduce disparities and inequality across the city. We must consider the totality of socialities throughout the city's regions, and how these socialities are woven together into a cohesive civic society.

Finally, we pursue the practice of Guiding. Through infrastructure development, which is guided by our city's comprehensive plan, as well as goals for the city, we seek to shape the type and amount of development occurring in any give region of the city. In general, development follows infrastructure, and so we work to shape commercial investment and involvement through strategic infrastructure creation, which derives from the forms of sociality we think is ideal for a particular area of the city.

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To Share or Not to Share: Antecedents and Consequences of Consumer Disclosure

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Paper #1: I Want You to Like Me, so I'll Wait to Share the Bad - The Influence of Self-Presentation Concerns on Consumer Ratings

Elisa Solinas, University of Southern California, USA
Francesca Valsesia, University of Washington, USA
Joseph C. Nunes, University of Southern California, USA
Andrea Ordanini, Bocconi University, Italy

Paper #2: He Said, She Said: Gender Differences in Disclosure

Erin Carbone, Carnegie Mellon University, USA
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Irene Scopelliti, City, University of London, UK
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Paper #3: Background for Success: The Role of Videoconference Backgrounds in Self-Presentation

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Paper #4: I told you so effect

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SESSION OVERVIEW

During the past year or so, consumers' personal and professional interactions have increasingly moved online. Consumers spend hours working, shopping, interacting with friends and expressing their opinions virtually. However, according to the popular press, these enhanced sharing opportunities have resulted in opposing outcomes. While some articles caution that consumers are over-sharing (Steinberg, 2020), others highlight consumers' propensity to under-share (Dooley, 2017). The papers in this session focus on consumers' reluctance to share self-relevant information, by exploring its drivers, consequences as well as what happens when consumers do share, but probably should not have. Overall, the session deepens our understanding of impression management strategies that affect when and why consumers hesitate to share, or do not, and the consequences of their choices.

The first two papers focus squarely on consumers' reluctance to share. **Solinas, Valsesia, Nunes, Ordanini** examines how consumers' likelihood to post reviews online evolves over time. They find consumers are reluctant to post negative reviews early in their reviewing history, resulting in a negative trend in reviews at the reviewer level. They present evidence that this reluctance is driven by people's desire to avoid being perceived negatively.

Carbone, Loewenstein, Scopelliti, and Vosgerau explore how gender influences consumers' reluctance to disclose information about the self. They find women are overall more likely to share information than men. More importantly, while they find men and women are equally likely to disclose positive information, men are especially reluctant to disclose negatively-valenced information in order to maintain a desired image.

The next two papers explore the consequences of consumers' decisions regarding sharing. The first focuses on a context where under-sharing impacts impressions negatively, the second explores a situation where over-sharing has negative consequences. **Karabulut, Moore, and Messinger** explore actors' use of more or less revealing backgrounds online. They find people generally avoid personally revealing backgrounds when they want to come across as competent to their audience. Yet, observers evaluate people with revealing backgrounds more positively, both in terms of warmth and competence.

Finally, **Sezer, Affinito, and Staats** focus on whether advisors share the fact they were right in the past, and how advisees react. They find that, while consumers frequently share the phrase "I told you so" when being right about something, advisees dislike this statement and view people who use it as condescending, less empathic, and less trustworthy, compared to someone that simply stays silent.

Taken together, this session expands our understanding of strategic self-presentation with regards to sharing. We identify different drivers of consumers' reluctance to share, while highlighting when being more forthcoming can help, and when instead being too forthcoming hurts. Given the importance of sharing and its impact on impression management, we expect this session to generate interest among researchers studying strategic self-presentation, information disclosure, online consumer behavior, as well as gender effects. In the spirit of the conference theme "Privacy," we believe this set of papers illuminates what influences consumers' decisions of when and why to stay silent, and will provoke a fruitful and engaging discussion at ACR.

I Want You to Like Me, so I'll Wait to Share the Bad - The Influence of Self-Presentation Concerns on Consumer Ratings

EXTENDED ABSTRACT

Previous work has documented a negative trend in reviews on online platform for individual *products across reviewers*. Prior research suggests this is due to social dynamics (Schlosser, 2005), self-selection (Li and Hitt, 2008; Wu and Huberman, 2008; Hu and Li, 2011; Moe and Schweidel, 2012), and macro-level trends (Godes and Silva, 2012). In this work, we identify a different, yet equally important phenomenon: a negative trend in reviews for individual *reviewers across products*.

We propose and test a self-presentation explanation for this phenomenon. One strategic way to avoid negative impressions is limiting what one says publicly (Schütz, 1998). The MUM effect (Rosen and Tesser, 1970) suggests people avoid delivering negative information as a way of not being linked to the negative feelings it engenders. We argue reviewers are concerned about the impression they might make on other online platform users. Further, in order to avoid making a negative impression before having established a reputation in the community, they tend to stay silent rather than share negative experiences early in their review history.

In study 1, we document a negative trend for individual reviewers across products using real-world Yelp data. The data include 8,635,403 reviews made by 2,189,457 reviewers since its inception (2004) until 2021. Having data since Yelp's inception is critical as it includes reviewers' first reviews, and allows us to test for the existence of a negative trend as users begin accumulating reviews. The number of ratings posted by a reviewer before the focal rating serves as the main predictor, while star rating serves as dependent variable. We analyze the data using an ordinal logit model with random effects at the reviewer level. The coefficient of our predictor is negative and significant, suggesting the existence of a negative trend at the reviewer level (OR=.99; $p<.01$). For a reviewer, accumulating 10

reviews increases by 8.3 percentage points the chance the next rating falls into a lower (vs. higher) star category.

In study 2 (N=324) we disentangle whether the negative trend observed is due to people's reluctance to post negative reviews early on, or a change in how experiences are evaluated over time. This study is a 2(Experience: *Positive* vs. *Negative*) x 2 (Review History: *Early* vs. *Late*) between-subjects design. Participants recalled either a positive or negative experience. Next, they read about an online rating platform where they had already posted either 2 or 22 reviews and were asked if and how they would rate the experience they recalled. Respondents were more likely to post a positive than a negative experience (F(1,317)=44.68, *p*<.001). A significant interaction emerged (F(1,317)=5.87, *p*=.016): participants were more likely to post the negative review late (M=3.88) than early (M=3.24, F(1,317)=5.12 *p*=.024), whereas there was no significant difference for positive experiences. While positive experiences had a higher likelihood of receiving a higher star-rating (OR=5.7 p<.001), the number of prior ratings did not impact how respondents evaluated the experience.

These results suggest the negative trend is mainly due to *when* consumers decide to share negative experiences, as opposed to a change in *how* experiences are evaluated. The next studies provide initial evidence for our explanation: reviewers' reluctance to post negative reviews early on is driven by self-presentation concerns.

In study 3a (N=395) we manipulated Review History (*Early* vs. *Late*) between-subjects. We asked respondents how they expected other users would perceive them if they posted a negative review. We find they expect to be perceived more negatively when posting a negative review early (M=4.71) rather than late (M=4.17, t(393)=3.70, *p*<.001). In study 3b (N=301) we find evidence this expectation is accurate. Respondents formed a more negative impression of a reviewer who posted a negative review early (M=4.67) rather than late (M=3.67, t(299)=5.80 *p*<.001).

Study 4 (N=389) is a single-factor (Review History: *Early. vs Late vs. Late/different platform*) between-subjects design aimed at providing evidence of a self-presentation explanation through moderation. Participants recalled a negative experience and imagined having joined a review platform ("Yum") on which they posted either 1 (*Early*) or 18 (*Late*) review(s). In the *Late/different platform* condition, respondents were told they had posted 17 reviews on Yum but had then joined a new platform ("JustEat") on which they only posted 1 review.

Participants were less likely to post the negative review early (M=3.66) than late (M=4.33, F(1,386)=7.20 p=.008). Importantly, participants in the *Late/different platform* condition were also less likely to post the negative review (M=3.80) than those in the *Late* (same platform) condition (F(1,386)=4.66 p=.031). There was no significant difference between *Early* and *Late/different platform* conditions. These results provide evidence that reviewers' reluctance to post negative reviews early on does not depend on the number of prior ratings per se, but rather on the number of prior ratings in front of a certain audience, consistent with self-presentation concerns playing a role.

Study 5 (N=301) identifies a platform feature that can mitigate the negative trend. We test whether bundling a negative review with more positive reviews, and posting them simultaneously, moderates the effect in a 2 (Review History: *2nd* vs. *17th*) x 2 (Reveal: *Sequentially* vs. *Simultaneously*) mixed design. Respondents imagined joining a review platform and were presented with 18 distinct dining experiences, and a brief description of each, sequentially one-by-one. The 2nd and 17th experiences were described as more negative. Participants rated each experience and reported their likelihood to post that

review. In the *Sequentially* condition, likelihood to post was reported for each experience one-by-one; in the *Simultaneously* condition it was reported after providing all 18 ratings and knowing all reviews would be posted simultaneously. Respondents were more likely to post the 17th (vs. 2nd) negative review (F(1,299)=14.68, p<.001). Participants were more likely to post when reviews would appear Simultaneously than Sequentially (F(1,299)=7.46 p=.007). A significant interaction emerged (F(1,299)=8.48, p=.004). When posted Sequentially, participants were more likely to post the 17th (M=5.12) than the 2nd review (M=4.53, F(1,299)=23.12 p<.001). When posted Simultaneously, no significant difference emerged.

Overall, our studies provide evidence that reviewers' reluctance to post negative reviews early on is due, at least in part, to self-presentation concerns.

He Said, She Said: Gender Differences in Disclosure

EXTENDED ABSTRACT

The advent of an increasing array of digital communication channels and social media has enabled unprecedented levels of information sharing and self-disclosure, which can be inherently pleasurable (Tamir & Mitchell, 2012) and engender health, psychological, and social benefits (e.g., Frattaroli, 2006). At the same time, these new opportunities for self-disclosure take on a public and often permanent character, amplifying the potential for material and reputational damage (Brandimarte, Vosgerau, & Acquisti, 2018; Hofstetter, Rüppell, & John, 2017). The present research explores differences in how men and women navigate these trade-offs and contributes to a vast but somewhat inconclusive literature on gender differences in self-disclosure. Although women are generally found to be more disclosing than men, gender differences are sensitive to features of the context and experimental design (Dindia & Allen, 1992). We circumvent several challenges facing the extant literature in three studies that employ novel designs and measures to explore the boundaries of gender differences in self-disclosure.

In particular, we focus on differences not only in actual disclosure but also in the psychological desire to disclose among men and women. A wide range of factors, such as impression management and the anticipation of negative consequences, can inhibit disclosure. At the same time, men and women face different consequences, and thus have a different set of considerations, when translating the desire to disclose into a decision of whether or not to share information with others. Our results present a robust and systematic pattern in which women experience a stronger psychological desire to disclose and are more likely to act on that desire than their male counterparts. However, these results are driven by an interaction between gender and the valence of the information to be disclosed. Specifically, males and females exhibit a similar desire and propensity to disclose positive information, but males have a substantially lower desire and propensity to disclose *negative* information than females, reportedly due to an interest in impression management.

In **Study 1** (N=215), participants were asked to recall a time when they were "dying to tell someone something" and to indicate whether or not they ultimately shared the information with others. This information could be about any topic and concern oneself or someone else. Female participants were significantly more likely to report having had the experience of "dying to share" than their male counterparts, 91% vs. 76%, χ2(1, N=193)=7.88, *p*<.01. Open-ended descriptions of these events revealed a significant interaction between gender and valence, with a substantially greater proportion of male than female responses coding as positive, 63%

vs. 48%, χ2(1, N=235)=5.66, *p*=.02. This can be explained by gender differences in underlying motivation. When asked to select from a list of motives those that might have driven their desire to disclose, males overwhelmingly selected self-presentational motives relative to female participants. Specifically, significantly more female participants reportedly wanted to reveal the information in order to be comforted, t(162)=2.16, *p*=0.02, while significantly more males wanted to disclose in order to: entertain others, t(162)=-2.14, *p*=0.02; influence how others see them, t(162)=-1.90, *p*=0.03; receive validation or praise, t(162)=-1.89, *p*=0.03, t(162)=-1.82, *p*=0.04; and reinforce their own self-image, t(162)=-1.69, *p*=0.05.

Participants in **Study 2** (N=552) saw a random selection of positive and negative "scenarios" that were almost exclusively self-relevant (e.g., feeling proud about a moral decision you made, learning that a close friend said something hurtful about you). For five of the scenarios that they reportedly experienced in the past, participants indicated their desire to disclose the experience to others using a scale from -5 (*Intense, overwhelming desire to <u>withhold</u>*) to 5 (*Intense, overwhelming desire to <u>share</u>*), and subsequently indicated whether or not they ultimately shared the information with others. For both measures, we observe a main effect of gender: Female participants, on average, experienced a stronger desire to disclose than their male counterparts, M=1.53 (SD=2.43) vs. M=1.03 (SD=2.47), t(2658)=5.21, *p*<.01, and women reported disclosing on average more of the scenarios (77%) compared to men (69%), χ2(1, N=2384)=22.78, *p*<.01. Fixed effects OLS and logistic regressions confirmed the presence of a gender-valence interaction for the desire and propensity to disclose, respectively, albeit marginal for the former measure, Desire: $b_{maleXnegative}$=-.31, t(2,540)=-1.74, *p*=0.08; Propensity: $b_{maleXnegative}$ (as odds ratio)=0.78, z(2,282)=-2.37; *p*=0.02. In addition, we captured participants' self-perceptions of their disclosing behavior using a scale from 0 (*I don't share thoughts and feelings when I should*) to 10 (*I share thoughts and feelings when I probably should not*) and found that, on average, men perceive themselves as being too reserved: the average male rating is significantly lower than that of females, M=4.23 (SD=1.79) vs. M=5.01 (SD=1.83), t(546)=5.91, *p*<.01.

The results from the above exploratory studies were then preregistered and tested in **Study 3** (N=407), where we used similar measures for the desire and propensity to disclose as in Study 2 but manipulated valence and self-relevance (i.e., whether the information was about oneself or someone else) both between subjects (within a domain) and within subjects (across domains). As hypothesized, female and male participants experienced a similar desire to disclose positive experiences, t(799)=0.51, *p*=.31, but male participants experienced a significantly lower desire to disclose negative experiences relative to their female counterparts, t(789)=4.55, *p*<.01. This pattern of results holds for reported propensity to disclose, Positive: t(729)=1.29, *p*=.10; Negative: t(760)=4.27, *p*<.01), and regardless of whether the information is about oneself or others.

The experimental paradigms employed in this research departs from the conventional study designs employed in disclosure research in ways that introduce fewer artefactual constraints and, as a result, more closely resembles actual decision-making, providing a better measure of consequential, real-world disclosing behavior. In all three studies, we consistently observe higher levels of the desire to disclose among female, as compared to male, participants when it comes to negative, but not positive, information. Men reportedly shy away from disclosing negative information in the interest of maintaining a desired image. Sharing information is increasingly prevalent in the Internet age, and gender is an important fault line when it comes to patterns both of desire to disclose and of actual disclosure.

Background for Success: The Role of Videoconference Backgrounds in Self-Presentation

EXTENDED ABSTRACT

By enabling virtual "face-to-face" communication anytime and anywhere, videoconferences are changing how people play, work, and shop. In marketing channels, firms are boosting customer satisfaction by emulating in-person experiences through videoconference sales and service activities (Patel, 2020).

While self-presentation motives and strategies are important for online and offline interpersonal communication (Goffman, 1978; Krämer & Winter, 2008; Leavy & Kowalski, 1990; Schau & Gilly, 2003), online channels such as videoconferencing afford new means of self-presentation, and are the focus of the current research.

Revealing personal information is central to self-presentation (Collins & Miller, 1994). People engage in impression management by choosing what—and how much—information to present about themselves to observers (Krämer & Winter, 2008)—and observers need information about actors to form impressions (Kervyn et al., 2009). Online and offline channels both offer self-presentation opportunities in the form of actors' appearance (e.g., clothing; Bellezza et al., 2014), although the amount of such information conveyed in videoconferences is limited to what is visible onscreen. More critically, videoconferences afford a unique—and controllable—self-presentation cue: the onscreen background, which may be real (e.g., bedroom) or virtual (e.g., nature scene). Indeed, 83% of participants in an MTurk survey (N = 283) agreed that controlling their videoconference background could maximize their ability to create a positive impression, and 53% agreed that they form impressions of others in videoconferences based on their background.

Building on these insights, we investigate how actors choose backgrounds and how observers evaluate actors with different backgrounds. We explore how warmth and competence impressions are affected by actors' use of revealing (vs. non-revealing) backgrounds. Revealing backgrounds offer more self-related information about the actor's personality, preferences, or tastes (e.g., a plain wall vs. a Star Trek scene); the use of such backgrounds should convey warmth (Collins & Miller, 1994). However, we anticipate that there will be a gap between actors' and observers' impressions of—and preferences for—warmth and competence.

Prior work suggests that actors perceive a trade-off between warmth and competence in self-presentation. In professional contexts, actors believe appearing competent is more important (Li et al., 2019), and therefore downplay warmth (Fiske et al., 2007; Holoien & Fiske, 2013). Further, the desire to control one's self-image discourages revelation (Arkin, 1981; Berger & Barasch, 2018; Leavy & Kowalski, 1990). Thus, we suggest that actors should anticipate that using non-revealing (vs. revealing) backgrounds will convey competence. In turn, this should lead actors to choose non-revealing backgrounds, whether real (e.g., plain walls) or virtual (e.g., institutional images, single colours).

In contrast, observers should emphasize warmth. This is because warmth is evaluated before competence, accounts for a greater portion of observers' impressions than competence (Cuddy et al., 2011), and is more accessible and diagnostic than competence in impression formation (Scott et al., 2013). Thus, actors' use of revealing (vs. non-revealing) backgrounds should increase observers' impressions of warmth, and should have positive downstream consequences for observers' intentions toward actors.

We test these predictions in three studies. Study 1 examines actors' preferences for non-revealing over revealing videoconference backgrounds. Undergraduates (N=151) imagined themselves as customer service employees who were joining a videoconference with a customer. They were presented with one of four images in a 2 (background: real, virtual) by 2 (type: revealing, non-revealing) design, and imagined the image was their videoconference background. Images in all studies were pre-tested to be equally positive, but to vary in revealingness. After viewing their initial revealing (non-revealing) background, participants were given the opportunity to switch to a non-revealing (revealing) background. Participants in the revealing background condition were more likely to change their background to a non-revealing background (64% vs. 36%; χ^2=8.38, $p < .01$).

Study 2 tests the gap between actors' expectations and observers' evaluations. Undergraduates (N=490) imagined joining a class via videoconferencing. They were presented with a background image in a 2 (background image: real, virtual) by 2 (image type: revealing, non-revealing) by 2 (role: actor, observer) between-subjects design. They imagined the image was their background (actors), or one of their classmate's backgrounds (observers). Participants then reported on the warmth and competence impressions they expected to make on others (actors), or on their warmth and competence impressions of their classmate (observers).

Analysis showed a background type by role interaction on participants' judgments ($F_{competent}(1, 482) = 33.25$, $p < .001$; $F_{warm}(1, 482) = 17.50$, $p < .001$). Actors in the non-revealing condition expected observers to perceive them as more competent ($M = 2.98$) but less warm ($M = 2.42$) than in the revealing condition ($M_{competent} = 2.54$; $M_{warm} = 3.38$; $F_{competent}(1, 482) = 20.45$, $p < .001$); $F_{warm}(1, 482) = 89.44$, $p < .001$). However, observers showed a different pattern: those in the revealing condition perceived actors as more competent ($M = 3.22$) and as warmer ($M = 3.06$) than in the non-revealing condition ($M_{warm} = 2.70$; $M_{competent} = 2.88$; $F_{competent}(1, 482) = 13.16$, $p < .001$; $F_{warm}(1, 482) = 13.18$, $p < .001$). An additional study found a similar pattern of results using a different context, where participants imagined having a work meeting with other employees.

Study 3 tested the actor-observer gap as well as the downstream consequences of this gap. Prolific participants (N=300) imagined joining a virtual consultation session with a nutritionist who was using either a revealing or non-revealing background. They reported on their anticipated satisfaction with the nutritionist and their warmth and competence impressions of the nutritionist. In the revealing condition, participants evaluated the nutritionist as more warm ($M_{revealing} = 3.89$, $M_{non-revealing} = 3.08$; $F(1, 298) = 100.21$, $p < .001$) and anticipated being more satisfied ($M_{revealing} = 5.73$, $M_{non-revealing} = 5.39$; $F(1, 298) = 7.24$, $p < .01$).

In summary, while actors anticipate that they create impressions of competence when they use non-revealing backgrounds, observers do not share these impressions. Instead, observers perceive actors with non-revealing backgrounds as less warm, which negatively impacts their service evaluations and intentions. These findings provide novel evidence for service employees' self-presentation strategies in their interactions with customers on an emerging platform and customers' reactions to these strategies.

I Told You So Effect

EXTENDED ABSTRACT

From solving complex problems to making purchases, people often rely on advice from others. In fact, consumers rarely make critical decisions in isolation. Prior research has identified multiple factors that influence individuals' use of advice. For instance, deci-sion makers weigh advice more heavily when the advice is costly to get (Patt, Bowles & Cash, 2006), or when the task is difficult (Gino & Moore, 2007). When people feel confident or experience anger (Bonaccio & Dalal, 2006; Gino & Schweitzer, 2008), they are less likely to rely on advice. Similarly, advisor characteristics also impact whether people follow their advice. When the advisors are more experienced (Feng & MacGeorge, 2006; Goldsmith & Fitch, 1997; Harvey & Fischer, 1997; Sniezek, Schrah, & Dalal, 2004; Soll & Larrick, 2009; Yaniv, 2004; Yaniv & Milyavsky, 2007) and have greater confidence (Phillips, 1999; Sniezek & Buckley, 1995; Sniezek & Van Swol, 2001; Soll & Larrick, 2009; Van Swol & Sniezek, 2005; Yaniv & Foster, 1997), the advice is weighted more heavily.

At the same time, however, the consequences of expressions that advisors use depend on the psychological and emotional reaction of the targets, and critically on their appraisal of the advisor statements as helpful or not, because interpersonal aspects in advice exchange is as important as the quality of the advice (Blunden, Logg, Brooks, John & Gino, 2019). While previous research has focused on expressions that prompt advisor credibility and confidence (Soll & Larrick, 2009), little is known about the effects of statements that backfire. In the current research, we investigate a common and a universal statement that is of critical importance in advice-giving contexts: "I told you so."

Building on past research on advice-giving and learning, we conceptualize "I told you so" as a statement that stem from the satisfaction of being right. We propose that individuals who hear this statement view the advice giver as more condescending, less empathic, and less trustworthy. We suggest that although it is a very common statement that exist in all languages across the world, and is a universal phenomenon, saying I told you so backfires as it harms trust in advice exchange and hurts learning.

In Study 1 (N = 302), participants estimated an individual's weight from a photograph for three rounds. Out of 302 participants, 133 of them ignored their advisor's estimate in Round 1, and 169 of them took the advice. In Round 2, those who didn't follow the advice in Round 1, got another piece of advice, but half of them heard the new advice with "I told you so" while the other half only heard just the advice. Among the ones who ignored their partner's advice in the first round, those who received Round 2 advice with "I told you so" perceived the advice to be lower quality than those who received the same advice without the I told you so statement, t (131) = 2.64, p = .009, M = 4.11 vs M = 4.75. Similarly, the group that received "I told you so" perceived their advisor to be more condescending, t (131) = 7.69, p = < .001, M = 4.89 vs M = 2.53, and less empathic t (131) = 3.43, p = . 0008, M = 3.54 vs M = 4.24.

In Study 2 (N=500), we employed the same design as Study 1, and randomly assigned participants to one of two between-subjects conditions: "I told you so" vs "You were wrong.". When participants didn't follow their partners' advice, in Round 2, they either received "I told you so" or "You were wrong" as a message in addition to advice for the new round. Out of 500 participants, 276 of them ignored the advice from their partner in Round 1. Among the group who ignored their partner's advice, those who received "I told you so", perceived their partners to be more condescending t (274) = 8.07, p = < 001, M = 5.01 vs M = 3.71, and less empathic t (274) = 4.32, p = .002, M = 1.81 vs M = 2.37, than those who received "You were wrong" from their partners.

In Study 3 (N=102), participants in the lab completed the same weight estimation task, and those who received "I told you so" in Round 2, along with the advice, perceived their partner to be more condescending, t (100) = 9.67, p < 001, M = 5.03 vs M = 2.87, less empathic t (100) = 7.23, p < 001, M = 1.81 vs M = 3.56, and less

trustworthy t (100) = 3.89, p = .004, M = 3.56 vs M = 4.35. than the participants who didn't hear I told you so, but received the same advice. More importantly, those who received "I told you so" were less likely to choose the same partner for the subsequent round, p = .03.

In Study 4 (N=102), participants engaged in 10 rounds of the same task, but as an advisor this time. After each round, they found out they were right, and their partner was wrong, and they could either send "Bummer!" or "Bummer, I told you so!" as a message. 142 out of 200 participants (71%) chose to send the "I told you so" message at least once across 10 rounds, and on average, participants chose to send this message 3.235 times of the possible 10. About 23% of participants chose to say I told you so after only Round 1. In other words, despite not liking this statement (as shown in Studies 1,2 and 3), when given a chance, participants use their chance to say "I told you so."

We contribute to advice literature by focusing on interpersonal effects, as opposed to decision accuracy and quality, which has been the primary focus of previous research (Bonaccio & Dalal, 2006). We introduce and examine the psychology underlying a common advice statement "I told you so" and shed light on the importance of empathy and trust in learning and building an advisor-advisee relationship.

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"Device-dependencies": How SmartPhone Use Affect Consumer Beliefs and Choices

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Paper #1: Smartphones and the Self-Expressive Meaning of Choice

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Paper #2: Smartphone (vs. PC) Users Are More Likely to Believe and Share Fake News

Minzhe Xu, University of Florida, USA
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Paper #3: Devices, Fast and Slow: How Electronic Devices Influence Decision Making

Shuqi Zhu, University of Warwick, UK
Sarah Wei, University of Warwick, UK
John Rudd, University of Warwick, UK
Yansong Hu, University of Warwick, UK

Paper #4: The Addictive Properties of Mobile Applications: How Endless Scrolling and Intermittent Notifications Impact Consumer Perceptions and Behavior

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SESSION OVERVIEW

As of 2019, a total of 2.71 billion people around the world, including 81% of Americans, owned or used smartphones (Montag et al. 2019; Pew Research 2019). Smartphones are portable, personal, and (because of these features) can provide feelings of comfort during times of stress (Melumad and Pham 2020). Yet smartphones also contribute to unsafe behaviors, have been associated with decreased work productivity (Duke and Montag 2017), and their mere presence can decrease available cognitive resources (Ward et al. 2017).

Many everyday decisions and activities are made with electronic devices. However, little is known regarding how various electronic devices shape how consumers construe and process decisions. Accordingly, the shift from stationary to mobile devices presents consumer behavior researchers with an opportunity for academic research that is not only theoretically important, but that is also rife with timely substantive implications.

Our special session addresses this opportunity by exploring consequences stemming from how the use of one's smartphone to perform certain activities, including choice, may affect the extent of self-expression, what becomes believable and shared, the favored type of cognitive processing and the exertion of agency through choice. We demonstrate that these device interactions (1) activate private self-awareness, namely, intimate self-knowledge and attention to personal internal states, which increases consumers' focus on what makes them – and their choices – unique and distinct from those of others (Song and Sela), (2) make consumers become more likely to believe and share fake news than PC users because smartphone users deliberate less (Xu, Liu and Yang), (3) encourages the deployment of fewer cognitive resources, which makes consumers rely less on deliberative processing when using smartphones compared to using stationary devices (Zhu, Wei, Rudd and Hu), and (4) generate a diminished sense of control – a common feature of addiction – which influences consumers' subsequent behaviors, spe-

cifically, the desire to restore personal control by exerting agency (Chapman and Valenzulea).

Importantly, this session highlights that there are several mechanisms through which consumer use of smartphones might influence user responses, including enhanced self-awareness (paper 1), limited deliberation (paper 2), the deployment of fewer cognitive resources (paper 3), and a diminished sense of control (paper 4). All papers are in advanced stages of completion with multiple studies run.

These progressive approaches and novel results are sure to induce a lively discussion and are likely to appeal not only to researchers interested in this kind of communication devices and their influence on consumer behavior and choices, but to a broader audience interested in consumer-product interactions and consumer interactions with technology more generally.

Smartphones and the Self-Expressive Meaning of Choice

EXTENDED ABSTRACT

Choice is often considered self-expressive. Consumers view choice not only as a means for obtaining material benefits but also for expressing their uniqueness, personality, and attitudes. Perceiving choice as self-expressive and reflective of one's individual preferences, in turn, influences product evaluation and consumers' tendency to exchange, defend, and regret their chosen options (Maglio and Reich 2020; Sela, Berger, and Kim 2017; Weiss and Johar 2013). However, the extent to which choice is seen as self-expressive in specific instances varies considerably, as a function of culture (Kim and Drolet 2003), self-construal (Markus and Schwartz 2010), self-control (Sela et al. 2017), emotionality (Maglio and Reich 2018), and the presence of external incentives (Bem 1972).

We argue that making choices using one's smartphone, compared with PC or tablet computer (e.g., iPad), increases people's tendency to view their choices as self-expressive and reflective of their true individual preferences. We argue that because smartphones are extremely private and personal (Clayton, Leshner, and Almond 2015; Hatuka and Toch 2016; Park and Kaye 2019), using them activates private self-awareness, namely, intimate self-knowledge and attention to personal internal states (Carver and Scheier 1981; Gibbons 1990; Song and Sela 2021). This elevated state of private self-awareness, caused by smartphone use, increases consumers' focus on what makes them – and their choices – unique and distinct from those of others (Gibbons 1990; Kircher and David 2003; Song and Sela 2021).

Four studies support this perspective. In study 1A, participants were randomly assigned to use their personal smartphone, PC, or tablet computer ($N = 218$; 41.7% females, $M_{age} = 36.1$). They chose one of five white, mainstream sedan brands and we measured the extent to which they perceived their chosen option as self-expressive (e.g., "The choice of the car brand shows who I am"; scale adapted from Kaiser et al. 2017). Consistent with our prediction, smartphone users rated their choice as more self-expressive ($M = 4.69$) than both PC ($M = 3.71$; $F(1, 215) = 16.54$, $p < .01$) and tablet users ($M = 4.01$; $F(1, 215) = 6.52$, $p = .01$; not different from PC, $p = .28$). Because both smartphones and tables use touch screens, touch cannot explain the results. Across studies, the effect of device on perceived self-expressiveness was not moderated by the specific option chosen (all p's > .12) or device brand (i.e., apple vs. non-apple; p's > .15).

Study 1B rules out an alternative account based on display size. We randomly assigned participants ($N = 311$; 65.9% females, M_{age} = 19.7) to condition in a smartphone vs. PC vs. PC-small-screen between-subjects design. Participants used their personal devices. Those in the PC-small-screen condition used their laptops but saw the entire study in a smaller frame in the middle of their screen, similar in size to a smartphone. Participants chose sunglasses and rated choice self-expressiveness as in Study 1A. Those in the smartphone condition felt their choice was more self-expressive ($M = 4.32$) than in the PC ($M = 3.88$; $F(1, 308) = 6.20$, $p = .01$) and PC-small-screen condition ($M = 3.91$; $F(1, 308) = 5.36$, $p = .02$; not different from PC condition, $p = .87$).

Study 2 uses an incentive-compatible design to test the mediating role of private self-awareness and the consequences of perceived self-expressiveness. We randomly assigned participants ($N = 334$; 60.8% females, $M_{age} = 21.1$) to use their personal smartphone or PC. They chose a poster, which they could receive, and then rated choice self-expressiveness as in the previous studies. We also measured private self-awareness using a scale adapted from prior research (e.g., "I've been very aware of myself, my own perspective and attitudes"; Matheson and Zanna 1988; Joinson 2001). Smartphone users felt their choice was more self-expressive than did PC users (4.05 vs. 3.69; $F(1, 332) = 4.81$, $p = .03$) and reported higher private self-awareness (4.66 vs. 4.28; $F(1, 332) = 10.31$, $p < .01$). The effect of smartphone use on choice self-expressiveness was mediated by private self-awareness ($a \times b = .17$, $SE = .06$, 95% CI [.06,.30]). Furthermore, compared with PCs, smartphones had a downstream effect on increased willingness to pay for the chosen poster, which was serially mediated by private self-awareness and perceived choice self-expressiveness ($a \times b = .04$, $SE = .02$, 95% CI [.01,.07]; Hayes 2013, model 6).

Study 3 uses moderation to bolster the underlying role of private self-awareness. We randomly assigned participants ($N = 207$; 56.8% females, $M_{age} = 21.9$) to use their personal smartphone or PC. We manipulated private self-awareness by instructing participants to "be sensitive to your thoughts and feelings" (elevated condition) or "keep focusing on the survey" (baseline condition; adapted from Ellis and Holmes 1982). Similar to Study 2, participants chose a poster and rated their choice as self-expressive. A 2 (device type) × 2 (private self-awareness) ANOVA on choice perception revealed a significant interaction ($F(1, 203) = 5.37$; $p = .02$). Whereas smartphone users rated choice as more self-expressive than did PC users in the baseline condition (4.47 vs. 3.57; $F(1, 203) = 8.43$, $p < .01$), there was no difference when private self-awareness was experimentally elevated (4.12 vs. 4.22; $p = .75$). This pattern supports our suggestion that the effect of smartphone use on perceived self-expression is driven by differences in private self-awareness.

Taken together, the findings show that making choices using their smartphone leads consumers to view the chosen options as more self-expressive, in consequential settings, with downstream effects on option valuation. The findings underscore the underlying role of private self-awareness. Smartphones have had a dramatic effect on consumers' lives, reshaping relationships, habits, and consumption behaviors. We hope that this research advances understanding of some of these effects.

People Are More Likely to Believe and Share Fake News on Smartphones (vs. PCs)

EXTENDED ABSTRACT

The rise of social media has contributed to the spread of both credible information and misinformation. In 2020, for example, mis-information surrounding the global pandemic flooded the internet to such an extent that WHO eventually called on institutions and organizations to intervene in the "infodemic" (WHO et al. 2020). The spread of fake news can cause myriad severe problems: distrust of media (Lazer et al. 2018), polarization of political views (Bago, Rand, and Pennycook 2020), threats to public health (Poland and Spier 2010), and distrust of brands (Chen and Cheng 2020), among others.

The nascent literature on misinformation has advanced our understanding of how people's belief in and willingness to share fake news are influenced by both news characteristics (Pennycook et al. 2020; Pennycook, Cannon, and Rand 2018) and individual characteristics (Bronstein et al. 2019; Pennycook and Rand 2020). However, no research, to the best of our knowledge, has investigated whether receptivity to misinformation is influenced by the user's device.

Study 1 explored this question by analyzing a dataset provided by Zubiaga, Liakata, and Procter (2017). The dataset, scraped from Twitter, includes 97,765 replies to 5,802 source tweets. The source tweets relate to one of five breaking news topics in 2014–2015 (Table 1) and were labeled by journalist collaborators as either rumors or non-rumors. We parsed the original json file of each reply to these source tweets and extracted users' device information from the "source" data field. A majority of replies were posted via a mobile device (51%) or a PC (35%). Notably, few replies (2%) expressed concern about the authenticity of the source tweet. A user's Twitter replies appear on the user's own Twitter timeline, so we use replies as a proxy for the user's belief in and willingness to share the source tweets.

To estimate the effect of the device type, we analyzed the data using logistic regression with event fixed effects. The DV was whether the reply was in response to a rumor source tweet, and the main predictor was whether the reply was posted via a mobile device or PC. The analysis revealed that the average mobile user was more likely to reply to a rumor source tweet than the average PC user (Table 2). The effect persisted when we controlled for the scraped covariates, including the follower count of the replying user, whether the source tweet contained a URL, the local time at which the user replied, etc.

Why are people more likely to believe and share fake news when they use smartphones (vs. PCs)? There are several possible explanations. The first is about device characteristics. For instance, smartphones have smaller screens, making it more difficult to process information (Ghose, Goldfarb, and Han 2013). Smartphones are also more associated with fun than with work (Shen, Wang, and Zhang 2019), which may contribute to the lack of deliberation (Zhu et al. 2020). The second is user characteristics. When people self-select devices, the difference could be due to individual differences (e.g., age, education). The third is related to environmental distractions. Because smartphones are more portable than PCs (Melumad and Pham 2020), they can be used anywhere at any time, even when environmental distractions are high. Environmental distractions may reduce deliberation and make people more vulnerable to fake news.

We then tested these possible mechanisms in two experiments. Study 2 (N=201, Prolific) examined the role of device characteristics by randomly assigning participants to use their PC or smartphone, which should hold user characteristics and environmental distractions constant. Participants read 12 news headlines (six true, six fake) about COVID-19 in a random order and indicated their belief in and their likelihood of sharing each headline. We conducted a regression with robust SEs, using participants as the cluster variable, and device (1=smartphone, -1=PC), news (1=true, -1=fake), and their interaction as predictors. We found no significant device

× news interaction effect on belief (B=-.002, SE=.04, t(200)=-.06, p=.955): the device had no significant effect on belief in the fake news (2.46 vs. 2.39; B=.03, SE=.06, t(200)=.53, p=.600) or belief in the true news (4.55 vs. 4.50; B=.03, SE=.06, t(200)=.49, p=.628). We also observed no significant interaction effect on the likelihood of sharing. These null results suggested that our effect is not driven by device characteristics.

Study 3 (pre-registered; N=395, Prolific) further tested the roles of environmental distractions and user characteristics by allowing participants to complete the study on either a smartphone or a PC. Participants read four news headlines (two true, two fake) about COVID-19 in a random order and indicated belief in each headline. They also reported environmental distractions and user characteristics (i.e., gender, age, education, and anxiety). A regression analysis with robust SEs yielded a significant device × news interaction effect (B=-.14, SE=.06, t(394)=-2.56, p=.011): smartphone (vs. PC) users reported stronger belief in the fake news (2.55 vs. 2.19; B=.18, SE=.07, t(394)=2.49, p=.013) but similar belief in the true news (4.01 vs. 4.21; B=-.10, SE=.08, t(394)=-1.35, p=.177). Moreover, smartphone users reported more environmental distractions (2.24 vs. 1.77, F(1, 393)=9.12, p=.003), which mediated the above effect (90% CI for moderated mediation =[-.067, -.005]). No individual characteristics varied with the device, and controlling for them did not change the conclusion. Study 3 thus supported environmental distractions rather than user characteristics as a viable mechanism.

Theoretically, this research contributes to the literatures on misinformation and technology by documenting a novel effect of the device type on consumers' beliefs in and intentions to share fake news. Practically, our work underlines the need for news websites and social media to alert smartphone users to fake news.

Devices, Fast and Slow: How Electronic Devices Influence Consumer Decision Making

EXTENDED ABSTRACT

Many everyday decisions are made with electronic devices, ranging from what groceries to buy to where to have a family vacation, from what job to apply to how to invest life savings. However, little is known regarding how various electronic devices shape how consumers construe and process decisions. This research investigates how using mobile versus stationary devices affects consumers' approaches to decisions. In particular, we argue that using mobile devices prompts consumers to rely less on deliberative processing than using stationary devices.

Based on the distinct mental dispositions consumers develop while using mobile versus stationary devices, we propose three key aspects that define these two types of devices. First, consumers use mobile devices primarily to process fragmented information and stationary devices to process an integrated block of information. Second, consumers tend to use mobile devices in time fragments in-between other activities and stationary devices in a reserved block of time. Third, consumers are more mentally prepared for interruptions that prevent them from focusing on the current decision when using mobile devices than stationary devices. Such mental dispositions can be triggered by different devices a consumer use (e.g., smartphone vs. PC) and vary among individuals for the same device (e.g., a consumer who uses a laptop to browse Tweets in a waiting room would consider it as a mobile device, whereas one who uses a laptop to watch a movie would consider it as a stationary device). Ultimately, consumers are inclined to reserve less cognitive resources when using mobile than stationary devices. Knowing that deliberative processing draws on sufficient cognitive resources (Chaiken and Trope 1999; Kahneman 2003; Kahneman and Frederick 2002), we hypothesize that using mobile devices reduces the extent to which consumers rely on deliberative processing, compared to using stationary devices.

Evidence from six studies, including a field dataset, supports our theorizing.

Study 1 demonstrated that mobile-devices-based decisions required less deliberation than stationary-devices-based decisions. Participants recalled the most recent decision they made, using either smartphones (mobile-device condition) or PCs (stationary-device condition). Codings from three independent coders showed that smartphone-based decisions were less deliberative (MSmartphone = 3.87 vs. MPC = 4.35, t(388) = -4.71, p < .001) and less effortful (MSmartphone = 3.42 vs. MPC = 4.15, t(388) = -7.56, p < .001) than PC-based decisions.

In Study 2, participants indicated how they generally use their smartphones or PCs (between-subjects). In line with our theorizing, participants were more inclined to use smartphones for fragmented information and PCs for an integrated block of information (MSmartphone = 3.33 vs. MPC = 4.43, t(111) = -4.01, p < .001). Participants were also more likely to use their smartphones in time fragments in-between other activities and PCs in a reserved block of time (MSmartphone = 3.19 vs. MPC = 4.77, t(111) = -4.89, p < .001). Finally, smartphones prompted participants to be more mentally prepared for interruptions than PCs (MSmartphone = 4.86 vs. MPC = 3.86, t(111) = 3.32, p = .001).

Studies 3 and 4 examined the key hypothesis via two classic heuristics – the anchoring effect and the attraction effect. Since deliberation reduces the likelihood of using heuristics (e.g., Epley and Gilovich 2006; Kahneman 2003; Pocheptsova et al. 2009; Tversky and Kahneman 1974), consumers who use mobile devices should be more prone to anchors and decoys. In Study 3, across four products (hedge trimmer, hot water dispenser, UV sanitizer box, electric grill), we found that participants who used smartphones were more likely to anchor their willingness-to-pays around the last two digits of their IDs (b = 0.28, SE = 0.03, p < .001) than did those who used PCs (b = 0.20, SE = 0.03, p < .001). In Study 4, participants selected a bonus task from a set of three options, in which a dominated decoy was introduced to one of the two core options (a'ab vs. abb'). We observed an attraction effect only when participants used smartphones – they were more likely to choose the focal option (option a) when it was the dominate option (a'ab) than when it was not (abb'; 76.9% vs. 52.9%, χ2 = 7.30, p = .007). No attraction effect was found when participants used PCs (choice share of the focal option: 66.3% vs. 67.1%, χ2 = 0.01, p = .910).

Study 5 examined how devices affect the likelihood of making a purchase, with the moderating role played by set alignability. Using mobile devices should decrease the likelihood to make a purchase only in a nonalignable set, which is cognitively demanding to process; however, devices should not influence the likelihood in an alignable set, as the choice from which is effortless and does not require much cognitive resources (Alter et al., 2007; Gourville and Soman, 2005; Stanovich, 2011; Zhang and Fitzsimons, 1999). Participants used smartphones or PCs to make a consequential purchase from six power banks that varied on a comparable attribute (alignable-set condition) or a non-comparable attribute (nonalignable-set condition). We found an interaction on the likelihood of buying a power bank (b = 0.67, Wald = 3.12, p = .077): in the nonalignable set, using mobile devices reduced the likelihood of buying a power bank (70.9% vs. 57.6%; b = -.59; p = .034); whereas in the alignable set, the device did not influence the likelihood of making a purchase (59% vs. 61.2%; b = -.09; p = .733).

In Study 6, individual-level clickstream data (N = 241,002) from a UK-based online retailer corroborated our theorizing. Compared to using PCs, using smartphones reduced consumers' decision time (b = -0.15, SE = .03, z = -4.78, p < .001) and their likelihood of making a purchase (b = -0.26, SE = 0.13, z = -2.02, p = .043), while controlling for other inspection related variables.

Overall, this research presents that mobile devices prompt consumers to rely less on deliberative processing than stationary devices. These findings advance our understanding of how the electronic devices consumers use can shape the way they approach decisions and, ultimately, influence their product choice, willingness-to-pay, and the likelihood of making a purchase.

The Addictive Properties of Mobile Applications: How Endless Scrolling and Intermittent Notifications Impact Consumer Perceptions and Behavior

EXTENDED ABSTRACT

As of 2019, 2.71 billion people around the world, including 81% of Americans, owned or used smartphones (Montag et al., 2019; Anderson, 2019). While smartphones provide a portal to social connection and a gateway to information, a growing body of evidence suggests they also can create problems, both at the individual and societal level.

In this paper, we investigate how smartphone features might create a diminished sense of control – a common feature of addiction – and influence consumers' subsequent behaviors. Emerging research supports the proposition that digital technologies can become addictive, due at least in part to self-control challenges (Allcott, Gentzkow, & Song, 2021). Technology addiction is often self-diagnosed (Raghubir, Menon, & Ling, 2021); however, self-awareness alone is ineffective in changing technology-related behavior (Zimmerman, 2021).

Neyman (2017) identified specific smartphone features that contribute to technology addiction. One feature, endless scrolling, refers to content that perpetually loads on a single page, rather than on separate pages. Recent literature has identified endless scrolling as a reason for increased smartphone usage. Montag et al. (2019) explained this increased usage by asserting that when consumers engage in endless scrolling, they may experience a flow state, which is characterized by high levels of enjoyment and involvement, and a willingness to continue the activity even at great cost (Csikszentmihalyi, 2002).

Another smartphone feature is intermittent rewards, which are commonly operationalized through notifications. Notifications refer to visual, haptic, or auditory signals that alert consumers to a new event (Pielot, Church, & de Oliviera, 2014). By providing rewards at random intervals, notifications increase dopamine production in a manner similar to slot machines (Neyman, 2017).

Addiction encompasses both subjective feelings and objective outcomes (Sussman & Sussman, 2011). Subjective feelings associated with addiction include a heightened sense of incompleteness and a diminished sense of connection with the outside world (Hirschman, 1992). It also has been widely documented that addiction is associated with a diminished sense of personal control (Sussman & Sussman, 2011; Walters & Gilbert, 2000).

It is well established that people attempt to regain a sense of personal control when it is diminished (Roth & Kubal, 1975). One way to regain a sense of control is by exerting agency. The act of choosing provides one means of exerting agency (Averill, 1973; Lefcourt, 1973) and can be used to regain a sense of control when it has been diminished (Inesi et al., 2011). Thus, we expected that when

smartphone users feel low in control, they might exert agency, operationalized through the act of choosing.

To test if smartphone features can diminish consumers' sense of control, we recruited 123 participants (Mage = 18.88, SD = 0.927, 50.3% female) to complete our survey in exchange for partial course credit. In the survey, we first asked participants to name an application that contained either endless scrolling or useful information (which served as the control condition). After participants named an application, we asked, "When you are using an app that offers [this feature], to what extent do you feel out of control, like the app is making you continue to use it?" (1=Not at all to 5=An extreme amount). Participants reported stronger feelings of being out of control in the endless scrolling versus the control condition (Mendless scrolling = 3.652 versus Mcontrol = 2.565; F(1, 122) = 5.871; p < .05).

In study 2 (n=109, Mechanical Turk, Mage = 40.43, SD = 10.574, 52.8% male), we added the feature "intermittent notifications." Participants read one of four scenarios about a fictional app called "Local Eats." Each scenario featured either scrolling or notifications, which were operationalized as either "addictive" or not. For example, in the "addictive" scrolling condition participants read that "there are always additional restaurants that appear on the page." In the "non-addictive" scrolling condition, they read that "there are at least five pages of restaurants."

After the scenario, we asked participants, "To what extent do you feel connected to the physical world around you?" (1=Not at all to 5=An extreme amount) and found a main effect of addictive features (Maddictive = 4.204 versus Mnon-addictive = 4.853; F(1, 105) = 5.871; p < .05). Next, we asked, "To what extent do you feel out of control, like the app is making you continue to use it?" Again, we found that addictive features made participants feel more out of control (Maddictive = 4.167 versus Mnon-addictive = 1.942; F(1, 105) = 41.198; p < .001). Importantly, both features (endless scrolling and notifications) increased feelings of being out of control (ps < .01).

In Study 3 we used the same operationalization. After reading the scenario about the Local Eats app, participants indicated to what extent they felt connected to the physical world, a sense of incompleteness, and a desire to regain control. Participants (n=295) in the addictive features conditions felt less connected to the physical world (Maddictive = 4.041 versus Mnon-addictive = 4.495; F(1, 293) = 4.138; p = .043), a greater sense of incompleteness (Maddictive = 4.185 versus Mnon-addictive = 3.455; F(1, 292) = 8.531; p = .004), and a greater desire to regain control (Maddictive = 5.072 versus Mnonaddictive = 4.222; F(1, 292) = 17.740; p < .001).

Then, we tested whether addictive properties increase preferences for agentic choice. Participants read a consumption scenario in which they could make a choice or let a company choose. Specifically, they imagined that they already had selected a 4-star hotel on Main Street. However, they could receive a 10% discount if they instead allowed the hotel booking website to select the exact hotel for them. Our key dependent measure was how much participants kept agency in choice: 64.4% in the addictive properties condition chose the hotel on Main Street vs. 51.5% in the control condition (Chi-Square = 4.560; p = .033); using a likelihood scale, Maddictive = 3.860 versus Mnon-addictive = 3.480 (F (1, 289) = 6.908, p = .009).

This paper's findings contribute to our knowledge of how smartphones impact consumer behavior, and the society at large, with important implications for marketers, tech designers, public policy – and consumers themselves.

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When Cash is no longer King: On the Unintended Consequences of Digital Financial Platforms

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Paper #1: Connectedness to Financial Vehicles and Its Effect on Consumer Experience, Reselling, and Investing.

Christopher J. Bechler, University of Notre Dame, USA
Szu-chi Huang, Stanford University, USA

Paper #2: Peer-to-Peer Social Defaults: Do Individuals Socially Conform When Making Private Financial Decisions?

Avni M. Shah, University of Toronto, Canada
Xinlong Li, NTU, Singapore

Paper #3: The Effect of Going Cashless for Small Value Transactions: Evidence from the Field.

Shelle Santana, Bentley University, USA
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Paper #4: Just between You and Me: Paying Privately Signals Moral Traits and Enhances Others' Willingness to Cooperate.

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SESSION OVERVIEW

Digital payment platforms have gained popularity in recent years. Venmo now boasts more than 40 million users (Rudegeair 2019), and cash is fast going down in the list of the preferred payment methods in the U.S. (Szmigiera 2019). Despite the prevalence of these new payment platforms, little is known about the social and behavioral implications of their use.

These new research questions present consumer behavior researchers with an opportunity for solving questions that are not only theoretically important, but also rife with timely substantive implications.

Our special session addresses this opportunity by exploring behavioral consequences stemming from the use of financial vehicles other than cash. We focus on how using alternative payment vehicles, most of them hosted within digital platforms, may affect information processing, judgements and downstream choice. We demonstrate that (1) the differential attachment that consumers have to their financial vehicles (crypto vs. cash) spills over to their experience with the purchase, their reselling price, and the extent of their investments (Bechler and Huang), that (2) individuals using P2P digital lending platforms opt towards a social default, choosing to invest in an option that others have chosen, even when the social default option is riskier and result in a lower payoff rate in the long run (Shah and Li), that (3) when cash is eliminated as a payment option for small dollar transactions, consumer spending and purchase behavior is affected, such that consumers spend more and make more impulse/unhealthy purchases (Santana, Vera, and Chacon), and that (4) the "social" nature of consumer-to-consumer payment platforms facilitates consumer inferences that private (versus public) P2P payers hold stronger moral personality traits and, thus, are more likely to cooperate with them in the future, and allows them to use of privacy settings to signal cooperative nature (Chapman and Valenzuela). Accordingly, while each paper individually focuses on a consequential outcome stemming from the nature of the non-cash digital financial platforms, collectively this session demonstrates that the behavioral

outcomes and contingencies linked to the use of these payment and investment vehicles the can vary widely.

Importantly, this session highlights that there are several mechanisms through which consumer payment and investment choices might influence user responses, including the possession –self link or attachment, in this case, to a financial vehicle (paper 1), the reference value of social defaults even for investment choices (paper 2), the psychological costs to consumers of lower pain of payment, regardless of transaction size (paper 3), and the signaling properties of keeping financial information private (paper 4). All papers are in advanced stages of completion with multiple studies run.

The progressive approaches and novel results in this session are sure to induce a lively discussion and are likely to appeal not only to researchers interested in the consequences of payment and investment choices, and the nature of financial vehicles, but to a broader audience interested in financial decision making and consumer interactions with technology more generally.

Connectedness to Financial Vehicles and Its Effect on Consumer Experience, Reselling, and Investing

EXTENDED ABSTRACT

Ashley is a crypto "nut." She adopted Bitcoin early, detests fiat, and follows the crypto markets. Her crypto is part of her identity—it makes Ashley, *Ashley*.

Now consider Zack. In contrast to Ashley, Zack holds most of his wealth in USD (cash) and sees crypto as his "play money."

Clearly, Ashley and Zack feel differentially attached to financial vehicles (cash and crypto) available to them. However, the consumer identity and attachment literatures—while vast—have largely overlooked this possibility and its potential effects. If Ashley and Zack purchase books with cash, who will feel more connected to these books, Ashley (who detests cash) or Zack (who is strongly attached to cash)? If Ashley and Zack are investing in crypto, who will take more risks, Ashley or Zack? Spoiler alert: it is Zack in both cases.

Modern consumers now use many financial vehicles to pay for goods and invest. Consumers often bring cash and multiple credit cards to physical stores, send virtual payments with Paypal/Venmo, and invest in cryptocurrencies. We explore how the *financial vehicles* consumers use—specifically, the connection they feel to these vehicles—contributes to their purchase experiences, affects subsequent purchase-related decisions (e.g., item use, reselling prices), and influences investments.

We first conduct a Pilot Study to establish that consumers indeed feel differentially connected to financial vehicles. We measured 1,001 participants' felt connection to 11 financial vehicles (e.g., cash, credit cards, Venmo, cryptocurrencies; see Dommer and Swaminathan 2013; Escalas and Bettman 2003, 2005) and factors that may contribute to this felt connection. The data indicated that consumers feel differently connected to their financial vehicles and illuminated factors that may drive financial vehicle connectedness, including greater frequency of past vehicle usage ($ps<.001$) and greater utilization within consumers' social circles/networks ($p<.001$).

Second, we examine how the relative strength of consumers' connection to their financial vehicles affects their purchase experi-

ences and investments. We theorize that this feeling of connection can *spillover*, such that when consumers use a highly-connected (vs. weakly-connected) financial vehicle to make a purchase, they feel more connected to their purchase. Similarly, when they use a highly-connected (vs. weakly-connected) financial vehicle to invest, they are more likely to hold onto that investment and thus make fewer trades. Our proposition is based on the assumption that consumers' associations with individual entities—including people, objects, groups, and characteristics—do not exist in a vacuum. Rather, these associations vary in strength and direction depending on how these entities relate each other (e.g., Wheeler and Bechler 2021). For instance, consumers view themselves as more intelligent when they strongly associate with an MIT pen (Park and John 2010) and perceive themselves as taller when obtaining tall (vs. short) mugs (Weiss and Johar 2016). We build on this conceptualization to hypothesize that the financial vehicles consumers use can serve as another entity for these transfers to occur.

Studies 1A-2 tested this key prediction by examining how consumers feel about their purchases. In Studies 1A-C, we first measured consumers' idiosyncratic differences in the degree to which they felt connected to their payment methods and then (after a filler task) assigned participants to imagine purchasing items from the university bookstore with different payment methods. In Study 1A (*N*=394; Payment Methods: Cash vs. Credit/Debit Card), participants who were more connected to cash reported that they felt more connected to products they were assigned to purchase with cash than with card, whereas participants who were more connected to their credit/debit card reported that they were more connected to products they were assigned to purchase with card than with cash (interaction: *p*<.001). This effect was replicated in Study 1B with electronic payment methods (*N*=447; e.g., Paypal vs. Venmo) and in Study 1C with cards versus cryptocurrencies (*N*=403), *p*s<.001 (Figure 1).

In Study 2 (*N*=148) we replicated these results by directly manipulating how connected consumers' felt to a specific payment method (their credit card) through social comparison (Festinger 1954; Argo, White, and Dahl 2006). Our pilot data suggested that past usage frequency could determine payment method connectedness, so we informed participants that they either used their credit card more frequently (high connectedness condition) or less frequently (low connectedness condition) than their peers (manipulation check of payment method connectedness: *p*<.001). Participants made to feel highly connected to their credit card (vs. less) reported feeling *more* connected to the 10 purchases they subsequently made with their card, *p*<.001.

Studies 3-6 tested consequences of this feeling of connection on selling, food consumption, mask usage intentions during COVID, and investing. In Study 3 (*N*=399), we found that participants requested higher selling prices for products they purchased with the payment method (cash or credit/debit card) they felt more connected to (interaction: *p*=.01). In Study 4 (*N*=597), we collected information about participants' last meal at a restaurant and found that participants felt more connected to their meal and perceived it to have a greater impact on their weight when they purchased it with a payment method (cash or credit/debit card) that they felt more connected to (interaction: *p*<.001 and *p*=.02, respectively). In Study 5 (preregistered; *N*=1,594), participants imagined that they forgot their facemask at home and were required to purchase one at a store. Participants who were more connected to their cash (vs. credit/debit card) reported feeling more connected to the mask and that they were more likely wear the mask in the future when assigned to purchase it with cash (and vice versa; interaction: *p*<.001 and *p*=.001, respectively).

Finally, Study 6 (preregistered; incentive-compatible; *N*=293) explored investment decisions. Crypto users invested their compensation from a study into a simulation that followed a random 150-day period in the market (e.g., BTC-USD; http://stanford.edu/~cbechler/cgi-bin/mkt_sim/1/index.html?Game=id=ACR&crypto=BTC). We found that consumers who were more connected to crypto traded less frequently in this crypto-based simulation (*p*<.001) and held their money in the market for longer (*p*=.003), indicating less risky investing behavior. Replicating past literature, fewer trades led to greater returns to investment (*p*=.01); thus, consumers who were more connected to crypto tended to receive greater compensation from this investment simulation.

Peer-to-Peer Social Defaults: Do Individuals Socially Conform When Making Private Financial Decisions?

EXTENDED ABSTRACT

From small decisions such as what airline meal to choose, to more consequential choices such as what car to buy or what home improvement to make, consumers are affected in a direct and meaningful way by their peers (e.g., Bollinger and Gillingham, 2012; McShane et al. 2012). Most research has documented that this operates via visual salience: public consumption choices are easy to observe and mimic. Yet, over half of consumer spending including many financial choices, are private and inconspicuous. Are these private, consequential investment decisions susceptible to social defaults, with individuals choosing investments based on what others have also chosen? If so, who is most susceptible to social default effects, and when?

Recent innovations in financial technology, and particularly the emergence of Peer-to-Peer (P2P) lending platforms, have made it possible to answer these questions in real-world empirical settings. P2P platforms operate by creating a marketplace directly connecting borrowers and lenders directly, bypassing conventional bank intermediaries. Similar to other investment options, investors have extensive information about their investment—having access to detailed credit information of the borrower and the purpose of the loan request. However, unlike most investment options, investors are also privy to social information as well such as the number of individual investors who have invested, their average investment size, and percent of the loan that is fulfilled.

Building off research in social influence and mimicry, we posit that when preferences are not well formed, people are more likely to opt towards a social default for their investment choices, choosing to invest in an option that others have chosen even despite the level of risk. Finally, we also predict that individuals may still be susceptible to opt towards social defaults even when it may be detrimental to financial performance.

We obtained data from the largest P2P lending platform in the US, Prosper.com. Prosper allows borrowers to set their own interest rates by posting an auction style listing specifying the maximum interest rate (reserve interest rate) she is willing to accept and the loan amount requested. However, borrowers who set their reserve interest rate high are typically more likely to default than those who set rates lower, leaving lenders (investors) to face a significant trade-off between high risk interest rates and higher potential rewards if these loans do not default and are paid in full.

Our data included 5,829,817 different bids submitted by 54,821 lenders, and allowed us to determine to test whether those who were more uncertain and less experienced (i.e., fewer loans invested in previously) were more likely to use a social default, investing in loans that had a higher number of other peer investors. We find that

inexperienced investors are more significantly more likely to invest in loans that have more investors ($B = .121$, SE = .018, $p<.001$). Our data also allowed for various borrower and loan-level controls (e.g., where the borrower is from, loan interest rate, loan amount), as well as firm-level controls (e.g., availability and distribution of loans). Even despite these controls, we find that inexperienced investors are more significantly more likely to socially conform in their investment decisions ($B=.016$, SE=.002, $p=.003$).

Interestingly, we found our results were moderated by the day of the week: Investors were significantly more likely to rely on social defaults—loans with more investors—at the end of the work week on Fridays, a day that has been associated with investor inattention and distraction, $B=.017$, SE=.002, $p<.001$ (DellaVigna & Pollet, 2009). Moreover, inexperienced investors were significantly more likely to show this end-of-week social default tendency, $B=-.007$, SE=.002, $p<.001$. Importantly, though, socially conforming choices did not lead to better decisions. Rather, investors were more likely to choose riskier loans that led to significantly lower returns ($p<.001$).

Despite this initial evidence, field data made it difficult to determine precise causality or the mechanism driving our effects. We conducted two follow-up experiments to more precisely test whether investment decisions are more susceptible to social default effects when expertise/experience and cognitive resources are lower.

In Study 2 and 3, we adapted an experimental design from Huh and colleagues (2014) to test whether social defaults are more likely to engender choice mimicry when preferences were not as clearly formed, i.e., in more or less uncertain/familiar choice settings and in the face of time pressure/less conscious deliberation. In Study 2, participants were asked to make an investment choice between either one of two English tea companies (more familiarity) or two Korean tea companies (less familiar). In both cases, individuals were told that 64% of previous participants chose either one of the two companies, randomly varying which company was presented as the favored option. Participants were significantly more likely to choose to invest in the social default investment option when the choice was between unfamiliar Korean tea companies versus when the choice was between two familiar English tea companies (M_{Korean} = 72.3% social default option, $M_{English}$ = 51.4%; $p<.001$). These results were partially mediated by tea brand familiarity ($p=.012$).

Finally, in Study 3 (N=448), we tested whether increasing time pressure and reduction in conscious deliberation increased the likelihood for choice mimicry and social defaults using a 2 (uncertain product choice between two Korean teas vs. certain product choice between two English teas) X 2 (time pressure: 10 seconds vs. 1 minute) between-subjects design. We found that participants were more likely to choose the social default option under time pressure, specifically when deciding to invest between two unfamiliar Korean tea companies ($p<.001$). However, time pressure did not significantly influence the likelihood of choosing the social default when the investment choice was more familiar ($p=.557$).

Across a large-scale P2P lending dataset and two follow-up laboratory experiments, we find that individuals are more likely to opt towards a social default, choosing to invest in an option that others have chosen as well when their preferences are not well formed. We find these effects occur in financial choices beyond P2P settings, and even when the social default option is riskier and result in a lower the payoff rate in the long run.

The Effect of Going Cashless for Small Value Transactions: Evidence from the Field

EXTENDED ABSTRACT

In 2018, cash was the third most preferred payment method in the U.S., behind debit cards and credit cards (Szmigiera 2019). Yet its popularity to pay for small-value transactions remains surprisingly high (Arango, Huynh, and Sabetti 2011; Klee 2008). Prior research contends that consumers have a threshold transaction size below (above) which they prefer cash (non-cash), and that the amount is less than $50 (Freeman and Kydland 2000; Lucas and Nicolini 2015;Wakamori and Welte 2016; Wang and Wolman 2016; Whitesell 1989). This is curious because digital payments, credit and debit cards offer both financial and psychological benefits to consumers in the form of float and/or lower pain of payment (Prelec and Loewenstein 1998), regardless of transaction size. However, the lower pain of payment associated with cards also results in higher spending by consumers. This research examines the prevalence of cashless payments for small dollar transactions and their potential implications.

Using five years of purchase transaction data, we determine the threshold where 50% of consumers switch from card to cash. We also examine whether the adoption of non-cash payment methods varies by population density. We then turn our attention to the implications of consumers paying for small-value transactions with cards. Using 26 months of transaction data, we observe the effects of eliminating cash as a payment option on consumer purchase and payment behavior.

We obtained a dataset from an international payments processor that included transactions between $.01 - $100 completed between 2015-2019 (n = 43.94 million). We had no a priori prediction regarding the specific magnitude of the threshold amount. Directionally we expected it to be less than $50, to decline over our observation period, and to be higher in major metropolitan markets (vs. smaller markets).

Table 1 shows the results of a logistic regression on the probability of cash payment (cash = 1, non-cash = 0) with transaction amount, year, and geography as predictors (1=top 25 market, 0 = not top 25 market). As expected, consumers were less likely to pay with cash over time (β_{year} = -.136, $p < .0001$), and were more likely to use cash at smaller transaction amounts (β_{amount} = -.048, $p < .0001$) and if they lived outside of a major metro area ($\beta_{top\ 25}$= -.196, $p < .0001$). Importantly, we also observed a decline in consumers' payment threshold. In 2015 the transaction amount where 50% of payments were cash (vs. card) was approximately $6.00, but by 2019 it had dropped 50% to approximately $3.00 (Figure 1a). Furthermore, we found that this threshold varies by geography. For consumers living in a major metropolitan area in 2019, the amount was also $3.00, but for those living outside these markets, the amount was roughly $1.00 higher (Figure 1b).

Based on our observation that consumers are increasingly paying small dollar transactions with cards, we turned our attention to the potential implications of such a shift. Extant research shows that consumers not only spend more when they pay with card (vs. cash), they also make more impulse purchases and buy less healthy food (Feinberg 1986; Hirschman 1979; Prelec and Loewenstein 1998; Prelec and Simester 2001; Raghubir and Srivastava 2008; Soman 2001; Thomas, Desai, and Seenivasan 2001). However, whether these effects replicate at small transaction amounts and when cash is not a payment option is unknown.

We obtained 26 months of transaction data from a food service vendor that managed a kiosk at a large business school where cash was eliminated as a payment option (i.e., it was "cashless"). The data

include 13 months of transactions prior to the change and 13 months of transactions after the change (n = 63,700), thus providing us with a natural field experiment. A regression analysis showed that average transaction amount after the removal of cash was significantly higher than it was before the change (β = 19.28, p < .0001), despite transaction counts remaining unchanged and controlling for price increases. Additionally, a separate regression on food type purchases showed that transaction counts significantly increased for impulse snacks (β= 15.17, p < .03) after the change, consistent with Thomas et al.'s (2011) finding that consumers purchase more unhealthy items when paying with a card.

In summary, this research focuses on two questions: 1) To what extent are U.S. consumers using card payments for small dollar transactions, and 2) What are the potential implications of such a change? Our data show that the transaction threshold where payments switch from cash to card/digital is low and is also declining. This is true in both major metropolitan markets and smaller markets, although the shift is happening faster in larger markets. We then show why this is potentially important by examining how consumer spending and purchase behavior is affected when cash is eliminated as a payment option for small dollar transactions. Our results confirm that consumers spend more and make more impulse/unhealthy purchases.

These findings have theoretical and policy implications. Theoretically we bridge the research from economics on demand for cash and payment choice with that from marketing on how payment types affect consumer behavior. In doing so, we offer new perspective on the implications of decreased cash use. Second, using a natural field experiment, we demonstrate a causal relationship between payment type choice, spending, and purchase behavior. Third, for policy makers, the debate surrounding going cashless rarely mentions the behavioral effects of using cards. Our research shows that this should be part of the dialogue.

Just between you and me: Paying privately signals moral traits and enhances others' willingness to cooperate

EXTENDED ABSTRACT

Online, consumers face decisions about whether to send messages, photos, and even payments privately or publicly. Such decisions can impact one's own privacy – and also the privacy of fellow consumers. We investigated such privacy decisions in financial contexts. Money, as it relates to personal finances, is a taboo topic people tend to keep private and avoid discussing (Goldberg & Lewis, 1978; Sun & Slepian, 2020). Thus, we hypothesized that keeping financial transactions private might provide social benefits.

Given that moral judgments can be formed quickly (Zajonc, 1980) on the basis of little information (Haidt, 2001), we propose that preserving a fellow consumer's privacy in a financial context might signal strong moral traits. Since morality inferences facilitate cooperation (Tomasello & Vaish, 2013), we investigate whether consumers would be more likely to cooperate with private payers due to the perception that they possess relatively stronger moral traits. We tested these ideas across six studies, in the context of peer-to-peer payments.

In study 1a, student participants (n=67) imagined they had paid for a classmate's lunch, and the classmate reimbursed them either privately or publicly on Venmo. To measure cooperation, we asked participants how likely they would be to pay for their classmate again (1=Extremely unlikely; 7=Extremely likely). Participants were more likely to pay again for private payers (Mprivate=6.212, Mpublic=4.824; F(1, 65) = 13.589, p < .001). In study 1b we replicated these findings with students in Spain (n=193). Participants imagined

they had paid for a classmate, who reimbursed them using the Spanish payment app, Bizum. All participants evaluated two payments: one private and one public. A repeated measures ANOVA revealed that participants were more likely to pay for a private payer again (Mprivate =6.228, M$_{public}$=5.655; F(1, 184) = 38.068, p < .001) and more likely to endorse a private payer (M$_{private}$=5.860, M$_{public}$=5.335; F (1, 184) = 25.981, p < .001).

In study 2 (preregistered), we replicated the main effect of payment privacy setting on cooperation and tested for mediation through perception of moral traits. MTurk participants (n=117) imagined they had received a private (vs. public) Venmo payment from a friend. Participants were more likely to endorse private payers (Mprivate=6.220, Mpublic=5.483; F(1, 115) = 9.307, p < .01), and were marginally more likely to pay for them again (Mprivate=6.254, Mpublic=5.828; F(1, 115) = 3.412, p = .067). Participants then evaluated the payer on six moral traits (considerate, sincere, conscientious, generous, agreeable, and trustworthy) which are associated with exemplars of moral character (Walker & Hennig, 2004). These traits loaded on one factor and were averaged to form a composite measure (α = .862). Private payers were inferred to possess stronger moral traits (Mprivate=5.890, Mpublic=5.362; F(1, 115) = 8.676, p < .01), and the perception of moral traits mediated the willingness to endorse the payer (indirect effect = .3916, 95% CI [.1220, .7408]) and pay for them again (indirect effect = .3402, 95% CI [.1100, .6183]).

Study 3 (preregistered) tested willingness to cooperate within an ultimatum game (UG). Participants on Prolific (n=200) read a scenario in which a new friend reimbursed them privately or publicly. Participants were then told that they would be responders in a UG, playing with this friend (proposer), who had between $1.00 and $4.00 to divide. The friend would make an offer, which the participant could accept or reject. Participants indicated how fair they thought the offer would be. Private payers' offers were expected to be more fair (Mprivate=5.940, Mpublic=5.582; F(1, 196) = 4.105, p = .044). All participants then saw an offer of $0.75, and indicated likelihood of accepting. Participants were more likely to accept the offer from private payers (Mprivate=4.630, Mpublic=4.020; F(1, 196) = 3.905, p = .050). Expected offer fairness mediated the relationship between payment privacy setting and likelihood of accepting (indirect effect=.1082, 95% CI [.0008, .3059]).

In study 4 (preregistered), we investigated whether consumers use privacy settings to signal their own moral traits. Participants (n=60) were instructed to send a Venmo payment to a fellow participant who would rate them based on what kind of impression they made. Participants were told that the person who was rated as the most considerate (vs. the most fun) would receive a $5.00 bonus. After sending payment, participants reported what kind of impression they were trying to make (considerate vs. fun) and how they sent payment (private vs. public). Participants paid privately more often when they were trying to make a considerate impression (82.6%) versus a fun impression (52.8%; χ2 = 5.448; p=.020). This indicated consumers may use privacy behaviors to signal moral traits (e.g. considerateness).

In study 5 (preregistered), we again tested our Hypothesis in the context of a UG. Participants imagined they would be making an offer (as proposer) to a new friend, who would either accept or reject. MTurk participants (n=222) were told they had recently paid their friend either privately or publicly. Then, participants rated the likelihood that their friend would accept their offer. Participants also evaluated how fair their friend would perceive the offer to be, and to what extent their friend would agree that they possessed specific moral traits (conscientious, considerate, sincere, agreeable,

generous, and trustworthy). Participants in the private condition thought their friend would agree more strongly that they possessed these moral traits (Mprivate=5.388 vs. Mpublic=4.821; $F_{(1, 219)}$ = 12.429, p = .001), and would perceive their offer as being more fair (Mprivate=6.159 vs. Mpublic=5.459; $F_{(1, 220)}$ = 5.737, p=.017). The perception of moral traits and expected offer fairness sequentially mediated the likelihood of accepting the offer (indirect effect = .1628, 95% CI [.0584, .3051]).

In sum, we found consumers were more likely to cooperate with private payers because they inferred them to possess stronger moral traits, and expected them to behave more fairly. Additionally, our two final studies provided evidence that consumers use transaction privacy settings to signal information about the self. While online platforms offer consumers the ability to broadcast personal information, our results indicate that when it comes to money, it pays to keep personal information private.

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The Consumer Budgeting Journey

Chair: Nirajana Mishra, Boston University, USA
Discussant: Dr. Abigail Sussman, University of Chicago, USA

Paper #1: Beyond "Food" and "Entertainment": The Effect of Budgeting Taxonomy

    Lin Fei, University of Chicago, USA
    Dan Bartels, University of Chicago, USA

Paper #2: Divergent Effects of Budgeting for Gift- and Personal-Purchases

    Yuna Choe, University of North Texas, USA
    Christina Kan, University of Connecticut, USA
    Evan Polman, University of Wisconsin-Madison, USA

Paper #3: How Financial Well-being Impacts Financial Communication Between Couples

    Nirajana Mishra, Boston University, USA
    Emily N. Garbinsky, Cornell University, USA
    Suzanne B. Shu, Cornell University, USA

Paper #4: Income Prediction Bias in the Gig Economy

    Ray Charles "Chuck" Howard, Texas A&M University, USA
    David J. Hardisty, University of British Columbia, Canada
    Dale W. Griffin, University of British Columbia, Canada

SESSION OVERVIEW

Budgeting is a common and consequential consumer behavior, yet it remains understudied. This is especially true given recent technological advances like budgeting apps, and the economic volatility introduced by the Covid-19 pandemic. Taken together, the papers in this session advance our understanding of consumer budgeting by helping elucidate its psychological mechanisms, downstream effects, and ways in which it can be improved.

In the first paper, **Fei and Bartels** examine how consumers represent and categorize their purchases. Although past research has shown that budgeting behavior is closely related to categorization, it remains unclear how consumers treat the categories. Their paper finds that the taxonomical distance between purchases, derived from the groupings, predicts adjustments in spending and saving. Specifically, when consumers overspend on an item, they are more likely to adjust spending for more closely related items.

In the second paper, **Choe, Kan, and Polman** seek to understand how consumers budget for others. They demonstrate that gift-budgets are perceived differently from personal-budgets which has important implications on consumers' spending behavior. When consumers budget for a personal purchase, they aim to spend less than their budget; when they budget for a gift-purchase (i.e., for others), they aim to exhaust their entire budget.

Mishra, Garbinsky, and Shu explore the downstream effects of budgeting by showing how the use of budgeting apps that display joint household situations for couples affects financial communication between them and their preferences for joint (vs. individual) financial products. Across four studies, they find that couples' perception of their financial position impacts their financial communication. When they think that their financial well-being is low (vs. high), they tend to communicate less with their partner and prefer individual (than joint) financial products.

The final paper by **Howard, Hardisty, and Griffin** explores how consumer budgeting has been impacted by the rise of the "gig economy." They find that consumers who work in the gig economy (e.g., Uber drivers) display an *income prediction bias* in which they over-predict their gig income. They also test two interventions de-

signed to improve prediction accuracy by drawing attention to either relevant past experience, or the possibility of atypical future outcomes.

This session will feature Dr. Abigail Sussman, Associate Professor of Marketing at the University of Chicago Booth School of Business, as the discussant. She will be discussing the relevance of budgeting to consumer financial well-being and providing feedback on the four papers in the session. Although this session will be of substantial interest to those who are active in budgeting research, we expect this session to have a broader appeal. As budgeting closely relates to spending, saving, and financial well-being, this session should attract those who study consumer financial decisions and well-being. Additionally, this session will focus on recent technological advances (such as the rise of the gig economy and budgeting apps) and will be relevant to researchers who study the impact of technology and decision-making. Lastly, the session would appeal to anyone who has an interest in self-other decision making.

Beyond "Food" and "Entertainment": The Effect of Budgeting Taxonomy

EXTENDED ABSTRACT

Budgeting is a common practice among consumers (for review, see Zhang, Sussman, Wang-Ly, and Lyu 2020). Past work suggests that budgeting behavior is closely related to categorization (Henderson and Peterson 1992), and consumers would be less willing to spend on the category if they consumed a typical item in the category (Heath and Soll 1996). But it remains unclear what the categories are, and whether all items within a category or outside of a category are treated the same. The current research attempts to address these questions and better understand mental budgeting processes by investigating how consumers mentally represent expenditures.

In order to recover the mental representation of expenditures, we ask participants to hierarchically categorize common purchases, as people appear to represent creatures, natural objects (Murphy 2002), and foods (Ratneshwar and Shocker 1991) in hierarchically-organized categories. Specifically, we elicit hierarchies of a range of expenditures (e.g., rent, dining out, etc.) using a successive pile-sort method (Boster 1994; Medin et al. 1997), where consumers first sort items into however many categories they would like. Then, they further split and merge the categories that they deem appropriate to generate a hierarchy of categories. This method yields the grouping of items that are the most natural to consumers as well as the taxonomic distance between the expenditures. These distances provide a refined measure of cross-item relationships that can be used to predict spending behavior. Specifically, we hypothesize that when consumers overspent on one item, they would be more likely to adjust spending for more closely related items, as revealed by the taxonomy derived from the successive pile sort task. This hypothesis allows us to make predictions about spending adjustments for items of all distances and does not require the researcher to label the categories.

In Study 1 (N = 27, Mturk), participants perform a successive pile-sort task of 64 budget items (determined through a pilot) on a web interface. To translate the hierarchy to a distance metric, an item had distance 0 with itself, while the items grouped in the subordinate level group (i.e., the group after splitting) had a distance of 1; items grouped in the basic level (i.e., first sort) but not in the subordinate

level group had a distance of 2; those shared only superordinate category (i.e., the group after merging) had a distance of 3 while those never grouped together had a distance of 4. The correlation between all participants' distance matrices passed the cultural consensus model (first eigen value is considerably larger than the second eigen value (12.23 vs 1.39); all factor loadings are positive; Romney, Weller, and Batchelder 1986), which indicated that participants achieve consensus in their representation of the expenditure items. This result suggests that individual participants' representations of these purchases are similar, that there is consensus that some items are closer (e.g., shampoo and toilet paper) and others further (e.g., shampoo and airplane tickets), and it provides the basis of stimuli selection in Study 2 and 3.

Using this method for deriving taxonomies, Study 2 investigated how consumers adjust their spending for items of different distances. To allow for clear distinction of items at different distances, Study 2 used two waves of data collection, separated by two days, to allow for individualized stimuli. In wave 1 (N=198), participants did the categorization task from Study 1. We then tailored the stimuli for each participant for wave 2 (N=161), which used a 2 (spending condition: overspend vs underspend on the focal item) by 2 (scenarios with different sets of items) within-subject design. Each set of scenarios consisted of a focal item that they had "spent" on and four comparison items, one of each that has a distance of 1, 2, 3 and 4 to the focal item. The comparison items were selected so as to be maximally comparable to each other on additional norming measures (e.g., hedonic and frivolous spending) that we collected. When consumers overspent on a focal item, they adjusted their spending less for items at greater taxonomic distances ($b = 0.10$, $t(642) = 2.66$, $p < 0.01$). In other words, the more closely related the comparison item was to the focal item, the more people adjusted their spending downward on that item. For underspending, we did not observe differences across levels ($F(3, 640) = 0.31$, $p = 0.82$). We replicated this finding in Study 2b with comparison items selected from aggregate distances.

In Study 3, we investigated spending behavior beyond self-reported adjustments. Participants (N = 356, MTurk) read that they have spent on a focal product that comes with a discount promotion, and they ranked three other comparison items of varying taxonomic distances in terms of how much they wanted to apply the promotion. The study used a 5 (scenario) by 2 (focal typicality: typical, atypical) by 2 (promotion magnitude: 10% off, 40% off) within-subjects design. According to our hypothesis, participants would want to apply the promotion to the item of closest distance the most to save money on the same budgeting category, and the rank would decrease as distance increases. The result was consistent with our hypothesis: as distance increased, the rank for an item decreased ($b = -0.004$, $t = 3.22$, $p < 0.01$), and the pattern was consistent across both the typicality of the focal product and the promotion magnitude. This pattern was replicated in Study 3b, which used choice rather than ranking as its dependent variable and a buy-one-get-one-free promotion.

The current paper develops its theoretical framework from the literature in cognitive science on the mental representation of categories and concepts and applies the investigation methodology to a mental budgeting context. By recovering consumers' representation of expenditures, we hypothesized and tested for specific spending adjustment patterns related to taxonomic distance. This approach for investigating people's categories of expenditures could be extended beyond budgeting to countless other decisions about spending and saving, and potentially illuminate other applications such as brand extensions and recommendation algorithms for items purchased together.

Divergent Effects of Budgeting for Gift- and Personal-Purchases

EXTENDED ABSTRACT

It is common for people to set budgets. From spending on rent, transportation, food, etc., consumers are often budgeting their money. One expense in particular that consumers make is buying gifts. While gift-giving is a prevalent consumer behavior, the intersection between budgeting and gift-giving has thus far received little attention. In our research, we explore how gift-budgets are perceived differently from personal-budgets, and the effect this has on spending on others.

Traditionally, budgets serve as a reference point for a purchase decision (Heath, Larrick and Wu 1999) and are often accompanied by a consumption-reduction goal (Krishnamurthy and Prokopec 2010). For example, when a consumer budgets $100 to buy a bottle of wine for herself, she will focus on getting the best wine within her budget. We predict that consumers with personal-budgets will prefer to spend less than their budgets in an effort to minimize their spending (i.e., *budget-minimizing goal*). In contrast, when a consumer sets aside $100 to buy a bottle of wine for a gift, we predict that she will focus on choosing the best wine that costs as close to her $100 budget as possible. For gift-purchases, we hypothesize that consumers prefer to spend the entirety of their gift budgets (i.e., *budget-maximizing goal*).

We theorize that the divergence between gift- versus personal-budgets stems from how much consumers focus on saving money. For personal-purchases, budgets are typically set for the purpose of controlling spending (Heath and Soll 1996), and are often driven by a savings goal (Peetz and Buehler 2009). However, gift-purchases often function to satisfy other goals, such as celebration, impression management, and relationship maintenance (Sherry 1983), which make people become willing to increase spending on others. Accordingly, research has found that people are less price-sensitive when choosing gifts than when making personal-purchases (Boncinelli et al. 2019; Wang and Van der Lans 2018). We thus hypothesize that consumers will treat gift-budgets in a relative budget-*maximizing* manner, resulting in weaker savings goals for gift-purchases than for personal-purchases.

In study 1, we asked 224 participants to recall both a recent personal- and gift-purchase, and to write down what "budgeting for a single item (vs. a gift)" meant to them. We coded participants' responses according to whether participants aimed to "spend less than their budget" or "spend around their budget." For personal-purchases, more participants indicated a preference to spend less than their budget (74.3%) than to spend around their budget (25.7%). In contrast, when buying gifts, more participants indicated a preference to spend around their budget (70.1%) than to spend less than their budget (29.9%), $p < .001$.

Study 2 tested the downstream consequences of holding different perceptions of personal- and gift-budgets, while providing process evidence of savings goals to explain the difference. We asked 329 participants to imagine that they set a $100 budget to buy a coffee maker for themselves or for a friend's gift, and to indicate their likelihood to choose between two coffee makers, from 1 (*Model A for $85*) to 8 (*Model B for $100*). Next, we measured participants' savings goals (cf. Peetz and Buehler 2013). Gift-purchasing participants showed a greater preference for the $100 (at-budget) coffee maker (han did self-purchasing participants (M_{gift} = 4.25 vs. $M_{personal}$ = 3.51; $p = .003$, $d = 0.33$). In addition, self-purchasing participants focused more on savings goals than gift-purchasing participants ($M_{personal}$ = 4.68 vs. M_{gift} = 4.29; $p = .002$, $d = 0.34$). A mediation analysis

showed that purchasing a gift rendered a stronger preference for the at-budget option because of gift-purchaser's weaker savings goals, *b* = 0.52, 95% CI: [0.19, 0.83].

In study 3 (pre-registered), we manipulated the explicitness of the budget (explicit, implicit, absent), and again measured participants' saving goals. In the explicit-budget condition, participants were told that they "set a budget of $50" to buy a sweatshirt either for themselves or for a friend's birthday gift. In the implicit-budget condition, participants were told that they were "considering spending around $50." In the absent-budget condition, no budget-related information was provided. All participants ($N = 954$) imagined that the price of the sweatshirt they were interested in buying was $40. Then, we asked participants to indicate their willingness-to-pay (WTP) for a 3-pack of fleece socks to add to their sweatshirt purchase. WTP for the socks was higher for gift- than personal-purchases when the budget was explicit (M_{gift} = $8.67 vs. $M_{personal}$ = $7.51; *p* = .017, *d* = 0.29) and when the budget was implicit (M_{gift} = $9.25 vs. $M_{personal}$ = $7.73; *p* = .002, *d* = 0.37). In contrast, WTP for the socks did not differ when the budget was absent (M_{gift} = $7.53 vs. $M_{personal}$ = $7.82; *p* = .579), which shows that the effect was mitigated when there was no clear budget.

In a final study, we conducted a real shopping experiment by giving $10 to 297 participants, and asking them to make purchases for either themselves or for others as a gift. We found that the amount spent in the gift-giving condition was not significantly different from the implicit $10 budget ($M$ = $9.59, *p* = .267), while the amount spent in the personal-purchase condition was significantly lower than the implicit $10 budget ($M$ = $8.80, *p* = .003). These results provided field evidence that consumers preferred to spend all of their budget when buying a gift (evidencing a budget-maximizing goal), whereas for personal-purchases, consumers preferred to spend less than their budget (evidencing a budget-minimizing goal).

While research in mental budgeting has considered mental budgets broadly as a tool to curb spending, we provided a novel perspective that a mental budget could be a goal-amount for either minimizing or maximizing. In addition, while the majority of work on gift-giving has examined asymmetrical giver-receiver disparities in gift-giving preferences, our research broadens the understanding of gift-giving behavior through exploration of a practical factor—how much money consumers spend on gifts. Finally, our research provides support for *why* choices for the self are different from choices for others in a gift-giving context (Polman and Wu 2020).

How Financial Well-being Impacts Financial Communication Between Couples

EXTENDED ABSTRACT

Many consumer decisions, especially financial ones, have the ability to affect not only the decision maker, but also their spouse (Hamilton et al. 2020; Raghunathan and Corfman 2006; Ramanathan and McGill 2007; Ratner and Hamilton 2015). When it comes to managing joint finances, couples often need to discuss financial matters, establish financial goals, and make choices regarding financial products (e.g., savings and loans). This project explores how a couple's perception of their joint financial situation influences their decision to communicate with each other during these decisions.

In **Study 1A**, we explored the data from a survey conducted by the Consumer Financial Protection Bureau (CFPB). In that survey, over 4000 married participants were asked whether they sought advice on matters involving money from their spouse. Moreover, the survey included scores that measured participants' financial well-being. We found a significant positive relationship between financial well-being scores and the likelihood of seeking a partner's financial advice (*exp*(β)=1.002; *p* =.002*)*. This result suggests that when one's perception of their financial situation is bad (i.e., low financial well-being scores), they seek their partner's advice to a lesser extent. In **Study 1B**, we analyzed another publicly available dataset provided by Inter-university Consortium for Political and Social Research (ICPSR #26544) with 1264 married couples. We found that when couples' everyday money management stress was high, and they thought that their financial situation had worsened, they shared and worked significantly less with their partner towards their financial goals (β=0.05; *p* =.048; β=-0.19; *p* <.001*)*. Thus, the findings from both the secondary datasets converge to demonstrate that a couple's financial situation impacts their degree of financial communication, such that the worse off financially they perceive themselves to be, the less they communicate with one another.

Our next two studies provide experimental evidence for this relationship. Past research suggests that when net worth is negative (i.e., debts > assets), people focus on their level of assets. For this reason, people feel wealthier when they have more (vs. fewer) assets, despite net worth being held constant (Sussman and Shafir 2012). Thus, in **Study 2** (N=601), we manipulated a couple's perceived financial well-being by providing them with a series of nine financial portfolios that had various magnitudes of assets and debts (ranging from low levels to high levels). We varied the amount of debt from $26,000 to $134,000 and accordingly the amount of assets from $1000 to $109,000, all the while keeping the net worth of the household constant at negative $25,000. For each financial portfolio, we asked participants to make a choice between an individual (or joint) financial product (i.e., separate vs. joint loans, savings accounts, or investments), such that choosing the joint financial product would facilitate greater financial communication. Results revealed that when magnitudes of assets were smaller (i.e., lower perceived financial well-being), fewer participants opted for the joint financial product (M_{low}= 66% vs. M_{high}= 76%; p <.001), replicating our previous pattern that when financial well-being is low, couple members are less likely to communicate with their spouse.

If couples' members are shying away from communicating with their spouse when their financial well-being is low, will they be more likely to talk to their spouse when financial well-being is high? In **Study 3** (N=799), we used a 2(net worth: positive vs. negative) x 2(asset-debt magnitudes: high vs. low) between-subjects design to test whether positive net worth moderates our effect. Depending on the assigned condition, participants either saw a positive household net worth of $25,000 or a negative household net worth of $25,000. Participants in the high asset-debt magnitudes condition saw asset and debt magnitudes of $109,000 and $134,000. In contrast, participants in low asset-debt magnitudes conditions saw asset and debt magnitudes of $9,000 and $34,000. We subsequently examined participants' preference for either individual or joint products for three types of financial products (separate vs. joint loans, savings accounts, and investments). Replicating Study 2, participants in the negative net worth condition preferred the joint product moderately less when the level of assets (i.e., their perceived financial well-being) was lower (M_{low} = 5.25) than when the level of assets was higher (M_{high}= 5.57; $F(1,727)$ = 3.12, *p* = 0.078). However, when net worth was positive (i.e., couple members can infer that their joint financial situation is good), we found no difference in preferences for the joint (vs. individual) financial products depending on the varying levels of assets and debts ($F(1,727)$ = 1.411, *p* = 0.235).

Overall, we find that when couples financial well-being is low, they communicate less and show a decreased preference for joint (vs. individual) financial products. This consistent pattern of results sug-

gests that couple members shy away from financial communication when they need it most. These findings have important implications for consumer financial well-being, since couples with less than ideal financial situations might manage their money more effectively (Olson and Rick 2018) by discussing their finances more openly.

Income Prediction Bias in the Gig Economy

EXTENDED ABSTRACT

Gig economy employment is defined by temporary, freelance work. Emblematic examples include driving for Uber, delivering food through apps like Door Dash, and participating in academic research on platforms like Amazon Mechanical Turk. An important and previously unstudied aspect of working in the gig economy is that gig income can be hard to predict. In the present research we test the hypothesis that consumers who work in the gig economy display an *income prediction bias* in which they over-predict their gig income. We also test two interventions designed to improve prediction accuracy.

Is there an Income Prediction Bias?

On the one hand, there are reasons to believe that gig income predictions may be reasonably accurate. For example, gig workers could engage in "income targeting" and simply work for as long as it takes to hit their target (Camerer et al., 1997). On the other hand, there is evidence suggesting that predictions tend to be optimistic, even in the face of contradictory information. For example, research on the planning fallacy has demonstrated that people tend to make optimistic predictions regarding project completion times, even when they are equipped with the knowledge that similar projects have taken longer than planned in the past (Buehler, Griffin, and Peetz 2010). Therefore, based on the logic that an optimistic income prediction means earning more money rather than less, we hypothesize that:

> *Hypothesis 1:*   *Gig economy workers display an income prediction bias in which they over-predict their gig income.*

How Can Income Prediction Accuracy Be Improved?

Several streams of research support the proposition that people do not consider the full distribution of possible outcomes when they make predictions. Two solutions to this problem that have improved prediction accuracy in other domains are: 1) explicitly prompting people to take an "outside view" and base their predictions on relevant past behaviour (Buehler, Griffin, and Ross 1994), and 2) prompting people to consider atypical outcomes when formulating their prediction (Howard et al. 2021). One goal of the present research is to systematically compare the effectiveness of these interventions in the context of income prediction. To accomplish this we test the following Hypothesis:

> *Hypothesis 2:*   *Prompting gig workers to base their predicted income on relevant past income reduces the income prediction bias.*

> *Hypothesis 3:*   *Prompting gig workers to consider reasons why their schedule will be different than usual reduces the income prediction bias.*

Studies 1–3: Examining the Bias

The first goal of Studies 1–3 was to test H1 with samples drawn from different types of gig work. The second goal was to test the feasibility of different participant recruitment channels. Participants in Study 1 were Uber drivers recruited through r/uberdrivers, a reddit.com community that Uber drivers use to communicate with each other (N = 38, M_{age} = 36.6, 13.2% female). Participants in Study 2 were MTurkers (N = 129, M_{age} = 34.9, 40.3% female). Participants in Study 3 were food delivery app drivers recruited through paid advertisements on reddit.com communities like r/grubhubdrivers (N = 47, M_{age} = 29.9, 23.4% female).

Participants in Studies 1–3 completed two surveys. The first survey was completed immediately, and it asked participants to predict their gig income and hours for the next week. The second survey was completed one week later, and it asked them to log into their gig's app and report their gig income and hours for the past week. Supporting H1, the Uber drivers in Study 1 overpredicted their gig income by 18.2% (Mean Difference = $63.90, 95% CI = [-.89, 128.69], $t(37)$ = 2.00, p = .053), the MTurkers in Study 2 overpredicted by 11.6% (Mean difference = $13.05, 95% CI = [1.01, 1.23], $t(128)$ = 2.14, p = .034), and the food delivery app drivers in Study 3 overpredicted by 19.9% (Mean difference = $63.52, 95% CI = [13.64, 113.40], $t(46)$ = 2.56, p = .014). Participants in all three studies also over-predicted the number of hours they would work (p's < .01). However, participants' expected hourly wage did not differ significantly from their actual hourly wage (p's > .10).

Study 4: Bias Reduction

The purpose of Study 4 was to test H1, H2, and H3. To do so we randomly assigned 662 food delivery app drivers (M_{age} = 30.03, 35.0% female) to one of three prediction conditions: control, outside-view, or defocalizing. In the control condition participants were asked to predict their gig income for the next week. In the outside-view condition participants were asked to base their income prediction on their average weekly earnings over the past month. In the defocalizing condition participants were asked to consider two reasons why their work schedule for the next week might be different than a typical week before predicting their income. One week later we sent participants a second survey that asked them to report their actual income earned. This study was preregistered on aspredicted. org (https://aspredicted.org/blind.php?x=nu8j4c).

H1 was supported: delivery drivers in the control condition overpredicted their weekly income by $62.38 or 23.2% ($M_{predictedincome}$ = $331.66, $SD_{predictedincome}$ = 238.15; $M_{actualincome}$ = $269.28, $SD_{actualincome}$ = 238.30; $t(209)$ = 5.76, p < .001, d = .40). H2 was also supported: the outside view intervention reduced the size of the bias by $29.31 or 53.0% versus control ($t(449)$ = -1.95, p = .051, d = .21). H3 was not supported: drivers in the defocalizing condition overpredicted their income by $67.39 or 25.7% ($t(210)$ = 3.20, p < .001, d = .40), and the magnitude of the bias did not differ between the defocalizing and control conditions ($t(419)$ = .32, p = .75, d = .03).

Discussion

To the best of our knowledge the present research provides the first evidence that consumers who work in the gig economy systematically over-predict their gig income. Furthermore, we find that this income prediction bias is associated with over-predicting the number of hours one will be able to work rather than one's hourly wage. Finally, we demonstrate that the bias can be reduced by prompting consumers to take an "outside-view" when prediction their income.

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Reimagining Taste: Examining Taste Emergence, Divergence, and Reconfiguration in Social Institutions and Markets

Chairs: Annetta Grant, Bucknell University, USA
Ankita Kumar, Bucknell University, USA
Discussant: Craig Thompson, University of Madison-Wisconsin, USA

Paper #1: A Post-Bourdieusian Examination of Taste: How Families Justify Divergent Tastes

Ankita Kumar, Bucknell University, USA
Annetta Grant, Bucknell University, USA

Paper #2: How Taste Practices Become More Complex

Pierre-Yann Dolbec, Concordia University, Canada
Zeynep Arsel, Concordia University, Canada
Aya Aboelenien, HEC Montreal, Canada

Paper #3: The Glocalization of Discursive Structures of a Culinary Taste Regime: Insights from Greenland

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SESSION OVERVIEW

Steeped in a Bourdieusian perspective, the taste literature in CCT tends to elaborate on the ways in which consumers reproduce class-based practices in their quest for distinction and identity construction (Holt 1998; Üstüner and Holt 2007, 2010; Üstüner and Thompson 2011). A subcategory of this literature shows how consumers learn to practice taste and gain communal identity in the process (Arsel and Bean 2013; Maciel and Wallendorf 2017; Seregina and Weijo 2018). Both domains highlight the reproduction of tastes and tend to downplay the role of consumer agency. They are seldom able to explain how social actors develop tastes that vary from their habituated dispositions (Thompson 2018) or how changes in social institutions, such as markets. Further, the practice theoretical literature tends to overlook disagreements and contestations within taste communities.

In the first paper, the authors examine taste practices intergenerationally in families to understand how divergences and convergences of taste practices and ideologies from the oversocialized form occur. They unpack the micropolitics to examine what discursive and practical strategies family members employ to critique and challenge each other's tastes and justify their own, and ultimately how they resolve ensuing tensions to stabilize the familial institution.

In the second paper, the authors examine how market-based taste practices become more complex, thus advancing the role of practices in bringing about market evolution. Using data from the coffee market, they propose that the coffee market is governed by competing institutional logics and further show how practice complexification results from interactions between firms that reflect different logics via a series of mechanisms that incorporate in new materials, skills, and meanings.

In the third paper, the authors examine the discursive emergence, rearticulation, and change of taste structures over time. Drawing upon a prolonged engagement with Greenlandic food culture, they show that the precursor to the formation of a taste regime is the discursive organizing and valorizing of cultural differences. This process is based on sociohistorically and politically established glocalized structures of valorization.

Together these papers: 1) Help advance doxic understandings of taste by enlisting both consumer and market perspectives, operating at different levels of analysis, to examine the emergence and operations of taste; 2) They push theorization of taste beyond the currently entrenched Bourdieusian and practice theoretical approaches by employing a diverse set of sociological and consumption theorists; 3) They draw attention to the undeveloped theme of taste transformation by highlighting how divergences in taste emerge at the level of individual and families and are discursively managed. Further they examine how these transformations emerge sociohistorically, undergo institutionalization and shape tastes at the level of markets and even national cuisines.

This session aligns well with the conference theme of 'What the World Needs Now' because it seeks to examine the reconfiguration of society and markets through novel theoretical approaches and multilevel analyses—within the contextual backdrop of sociohistorical, cultural, and political shifts. Social change is hard to achieve without newer ways of perceiving the world and ideological cooperation.

A Post-Bourdieusian Examination of Taste: How Families Justify Divergent Taste Practices

EXTENDED ABSTRACT

Bourdieusian-inspired consumption research repeatedly shows how consumers replicate social distinctions through the expression of naturalized taste (e.g., Holt 1998; Üstüner and Holt. 2007, 2010; Üstüner and Thompson 2012). However, this literature tends to remain silent on disruptive taste performances that diverge from habituated, class-based ideologies (Thompson 2018). Existing literature provides a deep understanding of the processes by which consumers translate taste into practice (Arsel and Bean 2013), but leaves us to wonder whether individuals oppose, contest, or violate the prescriptions of taste communities. Studies in this domain support the Bourdieusian tenets of social reproduction (e.g., Maciel and Wallendorf 2015; Seregina and Weijo 2017) by showing that consumers' participation in taste regimes tends to align with their socialized tastes. Neither of these streams addresses the agentic aspects of consumer taste, or the micropolitics of taste and how consumers navigate differences within groups. Our research goals are threefold, to illuminate how individuals (1) diverge in their taste practices from their socialized tendencies, (2) criticize the practices of others while justifying their own, (3) navigate the micropolitics of taste to achieve social coordination that helps preserve the stability of institutions.

Drawing inspiration from researchers' criticisms that Pierre Bourdieu (1998) undertheorizes the processes of change—both at the level of individual and society (Calhoun, LiPuma and Postone 1993)—we adopt Lahire's (2003) conceptualization on the 'plurality of dispositions' and Boltanski and colleagues' 'sociology of critique' (Boltanski 2011; Boltanski and Thévenot 2006). Lahire (2003) suggests that social agents develop a broad array of dispositions, each of which owe their accessibility, composition, and intensity to the socialization process in which they were acquired. He further draws a distinction between dispositions to act and dispositions to believe and states that the intensity to which these express in behavior depend on the social context in which agents are interacting.

The foundational tenets of the 'sociology of critique' are that social actors possess a capacity for critical reflection on the fairness

and merit of social arrangements and ideological rationales, which seek to shroud their more invidious subjugatory aspects. In situations of controversy, individuals may deploy orders of worth (forms of common good which align with regimes of justification) in practical tests—i.e., civic, market, industrial, domestic, inspiration and fame—to evaluate and critique worth attributed to persons or things based on these orders. Social actors face an imperative (steeped in the micropolitics of social interactions) to assess and criticize competing justificatory regimes and choose the course that best serves their understanding of fairness (Thompson 2018).

We base our study on 19 in-depth interviews with adult members from two and three generations of seven families of Midwestern American origins. We followed the extended case method (Burawoy 1991) according to which we selected anomalous cases specifically for their theoretical relevance. These were family members who diverged from prior generations and/or their siblings in capital endowments, ideologies, and taste practices. We conducted interviews following the phenomenological method (Thompson, Locander and Pollio 1989) and data analysis following the hermeneutic approach (Thompson 1997).

Our findings imply that younger family members acquire many habituated tastes during primary socialization but adopt divergent ideologies and taste practices owing to their secondary socialized dispositions. The plural dispositions express in different ways in different social situations. These acquisitions result in continuities as well as transformations of taste from one generation to the next. Departures in taste can cause conflicts in familial contexts with family members often premising these disputes on the moralization of taste and lifestyles. They criticize each other using justifications based on the different principles of worth. As an illustration, a son's vegetarianism becomes a point of criticism, with the adult child and parent using justificatory principles of civic and domestic worth to support their arguments for and again this consumption choice. Ultimately, we find that family members attain fragile truces—they raise a plurality of principles of worth, which gives way to the paramount principle of domestic worth.

We make several contributions with our investigation of the underexplored area of divergences of habituated taste and conflicting taste ideologies and practices. Firstly, we examine contestations within families, and the discursive and practical strategies family members employ to diffuse ensuing tensions. Secondly, we extend disciplinary understanding of how social coordination is achieved and institutions—in this case the fundamental institution of family—are maintained and stabilized. Thirdly, we draw attention to the role of consumer agency. We unpack the familial micropolitics that emerge over divergences of capital, ideologies, and taste practices to show how social actors may challenge oversocialized taste prescriptions. Lastly, we advance the boundaries of taste theorization by acknowledging the malleability of the habitus. We show how plural dispositions emerge via primary and secondary socialization and are expressed in particular social contexts to varying extents (Thompson 2018).

How Taste Practices Become More Complex

EXTENDED ABSTRACT

How do taste-based practices become more complex? The markets for beer, coffee, and tattooing share a characteristic: They are composed of practices that have increasingly complexified over time, a process that contributed to their evolution. For example, in the beer market, historically, products were differentiated mainly by brands (rather than their aesthetic properties) until the 1990s. Since then, a rapidly growing craft market has emerged (Carroll and Swaminathan 2000), and consumers can now engage in more complex taste-based practices, develop their knowledge, and conversely expand their tastes (Maciel and Wallendorf 2017). Although the complexification of practices seems ubiquitous to production and consumption, and while we know how consumers learn complex practices, we do not know how this complexity comes to be or how it can contribute to market evolution. We address this gap by studying the complexification of taste-based practices in coffee. Coffee is a market that has been recognized as increasingly complex (Pendergrast 2010), which makes it ideal for our research question. To answer how taste-based practices in a market become more complex, we analyze a multi-sited dataset composed of archival data (more than 2000 pages); field notes, pictures, and videos from 10 industry events; and primary (26 participants) and secondary interviews (42 actors) with consumers and producers.

We use a practice theoretical approach (Shove, Pantzar, and Watson 2012) to propose a theory of market evolution that relies on the complexification of the practices that comprise a market as the primary evolutionary theoretical mechanism. To explain this process, we first show how the coffee market is governed by competing institutional logics—craft and commercial—that lead firms to engage in differentiated performances based on the same practice. Institutional logics are "the socially constructed, historical pattern of material practices, assumptions, values, beliefs, and rules" (Thornton and Ocasio 1999, 804). For example, the making of coffee by Dunkin' employees (a commercial firm) is different from the making of coffee by the employees at the coffee shop owned by World Barista Champion Tim Wendelboe (a craft firm). The first set of employees will make coffee by emphasizing efficiency and maximizing profitability, while the latter will make coffee to perfect an aesthetic experience. The symbolic and material differences in these firms' beverages are an outcome of differences in practices governed by different logics.

Next, we show how practice complexification results from interactions between firms that reflect different logics (e.g., craft vs. commercial firms) and have different targets (narrow vs. broad targets). We identify three mechanisms through which this process happens.

In the first mechanism, firms of the same type *elaborate* a practice between themselves. For example, the World Barista Championship is a yearly competition that pitches the best (craft) baristas from each country against one another. To qualify, baristas need to develop a 15-minutes routine and compete regionally and then nationally. Performances, exchanges, experimentation, and innovation at hundreds of competitions at the regional, national, and world level lead to the development of new ways of making coffee, novel use of objects, and so on.

In the second mechanism, firms *translate* practices to fit better their narrower (i.e., niche) or broader (i.e., mainstream) targets. For example, craft specialists have translated the practice of making ready-to-drink cold brew coffee from craft generalists. Craft generalists make cold brew coffee in a way that removes coffee acidity, which creates a sweet and fruity flavor ideal for a broad range of consumers. Yet, this key characteristic of cold brewing by craft generalists, i.e., the removal of acidic flavors, is also the main reason why craft specialists initially shunned the practice: Craft specialists see the lack of acidity as a flaw that prevents the creation of the complex flavors associated with great coffee beans. To adapt cold brewing to their narrow target of coffee enthusiasts, craft specialists translated the brewing process to attain such acidic flavors. In the process, they

complexified the practice of making cold brew coffee by incorporating new doings and objects.

Last, we show how firms that reflect different logics (i.e., craft vs. commercial) *transform* practices to align better with their assumption, goals, and beliefs (i.e., aesthetic experience vs. profitability). For example, craft firms developed specialty coffee pods from commercial ones to align their goal of perfecting the aesthetic experience of coffee. Again, in transforming the making of coffee pods, craft firms developed new doings and objects and relationships in between to develop pods that would fit their taste.

Elaboration, translation, and transformation result in practice complexification. It leads to the inclusion of novel material elements, diversifying competences, and enriched meanings associated with a practice, which results in a richer repertoire of performances for practitioners.

We extend existing work on the replication and adaptation of practices (e.g., Ansari, Fiss, and Zajac 2010) and theorize how practices complexify. We also contribute to work on market evolution (e.g., Ertimur and Coskuner-Balli 2015) by explaining how practice complexification contributes to market evolution. Although we concentrate on the complexification of taste-based practices, our work has applicability to the complexification of practices in any market where competing logics exist.

The Glocalization Of Discursive Structures of a Culinary Taste Regime: Insights from Greenland

EXTENDED ABSTRACT

Taking as our starting point Arsel and Bean's (2013) definition of taste regimes as "[…] a discursively constructed normative system that orchestrates the aesthetics of practice in a culture of consumption" our aim in this presentation is to reveal how such a discursively constructed system may unfold over time. That is, our unit of analysis is not so much how practices are changing over time, but how they are discursively articulated based on historically established glocalized structures of valorization. We do this by drawing on an empirical study of Greenlandic food culture and examine how this process unfolds over time through glocalization. Doing so, we join several voices that seek to conceptualize taste and taste formation beyond Bourdieusian and practice theory-based approaches (e.g., Parmentier and Fischer 2018).

We situate our analysis in theories of glocalization, most centrally Wilk's concept of structures of common difference (Wilk 1995). Wilk highlights that homogenization occurs at the structural level and that those structures determine the lines along which cultural difference can be expressed. The emphasis on cultural and political identity politics – and thereby fragmentation and expansion in the symbols of cultural differences – are hence expressed within increasingly similar structures. One such structure is food culture and its surrounding taste systems. To bolster our analysis, we draw on two theoretical strands: 1) theories of structure, in particular Sewell's work on structural change and systems of valorization; and 2) recent glocalization theory that highlights the multidimensionality of glocalization along vertical, horizontal and temporal dimensions (Drori et al. 2014).

Empirically we rely on a prolonged engagement with Greenlandic food culture. Greenland's history of being initially populated by Inuit from the north, with Norse seafarers settling in the south, becoming re-colonized in the 18th century by the Danish Kingdom leading to a 20th century process of integration and modernization and ultimately in the 21st century to increasing political and cultural independence – this whole trajectory forms a socio-historical process of identity and nation building. Our data is based on interviews with Greenlandic consumers, interviews with intermediaries in the Greenlandic food sector, as well as a systematic historical analysis of Greenlandic cookbooks and household manuals stretching from 1934 to 2012. Our analysis identifies and historicizes shifts in Greenlandic food culture according to shifts in political and cultural economy of our context.

In our study of the historical development of Greenlandic food culture we identify four discursive structures with four general cultural schemas for organizing and valorizing cultural differences: segregating, integrating, separating, and finally relativizing. These wider socio-political discursive structures are re-articulated over time and inflected more specifically in cultural schemas of food and the interpretation and articulation of food cultural resources such as ingredients and preparation methods and traditions. We show how shifting political contexts over time beget shifting structures of common difference. These shifts we theorize as a glocalization of structures temporally, that is historically, as the structures are co-constitutive and intersecting in discourses of contemporary Greenlandic food culture and its gastronomization.

To understand the dynamics (emergence and possible institutionalization) of tastes we need more studies of taste situated in macro contexts of political, ideological, and cultural history and the interaction of locally institutionalized structures of valorization with globalizing structures of valorization (Askegaard and Linnet 2011). Not all taste regimes may be as influenced by glocalization processes as in our context. However, we would argue that for example the 'soft modernism' studied by Arsel and Bean or other taste and style-based 'isms' to a large degree are flowing as both aesthetic, ideology and practice. Artistic movements in visual or musical arts may emerge in a given locality but often travel across geographical boundaries through globalized media, cultural intermediaries and taste maker practices. This is as evident in *Jugend*, the Nordic version of French art nouveau as in contemporary glocalized rap genres (Solomon 2006). We argue in other words, that in order for a taste regime to emerge – for practices to take place – a discursive system is a pre-requisite for the structuring of taste difference, distinctions and practices. Hence the objects, meanings and doings of a taste regime are only valorized through such evolving discursive systems of valorization. In turn the practices of a taste regime may recursively confirm, reproduce or contest said systems. With such a structural discursive perspective, tastes, in other words, are talked into being.

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Working Papers

Crossing the Liminal Line – How Interracial Couples in China Experience Marriage

Amandeep Takhar, De Montfort University, UK
Gaye Bebek, De Montfort University, UK
Jiayi Zhong, University of Wales, Saint Trinity David, UK

This research study seeks to understand, just how interracial couples in China, make consumption choices during the liminal and transitional stage of marriage. We contribute to current literature by identifying the fluidity of their identity projects, as a consequence of the liminality that is experienced during this milestone.

Am I Worth It Now? The Social Currency of Fair Skin for Bengali Millenials in the U.K.

Amandeep Takhar, De Montfort University, UK
Gaye Bebek, De Montfort University, UK
Thomas Magede, University of Wolverhampton, UK

This research study seeks to understand the value and social currency of skin lightening products amongst millennials from the Bengali community in the U.K. It emerges that the consumption of these products surrounds the deep rooted ideologies of beauty, that have been transferred across the migrating generations from India.

Facial Alterations in Marketing Products Can Dehumanize Consumers: The Dark Side of Puppy and Eye Filters on Attitudes toward Underrepresented Consumers

Sumitra Auschaitrakul, University of the Thai Chamber of Commerce, Thailand
Dan King, University of Texas Rio Grande Valley, USA

We show that many products and marketing-related behavior increase racism and prejudiced behavior towards minorities. Marketers who manipulate eyes using filters induce dehumanization, an effect underpinned by consumers' ability to see the self of the person. The effect is robust whether people evaluated minorities, or even when minorities evaluated themselves.

Human Enhancement Technologies for the Übermensch Consumer

Vitor M. Lima, Audencia Business School, France
Russell Belk, York University, Canada

Drawing on Nietzsche's ideas about self-overcoming and Transhumanism literature, we conceptualize Human Enhancement Technologies and the *Übermensch* consumer as a novel perspective on consumer-technology relationships. Moreover, we offer insights that can help guide judgments on how to tackle ethical dilemmas surrounding what it means to be human/non-human, consumer/consumed, therapy/enhancement.

Sharing Consumer Biohacking to Tackle Coronavirus

Vitor M. Lima, Audencia Business School, France
Russell Belk, York University, Canada

By following consumer biohackers' self-experiments to tackle COVID-19, we introduce the Sharing Diagram, which encompasses possible sharing motivations. The contribution of this research is, firstly, to expand current studies of the sharing phenomena. Secondly, to provide insights into discussions of public participation in solutions development during public crises.

When and Why Process Imagery Can Increase Donation Intentions

Joshua Lundberg, University of Kentucky, USA
John Peloza, University of Kentucky, USA
Adam Craig, University of Kentucky, USA

In this work, we add to the nascent literature on sequential imagery by demonstrating how it can enhance the perceived efficacy of charities and thus generate greater prosocial intentions. Further, we find that this effect depends on third-party ratings of the charity and emotional decision making by the consumer.

Humor Use in Response to Negative Publicity

Ying Yu, Huazhong Agricultural University, China
Li Huang, Hofstra University, USA
Ping Qing, Huazhong Agricultural University, China
Tong Chen, Huazhong Agricultural University, China

The use of humor in brands' social media communication has become prevalent. This research explores the effectiveness of humor in responding to negative feedback on social media and the underlying mechanism of perceived norm violations. The results provide important implications for the brands managing customer relationships online.

Which Recommendation Label Can Induce Higher Willingness-to-Pay?

Lina Xu, New Mexico State University, USA
Michael Hyman, New Mexico State University, USA

Companies create various product recommendations to improve the online shopping experience. Across three studies, this work demonstrates that ranking-based recommendation labels reinforce e-shoppers' quality-assessment-belief, which in turn elicits a higher willingness-to-pay than the non-ranking-based ones. This effect is moderated by the congruency of consensus attributes and perceived price differences.

Avoiding Minimalist Design in Gift Giving

Dongjin He, Lingnan University, Hong Kong
Linying (Sophie) Fan, Hong Kong University of Science and Technology, Hong Kong
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

This research shows that consumers are less likely to choose a product with a minimalist design when it is to be sent as a gift to others (vs. purchased for self-usage). Furthermore, this avoiding-minimalism effect is moderated by the opportunity to personalize a product for intended users.

A Spiritual Journey to Zero-Waste

Jessica Darveau, Laval University, Canada
Khaoula Ellafi, Laval University, Canada
Aïda Faber, Laval University, Canada

This research explores spiritual aspects that are at play in the transition to a zero-waste lifestyle. Drawing from 35 in-depth interviews with customers of zero-waste grocery stores, it uncovers the spiritual journey that characterizes the commitment to a lifestyle that requires considerable efforts but that is precisely valued for it.

Push It Past the Limit: The Slippery Slope of Product Misuse.

Evelynn Devos, Ghent University, Belgium
Mario Pandelaere, Virginia Tech, USA
Anneleen Van Kerckhove, Ghent University, Belgium

How consumers use a product contributes to product longevity, an important leverage in waste reduction. Results show a slippery slope of product misuse: when consumers successfully exceeded product limits in the past, they will misuse the product even further, because they estimate the odds of negative consequences less likely.

Do You Want to Be Creative? Be Stupid First

Tatiana Karpukhina, WU Vienna, Austria
Martin Schreier, WU Vienna, Austria
Ayelet Fishbach, The University of Chicago, USA

In this research, we test a technique allowing to boost creativity. We find that contrary to our common problem-solving intuition, starting an ideation process by generating "stupid" ideas first significantly increases creativity of the final ideas. Being "stupid" first breaks cognitive fixations, allowing to reach more distant and novel ideas.

Thriving or Surviving? The Role of Mindsets in Times of Crises: Evidence from the COVID-19 Pandemic

Ross Murray, University of Texas Rio Grande Valley, USA
Xiaojing Sheng, University of Texas Rio Grande Valley, USA
Forrest Morgeson, Michigan State University, USA

We conducted qualitative interviews to examine differential responses among service business owners/employees to the COVID-19 pandemic, with some seeing the crisis as enhancing, and others viewing it as debilitating. These findings improve our understanding of the role of mindsets in driving responses among businesses and their employees during crises.

The Effectiveness of a Probabilistic Loyalty Reward Program

Adrian Camilleri, University of Technology Sydney, Australia
Liyin Jin, Fudan University, China
Zhang Ying, Peking University, China

Based on lab and field experiments, this paper finds that a probabilistic loyalty reward program (e.g., "buy 9 get 1 free but also a 10% chance to get 1 free after each purchase") can be more motivating than a traditional loyalty reward program (e.g., "buy 6 get 1 free").

Think Like a Robot: How the Interaction with Humanoid Service Robots Affects Consumer Decision Strategy

Jiancai (Johnson) Liao, Aalto University School of Business, Finland

This research examines a novel effect and its mechanism that humanoid service robots cause a higher level of emotion deficit, which in turn increases reason-based consumption. Furthermore, this research offers boundary conditions of the effect such that the effect vanishes for high anthropomorphism tendency; reverses when the consumption is utilitarian.

Can Nostalgic Feelings Affect Sustainable Behaviors?

Ngan Vo, University of Manitoba, Canada
Raj Manchanda, University of Manitoba, Canada

Marketing plays an important role in understanding how to shift consumer behavior toward more sustainable actions. In the context of emotions, it has been suggested that both positive and negative emotions impact sustainable behaviors. We propose and find that nostalgia can drive sustainable choices via the construct of social connectedness.

It's Not Me, It's You: Awareness of Being Nudged Results in Oppositional Changes in Self-Perceptions

Cory Haltman, The Ohio State University, USA
Rebecca Reczek, The Ohio State University, USA
Cait Lamberton, University of Pennsylvania, USA

The growth in use of behavioral interventions, or nudges, has come with a parallel increase in consumer awareness of such tactics. Across four studies we demonstrate that awareness that one's behavior has been nudged causes a backfire effect, wherein individuals' self-perceptions shift in the opposite direction of the desired behavior.

Understanding Self-Presentation, Aesthetic Motives and Brands' Roles in Teenagers' Use of Instagram

Laurence Dubé-Beaudin, École des Sciences de la Gestion, Université du Québec à Montréal, Canada
Amélie Guèvremont, École des Sciences de la Gestion, Université du Québec à Montréal, Canada

This research studies self-presentation and brand identification among teenagers aged 14-17 on Instagram. Thirty individual interviews were conducted and revealed the importance of self-profile consistency among teenagers and the quest for beauty on this social network. Results also question the role of brands in teenagers' self-presentation.

A Look on the Bright Side: Understanding How Consumer Anonymity Fosters Trust and Satisfaction in Privacy-Enhancing Technologies

Maximilian Hartmann, Heinrich Heine University Düsseldorf, Germany
Alena Bermes, Heinrich Heine University Düsseldorf, Germany
Peter Kenning, Heinrich Heine University Düsseldorf, Germany

This research investigates the role of consumers' feelings of anonymity when using Privacy Enhancing Technologies (PET). Grounded in the Social Identity Model of Deindividuation Effects, the results show that consumer anonymity increases social identity and hence group conformity, which in turn positively influences consumers' trust and satisfaction toward PET.

Color Me Aroused while Keeping the Cool

Nadeesha Bandara, University of Massachusetts Amherst, USA
Elizabeth G. Miller, University of Massachusetts Amherst, USA
George R. Milne, University of Massachusetts Amherst, USA
Lauren Labrecque, University of Rhode Island, USA

Arousal drives a variety of consumer behaviors and colors, especially warm colors, can induce arousal. However, limited research explores ways colors can impact arousal beyond wavelength. In this research, we show that using multiple cool colors can increase arousal through visual complexity, leading to increased purchase intentions and brand excitement.

Increased Generosity Under COVID-19 Threat

Ariel Fridman, University of California, San Diego, USA
Rachel Gershon, University of California, San Diego, USA
Ayelet Gneezy, University of California, San Diego, USA

We study how the presence of threat, proxied by COVID-19 deaths in one's geographic location, affects generosity. A large dataset of real-world donations (N = 696,942), and a 6-month longitudinal dictator game study (N = 1,003 participants) show individuals exhibited greater generosity following COVID-19 deaths in their county.

The Impact of Option Presentation on Optimal Choice Identification: The Moderating Effect Of Childhood Ses

Yue Zhang, Peking University HSBC Business School, China
Jooyoung Park, Peking University HSBC Business School, China

We investigated the effects of interaction between childhood socioeconomic status (SES) and sequential versus simultaneous option presentation on consumers' optimal choice. Two studies show that individuals with low (vs. high) childhood SES are better at identifying the optimal option when the options are presented simultaneously rather than sequentially.

Being a Family in a Digital World: How Digitalization Affects Family Identity Negotiation Through Consumption

Mathilde Lapostolle, ESCP Business School, France
Julien Schmitt, ESCP Business School, France

The influence of digitalization on collective identities, particularly on family identity, is still poorly understood. Drawing on individual interviews, this article provides arguments in favor of a disruption, engendered by the digital revolution, of the way in which families construct, negotiate, and enact their identity through consumption.

The More Thoughtful You Are, The More Uncertain You Become: When a Probabilistic Uncertain Advice Leads to a Higher Evaluation.

Minjeong Ko, Seoul National University, Korea, Republic of

This research examines why people prefer probabilistic uncertain advice over certain advice for inherently uncertain decision domains and found perceived consideration of alternative outcomes as an explanation. Furthermore, the positive influence of probabilistic uncertain (vs. certain) advice on credibility holds only when there are few (vs. many) alternative outcomes.

The Status Signaling Function of Wasting Food

Evelynn Devos, Ghent University, Belgium
Daphne Ribbers, Ghent University, Belgium
Mario Pandelaere, Virginia Tech, USA
Anneleen Van Kerckhove, Ghent University, Belgium

While the consequences of wasting food are well-known on a large scale, it remains unclear what the social consequences are for the individual who wastes food. Results show that wasting—both cheap and expensive—food increases one's financial status, yet also decreases one's social status in the eyes of others.

Green Marketing: Are Influencers the Right Choice?

Satadruta Mookherjee, Grenoble Ecole de Management, France
Shabnam Nazari, Binghamton University, USA

In this research we were interested to examine their effectiveness of influencers for green marketing. We find that for the green products, posts featuring product was perceived more believable and was more effective in persuading consumers than the posts featuring a popular influencer who endorses green products.

How Big is That Voice? Vocal Features of Conversational AI Affects Physicality Perceptions and Product Congruency

Fotis Efthymiou, University of St Gallen, Switzerland
William Hampton, University of St. Gallen, Switzerland
Christian Hildebrand, University of St Gallen, Switzerland

This work examines that modifying a conversational agent's vocal tract length (VTL) causes changes in physicality and masculinity perceptions. We demonstrate that humans attribute greater physicality and masculinity to longer VTL agents and vice versa. We further show that longer (shorter) VTL promotes congruency perceptions with masculine (feminine) food products.

Moms and Memes: Using Social Media to Redefine the 'Good Mother'

Kristen Schiele, California State Polytechnic University, Pomona, USA
Steven Chen, California State University, Fullerton, USA
Christine Hu, California Polytechnic State University, USA

This paper explores the coping mechanisms utilized by mothers of young children in response to the challenges of the Covid-19 pandemic. Through analysis of memes shared in this community, we uncover how mothers use online spaces to cope and redefine what it means to be a 'good mother'.

Fluent in Emoji? Consumer Processing of Emojis vs. Text

Jacob Almaguer, University of Texas Rio Grande Valley, USA
Reto Felix, University of Texas Rio Grande Valley, USA

In an attempt to stand out amidst the text on social media, marketers have started using emoji only communication, with emojis as full substitutes for text. This research demonstrates that emoji only communication is harder to process, and this results in lower brand attitude, when compared to a textual translation.

Brands' Love-Hate Relationship with Hedonic Preference: A Meta-analysis and an Experiment

Mehdi Hossain, University of Rhode Island, USA
Adwait Khare, University of Texas at Arlington, USA
Traci Freling, University of Texas at Arlington, USA
Sultan Alkhuzam, King Saud University, Saudi Arabia
Tracy Khan, University of Rhode Island, USA
Ashok Lalwani, Kelley School of Business, Indiana University, USA

Prior research on hedonic consumption has focused on the role of numerous product-related and contextual factors that influence hedonic preference. Our meta-analysis of this literature reveals a new variable that influences hedonic-preference —brand. Specifically, when hedonicity is lacking in a context, brand can compensate for that lacking.

The Psychological Underpinnings of Toilet Paper Stockpiling During The COVID-19 Pandemic

Mehdi Hossain, University of Rhode Island, USA
Tracy Khan, University of Rhode Island, USA

Authors investigated the psychological underpinnings of panic buying of toilet paper and found that consumers' uncertainty avoidance, future anticipated regret, need for structure and lack of self-control impacted their purchase behavior through anxiety and sense of control. In addition, enhanced thoughtfulness and long-term orientation reduces panic buying.

The Effect of Money Priming on Variety Seeking- Activating the Concept of Money Increases Variety Seeking

Mehdi Hossain, University of Rhode Island, USA
Ashok Lalwani, Kelley School of Business, Indiana University, USA
Priscilla Pena, University of Rhode Island, USA

Our findings suggest that money priming increases variety seeking amongst consumers by inducing one's orientation to the long-term. Studies 1 and 2 provide evidence of money's effect on variety seeking and studies 3-8 explicate the underlying psychological process of LTO. These findings carry significant theoretical and practical implications.

Typefaces as Commodities: A Multimethodological Interpretative Phenomenological Approach to Understanding Font Consumption

Ruffin Relja, University of Gloucestershire, UK

Consumers form relationships with typefaces that are shaped by their degree of 'connoisseurship'. This is a new temporally dynamic (valence and strength) and multidimensional concept comprising five facets: Apprehending; involvement; hunting and gathering; knowing; and gatekeeping. Recommendations are made for market development and to support understanding font consumption more fully.

Does Donating Make Us Happy? The Role of Beneficiary Social Distance

Gopal Das, Indian Institute of Management Bangalore, India
Patrick van Esch, Auckland University of Technology, New Zealand
Shailendra Pratap Jain, University of Washington, USA

Extending prior work examining the impact of recognition from others on charitable behavior, our research shows that donating to socially distant (vs. close) beneficiaries makes donors feel happier. This effect occurs because donating to distant others results in an experience of greater benevolence.

Visual Entropy and Consumer Creative Success

Rong Huang, Saint Anselm College, USA
Weiling Ye, Shanghai University of Finance and Economics, China
Darren Dahl, University of British Columbia, Canada
Yuqian Chang, Rutgers University, USA

Our work demonstrates that visual entropy – a measure of information intensity and uncertainty within a closed microsystem – enhances individual creativity with five empirical studies. We apply novel methodologies by incorporating various creative materials, tasks, and evaluations (of visual entropy and creativity) approaches, including machine-learning-based text-mining and computer vision.

Gamification of Advertising: A Meta-analysis

Gunwoo Yoon, University of Northern Iowa, USA
Joonghwa Lee, University of North Dakota, USA
Carter Briggs, University of Northern Iowa, USA

Gamification of advertising has evolved into a digital marketing strategy. In this meta-analysis, we provide a comprehensive overview of this playful and engaging approach and quantify the effects of gamification on psychological and behavioral outcomes (*ds* > .21). Moderator analyses also suggest insight into the variation of the gamification effect.

Temporal Framing in Risk Communication and the Moderating Role of Message Receivers' Optimistic Bias

Sandra Praxmarer-Carus, Universität der Bundeswehr München, Germany
Marina Wieluch, Universität der Bundeswehr München, Germany

This research studies the moderating effect of comparative optimism on the effects of temporal frames included in behavioral recommendations (such as "start exercising this week" versus "this year") on compliance intention. In two studies, proximal temporal framing proved more effective than distal framing among comparative optimists but not among nonoptimists.

Matching A Brand's Appearance with its Description Can Restore Personal Control

M. Deniz Dalman, Graduate School of Management, Saint Petersburg State University, Russian Federation
Subimal Chatterjee, Binghamton University, USA

Consumers often feel the need to restore control through purchases. Across three studies, we show that consumers can restore their lost control by selecting a brand that looks *more (less)* like a human vs. object if we describe the brand in the first (third) person activating a human (object) schema.

How Sustainability Cues in Advertising Affect Consumer's Trust and Purchase Intention: Slow vs. Fast Fashion

Dominyka Venciute, ISM University of Management and Economics, Lithuania
Neringa Lukosiute, ISM University of Management and Economics, Lithuania
Marius Kuslys, ISM University of Management and Economics, Lithuania

As consumers become more aware and concerned about the environmental issues in the fashion industry, they begin to demand sustainable fashion. This study examines the impact sustainability cues in fashion advertising have on consumers' trust and purchase intention, and compares these cues in slow vs. fast fashion advertising.

Engagement in Interactive Social Media Campaigns: Joint Effects of Social Cause and Monetary Reward

Elizabeth Han, Georgia Tech, USA
Samuel Bond, Georgia Tech, USA
Han Zhang, Georgia Tech, USA

We study the effects of social cause and monetary rewards on consumers' participation in interactive social media campaigns, which ask consumers to create user-generated content (UGC) on behalf of a brand. Through two experiments, we unveil joint effects of social cause and monetary rewards and underlying mechanisms for the effects.

Agency of Objects in Shifting Time and Place

Yuko Minowa, Long Island University, USA
Russell Belk, York University, Canada

How do human-object power relationships change as they are enacted over time? What are different forms of human-object relationships at different temporal stages? Underpinned by Alfred Gell's (1988) theory of the art nexus and incorporating sociality, we propose a model, triadic relations of agency, to answer these research questions.

Product Display Fit: The Effect of Product Fit Between Retail Display and Product Positioning at the Time of Product Use on Consumer Preferences and Liking

Jennifer Sun, Columbia University, USA
Michel Pham, Columbia University, USA

The present research explores consumers' preference for product arrangements that reflect a fit between how the products are displayed in retail settings and the products' position at the time of use. A series of studies explore whether consumers naturally prefer certain product displays that exhibit such a fit.

Warm or Cold? The Effect of Visual Temperature on Food Choice

Yining Yu, Zhejiang University, China
Miaolei Jia, University of Warwick, UK
Bingjie Li, University of Warwick, UK
Shichao Wang, Hangzhou Normal University, China
Lei Wang, Zhejiang University, China

This research demonstrates that consumers have built the association between visual warmth (visual coldness) and unhealthy foods (healthy foods). As a result, consumers are more likely to choose healthy foods in restaurants with visually warm designs. The research contributes to the literature on visual temperature effects and food consumption.

Exploring Consumers' Discontinuous Self-Disclosure from a Transactional Stress Perspective – The Case of Social Networking Sites

Alena Bermes, Heinrich Heine University Düsseldorf, Germany
Maximilian Hartmann, Heinrich Heine University Düsseldorf, Germany
Christina Noffke, Heinrich Heine University Düsseldorf, Germany
Peter Kenning, Heinrich Heine University Düsseldorf, Germany

Based upon the stressor-strain-outcome framework, this study examines why consumers stop disclosing personal information by considering the case of social networking sites. The preliminary results show that disclosure-related stressors induce self-disclosure exhaustion, which results in discontinuous self-disclosure intention. An outlook on further research is provided.

Genuine or Performative? When Activism by Advantaged-Group Members Backfires

Edith Shalev, The Open University of Israel, Israel
Sarit Moldovan, The Open University of Israel, Israel

Influencers from advantaged groups (e.g. men, white people) may utilize social-media to support social causes of disadvantaged groups. While such support is usually admirable, sometimes it elicits negative emotions and harms the influencer's reputation. We find that advantaged group members' support backfires when it seems performative rather than authentic.

Keeping Tabs on Myself: Tracking as Self-Regulation in Financial Goal Attainment

Yiling Zhang, UW-Madison, USA
Nancy Wong, UW-Madison, USA

This research explores the role of expense tracking in controlling spending. Analyzing user data from a financial budgeting app shows that (a) tracking leads to better control in spending; (b) concrete goals lead to tracking over longer duration; and (c) budgeting by itself is not sufficient in attaining financial goals.

Anthropomorphism and Virtual Assistants' Mistakes: Who is to Blame?

Bianca Kato, University of Guelph, Canada
Juan Wang, University of Guelph, Canada
Jing Wan, University of Guelph, Canada

This research investigates whether anthropomorphizing a virtual assistant (VA) influences attribution of blame followed by a mistake. Our findings suggest that anthropomorphism decreases the likelihood of consumers blaming the VA as opposed to its developing company. We suggest that anthropomorphism increases empathy towards VAs, leading to the proposed main effect.

The Senses Help You Escape: The Evading Effect of Cross Sensory Products on Upward Social Comparison Under Brand Alliance

Yijun ZShao, Renmin University of China, China

This research defines the cross sensory product (CSP), which refers to the product with sensory attributes provided by co-brands in a brand alliance and suggests that engaging in upward social comparisons makes consumers feel self-threatened and further leads to need for sensory stimulation, which in turn makes them prefer CSP.

How Gamification Can Be Used to Help Consumers Reach Their Saving Goals

Nethal Hashim, City, University of London, UK
Irene Scopelliti, City, University of London, UK
Janina Steinmetz, City University of London, UK

We test the hypothesis that gamification can increase consumer saving behavior. In a field study (N = 331), consumers who logged their savings over a 4-week period in a gamified web app were more likely to reach their saving goal than consumers who used a non-gamified version of the app.

It Should Be Green, So It Should Be Healthy: The Effect of Green-associated Objects on Perceived Healthfulness of Foods

Sining Kou, Renmin University of China, China
Yijun zhao, Renmin University of China, China

This research demonstrates that consumers would perceive a food with green- (vs. non-green-) associated objects as healthier, and are more likely to purchase it under health-seeking motivation. This effect emerges because consumers associate specific objects (e.g., leave) with the color "green", and associate green with the concept "health".

Feeling the Weight of the World in Your Hands: Effect of Material Density on Consumer Recycling Behavior

Lyndsay Loomer, University of Georgia, USA
Sarah C. Whitley, University of Georgia, USA

What if the inputs to sustainable behavior are not just in a consumer's head, but also in their hands? This research explores the role of material density and its haptic qualities on a consumer's decision to recycle an object. Current manufacturer practices of material lightweighting lend urgency to this topic.

Snacking Behavior in Different Stages of the Family Life Cycle

Marina Cozac, Florida State University, USA
Martin Mende, Florida State University, USA
Maura Scott, Florida State University, USA

This research proposes a focus on how caregiving stress and gender influence consumption behavior. Specifically, this research examines the effects of parental status and gender on snack consumption and choices, and how stress drives the effects. Furthermore, we explore how food positioning impacts consumers' perceptions and snacking behavior.

Party Competition: When Democrats and Republicans are Motivated to Post Misinformation on Social Media?

Xiajing Zhu, University of California, Irvine, USA
Connie Pechmann, University of California, Irvine, USA

This paper investigates when people post misinformation online. By conducting two experiments, this research demonstrates that in a competitive (vs. cooperative) context, people especially Republicans have a higher intention to post anti-outgroup (vs. anti-ingroup) misinformation due to an affiliation motive. This research helps to understand the pervasive misinformation phenomenon online.

Does the Gender of Your Siri Really Matter? The Impact of Voice Control Device Gender on Product Evaluation.

Ksenia Sergueeva, Drexel University, USA
Chen Wang, Drexel University, USA

Three studies investigate *whether*, *how*, and *why* the gender of the voice control device influences consumer evaluation when it fails to comprehend. Results show that the male (vs. female) device is rated higher. Such effect is mediated by perceived comprehension ability of the device and moderated by the task expertise.

Consumers Believe that Others Like an Option Less When Those Others Express Indifference

Graham Overton, Bocconi University, Italy
Ioannis Evangelidis, ESADE, Universitat Ramon Llull, Spain

We show that consumers infer that others derive less utility from a preferred option and more utility from a non-preferred option when they express indifference between alternatives compared to when they express a preference.

Discouraging Effects of True Self on Acquisition

Lina Xu, New Mexico State University, USA
Yanfen You, University of Massachusetts Amherst, USA

"Be your true self" is a trendy slogan in today's marketing campaigns. However, this research suggests that promoting consumers' true selves can discourage their acquisition intentions for the advertised products. Three studies demonstrate the effect using vice/virtuous and experiential/material purchases.

The Impact of Social Distancing on Creativity

Kristen Ferguson, University of Connecticut, USA
Kelly B. Herd, University of Connecticut, USA
Stefan J. Hock, University of Connecticut, USA

While social distancing (i.e., spatial distance between individuals) is now being implemented to contain the spread of COVID-19, its impact on individuals' behaviors remains largely unexplored. Across three studies, we identify improved creativity as one beneficial outcome of social distancing.

Assessing the Relationship between Product Scarcity and Consumer Utility

Claudiu Dimofte, San Diego State University, USA

Consumers who are more resourceful are likely to find value (i.e., utility in a conjoint analysis design) associated with product scarcity if it is driven by excess demand, but not if driven by insufficient supply. The latter is universally unattractive, unless the market includes counterfeit products.

The Effect of Power Distance Belief on Consumers' Attitudes Toward Slum Tourism: The Mediating Role of Perceived Morality

Sohyun Bae, National Cheng Kung University, Taiwan
Xiaoyan (Jenny) Liu, Southwestern University of Finance and Economics, China
Piaoran Ren, Southwestern University of Finance and Economics, China

We examined how consumers' power distance belief (PDB) influences their attitudes toward slum tourism. In three studies, we found that consumers with high PDB have more positive attitudes toward slum tourism than ones with low PDB because they regard such tourism as less immoral.

I'll Do It – After One More Scroll: The Effects of Boredom Proneness, Self-Control, and Impulsivity on Online Procrastination

Cansu Sümer, University of Duisburg-Essen, Germany
Oliver Büttner, University of Duisburg-Essen, Germany

This paper aims to investigate whether boredom proneness, self-control, and impulsivity are related to using social media and instant messaging and visiting online stores for procrastinatory purposes. Results indicate that while boredom and age are predictive of all 3 procrastination types, results differ in terms of self-control and impulsivity.

Consumer War Machines: Explicating Dynamics of Resistance and Capture

Hunter Jones, Aalto University School of Business, Finland
Joel Hietanen, Helsinki University, Finland

This conceptual paper uses Deleuze and Guattari's 'War Machine' concept to analyze the recent r/WallStreetBets short squeeze. Pushing against popular depictions of consumer resistance which leverage a Foucauldian rubric of power, it articulates r/WallStreetBets through a rubric of desire.

Not as Mindful as You Think: A Multidisciplinary Review of the Conscious and Non-Conscious Processes of Mindfulness and Consumption

Letícia Vedolin Sebastião, Copenhagen Business School, Denmark
Torsten Ringberg, Copenhagen Business School, Denmark
Jesper Clement, Copenhagen Business School, Denmark

Mindfulness has been defined as an intentional, effortful, conscious practice. More recent literature, however, points to non-conscious processes, that have not been thoroughly considered. We review the mindfulness and consumption literature and provide an overview situating these contradictory assumptions based on conscious versus non-conscious processes and intended versus unintended outcomes.

The Price of Gaming: Currency Biases From Digital Virtual Products

Arthur França Sarcinelli, FGV EAESP, Brazil
Delane Botelho, FGV EAESP, Brazil

Price currency influences price fairness evaluations and the distance of the exchange rate moderates this relationship. Three laboratory experiments demonstrate that digital virtual product prices listed in fictional currency are perceived to be more fair than real currency, especially when the exchange rate do not appear next to the product.

How Explicit and Implicit Reliance on the "Unattractive produce = More Natural" Lay Theory Affects Consumer's Choice of Unattractive Produce

Yixin Niu, Zhongnan University of Economics and Law, Wuhan, China
Yaxuan Ran, Zhongnan University of Economics and Law, China
Jiani Liu, Zhongnan University of Economics and Law, China

We demonstrate that when people's implicit and explicit reliance on unattractive = more natural belief (UMNB) is incongruent, they form the highest choice of unattractive produce. This is because implicit-explicit incongruence spontaneously leads to deliberations, which further corrects for negative and bias of intuitive preference for beautiful and attractive produce.

Love at First Touch: How Swiping vs. Typing Changes Online Dating Decision-Making

Farhana Nusrat, Drexel University, USA
Yanliu Huang, Drexel University, USA
Cait Lamberton, University of Pennsylvania, USA

We examine how the use of different devices (smartphones vs. computers) influences customers' online dating decision-making process. In two studies, we show that when using their smartphones (vs. computers), customers give greater priority to the inner as opposed to external attributes of a potential dating partner.

What is Happiness? Word Embeddings Quantify Concept of Happiness Across 40 Years in China

Zhiqiang Li, Zhongnan University of Economics and Law, China
Yaxuan Ran, Zhongnan University of Economics and Law, China
Jiani Liu, Zhongnan University of Economics and Law, China

Using the news from People's Daily (1979~2020), we utilized the word embeddings technique to demonstrate how the relationship between "happiness" and its five dimensions (e.g., physical need) embeddings helps to quantify the concept of happiness in China and how the temporal dynamics of the embeddings capture societal shifts.

Understanding the role of companions in a circular healthcare

Ana Suárez Vázquez, University of Oviedo, Spain
Leticia Suárez Álvarez, University of Oviedo, Spain
Ana Belén Del Río Lanza, University of Oviedo, Spain
Víctor Iglesias Argüelles, University of Oviedo, Spain

Through a sample of 1,814 informants (companions and chronically-ill elderly patients) this research reinforces the relevance of the communication between companions and health professionals to improve the well-being of the elderly patient. The current health situation, with the absence of companions, has highlighted the vulnerability of these types of patients.

How Far Is Too Far? Consumers' Responses to LGBTQ-Inclusive Ads and the Role of Gender-Based Ad Congruency

Khue (Kylie) Vo, University of North Texas, USA
Priyali Rajagopal, University of North Texas, USA

How would consumers respond to gay women in beer commercials? We explore how gender congruence influences heterosexual versus LGBTQ consumers' responses to LGBTQ-inclusive ads. Two experiments reveal that heterosexual consumers do not dislike LGBTQ-inclusive imagery unless the gender is incongruent, while LGBTQ consumers are not influenced by such gender congruence

We're Not All in This Together: Consumers Dislike Empathy-based Advertisements During the COVID-19 Pandemic

Eric VanEpps, University of Utah, USA
Craig Brimhall, University of Utah, USA
Brad Bitterly, Hong Kong University of Science and Technology, Hong Kong

How should brands advertise during COVID-19? Across multiple studies, we examine consumer attitudes toward advertising during a global pandemic, COVID-19. We find that attempts at empathy ("we're all in this together") perform worse than attempts at humor, and the best strategy can be to not advertise at all.

Retailer Communications During the COVID-19 pandemic: An Analysis of the Localness Dimension

Amélie Guèvremont, École des Sciences de la Gestion, Université du Québec à Montréal, Canada
Fabien Durif, École des Sciences de la Gestion, Université du Québec à Montréal, Canada
Frédérick Joly, École des Sciences de la Gestion, Université du Québec à Montréal, Canada

This research examines the content of retailer communications aiming to promote local products during the pandemic. Three hundred thirty-eight visuals pertaining to 'buying local' were gathered through various communication channels across industries. Following a content analysis, the main dimensions of localness communication strategies during the pandemic were: social influence/information/emotions/habits.

The Crime of Wanting

Tianjiao Yu, Washington University in St. Louis, USA
Cynthia Cryder, Washington University in St. Louis, USA
Sydney Scott, Washington University in St Louis, USA

We find that when consumers strongly (versus weakly) want products, they are admired less. This "Crime of Wanting" occurs because people infer that a consumer who desires products has less willpower. When high willpower is signaled via other means, the effect dissipates.

Culture Comforts: The Cognitive Effects of Political Ideology on Cultural Consumption

Bryan Buechner, Xavier University, USA
Joshua Clarkson, University of Cincinnati, USA
Ashley Otto, Baylor University, USA
Garrett Ainsworth, University of Oxford, UK

Do consumers differ in their preferences to learn about their own versus other cultures via consumption? The present research proposes consumers' preferences for these discrete types of cultural knowledge vary by their political ideology. Evidence across four studies suggests liberals prefer global consumption experiences, whereas conservatives prefer local consumption experiences.

Creativity is in the Mind of the Beholder: The Role of Thinking Style

Ilgım Benoit, Appalachian State University, USA
Elizabeth G. Miller, University of Massachusetts Amherst, USA
Ceren Ekebas-Turedi, Purdue University Northwest, USA
Elika Kordrostami, Rowan University, USA

Creativity is often viewed as a subjective judgment that varies from person-to-person. However, little research has studied the impact of individual differences on creativity perception. Across three studies, we provide evidence that thinking style moderates perceived creativity such that analytic thinking leads to higher ad creativity perceptions than holistic thinking.

The Role of Managed Violence Within a Therapeutic Servicescape

Amanda Garrison, University of Wyoming, USA
Linda Price, University of Wyoming, USA

This study explores managed violence within a servicescape, providing a theoretical understanding of how servicescape elements facilitate extraordinary consumer experiences with therapeutic value. This research provides theoretical implications for how negative emotions are engaged and managed in therapeutic servicescapes, illustrating the unique, productive, therapeutic and transformative releases managed violence provokes.

I Want What You're Having, but Don't Look At Me: Human Presence in Food Images

Ronghan (Michelle) Wang, Cornell University, USA
Kathy LaTour, Cornell, USA
Suzanne Shu, Cornell, USA

How do consumers value food presented with a human presence (i.e., someone at the table)? Studies showed that consumers have higher food preferences, purchase intentions and willingness-to-pay for food items presented with a human presence, however this positive effect diminishes when that human makes direct eye contact with the audience.

Overinflated Expectations from Maximizing with Unreliable Information

Edward Yuhang Lai, Virginia Tech, USA
Mario Pandelaere, Virginia Tech, USA
Daniel Villanova, University of Arkansas, USA

Maximizers use various ways to strive for the best outcome, such as making selections from a larger assortment size. However, when information is unreliable (vs. reliable), a larger (vs. smaller) assortment size brings less satisfaction with one's choice because heightened expectations of outcomes lead to greater expectancy disconfirmations.

Try Together: Joint Consumption Fosters Choice of Unfamiliar Products

Puyue Zhang, Zhongnan University of Economics and Law, China
Yaxuan Ran, Zhongnan University of Economics and Law, Chna

Joint consumptions are pervasive in consumers' lives. Three experiments demonstrate that compared to individual consumption, joint consumption leads to higher choice of unfamiliar products. Based on the risk-shifting theory, we proposed joint context shifts or dilutes consumption risk. Additionally, relationship closeness would moderate this effect.

Did you really say that? An investigation of AIVAs' effects on consumer embarrassment

Laura Pricer, University of North Texas, USA
Priyali Rajagopal, University of North Texas, USA

The use of voice-enabled virtual assistants (e.g., Amazon Alexa) has become popular among consumers raising the question of how these devices affect consumers' emotions and choice. Results of four studies suggest that the human-like characteristics of AIVAs increase consumer embarrassment because of amplified perceptions of social presence.

Downward Mobility and Status Shielding: Tactics to Overcome Financial Struggles

Aya Aboelenien, HEC Montreal, Canada

During economic and political unrest, how do wealthy individuals manage their consumption? Through an investigation of wealthy Egyptians, post the Arab Spring, the paper show that individuals endeavor to protect their conspicuous distinction by any means. Ihighlight such means and the struggles faced to sustain their acquired capital.

Phonological Fluency: How Syllable Markedness of Brand Names Influences Consumers' Brand Attitudes

Ai Nhan Ngo, University of Texas Rio Grande Valley, USA
Reto Felix, University of Texas Rio Grande Valley, USA
Dan King, University of Texas Rio Grande Valley, USA

This research explores how syllable markedness of monosyllabic brand names influences consumers' brand attitudes. In two studies, we find the relationship is mediated through processing fluency and perceived brand globalness, and moderated by consumer's first language. However, these effects vary based on the position and numbers of the consonants.

Artificial Intelligence Powered Diagnosis Applications: Understanding Patients' Reactions to The Use of Artificial Intelligence During Their Patient Journey

Princesse El Ariss, Univ. Grenoble Alpes, Grenoble INP*, 38000 Grenoble France *Institut of Engineering and Management, France
Agnès Helme-Guizon, Univ. Grenoble Alpes, Grenoble INP*, CERAG, 38000 Grenoble France *Institut of Engineering and Management, France
Antoine Lanotte, Univ. Grenoble Alpes, Grenoble INP*, 38000 Grenoble France *Institut of Engineering and Management, France
Marjolaine Rivard, Univ. Grenoble Alpes, Grenoble INP*, 38000 Grenoble France *Institut of Engineering and Management, France
Arnaud Teston, Univ. Grenoble Alpes, Grenoble INP*, 38000 Grenoble France *Institut of Engineering and Management, France

AI-powered applications in medicine are promising but sometimes elicit reluctance. Data from eighteen interviews based on their patient journey showed that self-use scenarii induced a need for human confirmation while practitioner-use scenarii yielded a search for a balance between the app's and the practitioner's role in decision making.

How Common or Scientific Name Works? The Influence of Food Type and Message Framing on the Choice of Ingredient Name

Dickson Tok, Nanjing University, China
Xi Chen, Nanjing University, China
Chun-Tuan Chang, National Sun Yat-sen University, Taiwan
Xing-Yu (Marcos) Chu, Nanjing University, China

This research investigates the impacts of two strategies for presenting an ingredient on product evaluations: a common or a scientific name. Three studies, including lab and field experiments, demonstrate the effect of ingredient name on the boundary conditions of food type and message framing, providing important insights to marketers.

Consumers' Perspectives On AI Ethics and Trust: An Explorative Investigation of Ethical Concerns Towards Autonomous Cars and Chatbots

Giulia Pavone, Toulouse School of Management Research, France

We investigate consumers' ethical concerns and trust towards autonomous cars and chatbots employing topic modeling and SEM. To increase trust, chatbots, perceived as unethical because unable to truly understand individual needs, should guarantee personalized interactions; autonomous cars, perceived as unethical if their algorithms are not standardized, should follow common rules.

Feeling Well Surrounded: How Body Shape Mobility Influences Self-control

Gitta van den Enden, as, Netherlands
Kelly Geyskens, Maastricht University, Netherlands
Caroline Goukens, Maastricht University, Netherlands

This research investigates the impact of body shape mobility (i.e. the belief that available means enable oneself to reach a goal) on the attainment of long-term goals. We show in three studies that body shape mobility perceptions positively influence self-control and that this effect is mediated by goal attainability.

Harder, Better, Faster, Stronger: The Adoption and Use of AI-based mHealth Applications

Vincent Favarin, TSM-Research, Université Toulouse Capitole, CNRS, France
Lars Meyer-Waarden, TSM-Research, Université Toulouse Capitole, CNRS, France
Julien Cloarec, IAE Lyon School of Management, Université de Lyon, France

Although mHealth applications help improve their users' well-being, obstacles still hamper their adoption and use. Based on automated text analysis and structural equation modeling, two mixed-methods studies (nAdoption = 145; nUse = 3,496) highlight the key roles of personalization and quantified-self in consumer experience of mHealth applications.

Can Sad Content Be Viral? A Reinvestigation of The Role of Emotion in the Sharing of Online Content

Julie Schiro, University College Dublin, Ireland
Lauren Min, University of Kansas, USA

Across a field study of over 100,000 Facebook posts and three experiments, we find that sad *prosocial* content can be more viral than other types of emotional content, including humorous content (positively valenced) and angering content (high arousal), in direct opposition to prior work.

Augmenting Self-extension Theory for the Internet of Things: Scale Development and validation

Min Yan, Newcastle University, UK
Raffaele Filieri, Audencia Business School, France
Matthew Gorton, Newcastle University, UK

This study reviews previous self-extension studies and integrates assemblage theory to develop an augmented conceptualization of self-extension. Through an analysis of interview data, self-extension is conceptualized as possessing five dimensions. This informed a scale development process and the paper presents and validates a new multi-dimensional self-extension scale.

Consumer-Artificial Intelligence Regimes of Interactions: A Sociosemiotics Perspective

Vitor M. Lima, Audencia Business School, France
Luís Pessôa, Pontifical Catholic University of Rio de Janeiro, PUC-Rio, Brazil

By drawing on Eric Landowski's sociosemiotics, we present distinct regimes of consumer-AI interactions. For the AI agentic capacity, rather than a position of mastering, serving, and partnering, consumers experience an ongoing symbiotic regime of adjustment in interacting with AI. Borrowing a term from biology, such a relationship is named *Mutualism*.

How to Polarize Items Evaluation With Different Ranking List Display Modes?

Shen Duan, Renmin University of China, China

We find that consumers have a greater evaluation polarization effect on items in the vertical ranking list than horizontal ranking list, the effect was driven by the difference in the perception of items. In addition, we found that attribute evaluability is the boundary condition for this effect.

"Relative Discount" Or "Absolute Discount"? The Effect of Matching Effect Between Discount Type And Purchase Type on Consumer Preference

Shen Duan, Ex Ordo, China

This study explores the relationship between purchase types and discount types. We find that consumers who are in the material purchases, will prefer absolute discount promotion, while in the experiential purchases, they will prefer relative discount promotion. We also demonstrate the boundary condition of this effect is the evaluation modes.

Domestic Currency vs. Foreign Currency? Research on the Influence of Currency Type on Price Quality Judgment

Shen Duan, Renmin University of China, China

We propose that consumers have a higher tendency to judge the quality of individual price under foreign currency cues than under domestic currency cues; Individual structural needs play a mediating role in the above relationships and the conversion task is the boundary condition of the effect.

A Meta-Analysis on the Effects of Anthropomorphism on Consumer Behavior

Zaichen Li, Bayes Business School (formerly Cass), City, University of London, UK
Irene Scopelliti, Bayes Business School (formerly Cass), City, University of London, UK
Janina Steinmetz, Bayes Business School (formerly Cass), City, University of London, UK

Anthropomorphizing products or brands affects consumer responses toward these targets. To manipulate anthropomorphism, researchers use visual cues of humanlike features, verbal cues of a humanlike mind, or a combination of these. In a meta-analysis, we compare these approaches and observe that verbal cues are most effective at influencing consumer behavior.

Privacy Consumer Activists on Reddit: Exploring Discourse, Sentiment, and Advocated Practices

Alec Slepchuk, University of Massachusetts Amherst, USA
Francisco Villarroel Ordenes, LUISS University, Italy
George R. Milne, University of Massachusetts Amherst, USA

New technologies are changing the conversation around privacy, upsetting consumers, and empowering activism. Yet, little is known about privacy consumer activists. In this research, we examine their marketplace culture by analyzing over 100,000 Reddit comments. We contribute to the literature by identifying what they are discussing, feeling, and advocating.

Identifying and Managing Ruminative Expressions in Negative Reviews

Hai-Anh Tran, Aston University, UK
Yuliya Strizhakova, Rutgers University–Camden, USA
Samuel Johnson, University of Warwick, UK
Lanh Nguyen, Illinois Institute of Technology, USA

We use text mining techniques to detect expressions of *rumination*—repeated negative thoughts—in online reviews. Using topic modeling and sentiment analysis, we demonstrate that three independent dimensions of rumination have separate negative impacts on sales. Management responses expressing empathy and offering compensation decrease these negative impacts.

"The Vegan Generation": Investigating Vegan Consumers' Responses Toward False Advertising on Social Media

Yong Whi Greg Song, University of Texas at Austin, USA
Natalie Brown-Devlin, University of Texas at Austin, USA
Won-Ki Moon, University of Texas at Austin, USA

We conducted an experimental study with vegan and vegetarian populations—consumer groups that are becoming more prevalent yet are understudied. We specifically examined how consumers respond differently to false advertising on social media, whether the advertising advocates vegetarianism or meat-eating, as well as the effects of social media's fact-check function.

Exposure to Xenophobic Claims Leads Asians to Prefer Self-identity Products and Non-Asians to Adopt Cybersecurity Products

Trang Mai-McManus, University of Manitoba, Canada
Jessie Du, Baruch College, CUNY, USA
Linh Nguyen, Université de Lille, France
Shweta Jha, Indian Institute of Management, Indore, India
Yu Ding, Columbia University, USA

In this research, we demonstrate that identity threatened group and threat-observing group react differently after exposure to the same xenophobic claim. The threatened group will try to restore their identity, while the threat-observing group will set up higher bars for security. The proposed mechanism is self-protection tendency.

You Want Me to Put That Where? An Intimate Exploration of Consumer Adoption of Reusable Menstrual Products

Mycah Harrold, Washington State University, USA
Aimee Dinnin Huff, Oregon State University, USA
Anabella Donnadieu, Washington State University, USA

We seek to identify consumer and product factors that facilitate or impede adoption of reusable menstrual products, such as menstrual cups and washable pads. Within this intimate consumption context, we contribute a nuanced, embodied understanding of reusable menstrual product consumption, and identify links between product features and social acceptability.

Heal Your Soul: Intimacy Value of Indulgent Foods

Shih-Chun (Daniel) Chin, University of Illinois at Urbana Champaign, USA
Aric Rindfleisch, University of Illinois at Urbana-Champaign, USA

Although indulgent foods are unhealthy, they can bring positive affective values. In two studies, we demonstrate that consumers associate indulgent foods with intimate relationships, thereby drawing intimate feelings from consuming indulgent foods. As such, consumers prefer these foods more when feeling threats to their close relationships.

Transforming Homo Mechanicus into Homo Ludens: Assembling Playfulness for Self-Care

Marat Bakpayev, University of Minnesota Duluth, USA
Anna Margulis, Universite du Quebec en Outaouais, Canada
Olga Podolska, Access Multi-Specialty Medical Clinic, USA

Contextualizing assemblage theory, this study explores how individuals engage in ludic aspects of virtual communities. A netnographic study of a natural online self-care quest reveals transformations within the community, the individuals, and the discourse. Each level goes through a four-stage stabilization process of ignition, connection, discovery, and strength.

Contagious Disease Threat Can Reduce Healthy Behaviors

Felipe M. Affonso, University of Florida, New Zealand
Juliano Laran, University of Basel, Switzerland
Chris Janiszewski, University of Florida, New Zealand

Consumers are often under contagious disease threat. Although healthy behaviors prevent the risk of many diseases, we show that, ironically, the threat of a contagious disease reduces engagement in healthy behaviors. We propose this happens because the risk associated with getting a contagious disease makes other health-related risks less salient.

Whose Values Come Out on Top When Making Decisions for End of Life?

Daniel Lewin, University of Liverpool, UK

Patients' values and beliefs are important in making decisions for their end of life. In care planning discussions, whose values come to the fore and whose are secondary? This study sought to identify how to help patients' values to be acknowledged while still receiving needed guidance in decision making.

Current Preference from Early Life Experience: The Impact of Childhood SES on Variety-Seeking

Jungkeun Kim, Auckland University of Technology, New Zealand
Jooyoung Park, Peking University HSBC Business School, China
Jihoon Jhang, University of Central Arkansas, USA
Jaehoon Lee, Florida International University, USA
Daniel Chaein Lee, Auckland University of Technology, New Zealand

While prior research on variety-seeking focuses on *current* individual or situational factors, little is known about how *past* life experiences influence variety-seeking. Variety-seeking was stronger for higher-SES childhoods. This effect disappeared when the decision was made for others (vs. themselves) and within the same brand (vs. across different brands).

Robo-Journalism: Less Biased, and More Likely to Be Shared

Jimin Nam, Harvard Business School, USA
Michael Norton, Harvard Business School, USA
Adam Waytz, Kellogg School of Management, Northwestern University, USA

"Robot journalism" – AI-generated news stories – is on the rise. Four studies show that Democrats and Republicans view robot-written stories as less biased than stories by columnists of opposing political parties and are more likely to share them with opposing party members. Robot-written articles may reduce selective news exposure.

Self and Socially-Focused Individuals: Intrinsic Motivation and Self-Construal Influence Neural Mechanisms Associated with Persuasion

Arina Tveleneva, University of Washington, USA
Matt Minich, University of Wisconsin-Madison, USA
Chen-Ting Chang, University of Wisconsin-Madison, USA
Christopher Cascio, University of Wisconsin-Madison, USA

The current study explores how different types of self-perceptions (self versus socially-focused individuals) influence neural processes associated with persuasion. Results suggest that individuals with autonomy-based intrinsic motivation, independent, and interdependent self-construal employ different neural regions when processing information. These findings highlight how differences in self-view can alter persuasive information processing.

Discount First or Last?: Discount Framing and Intertemporal Preference for Periodic Payments

Mijin Kwon, Korea University, Korea, Republic of
Song Oh Yoon, Korea University, Korea, Republic of

Should marketers place a discount in the first or last month? Despite the human nature to desire immediate rewards, framing discounts and regular payments as one flow (vs. discrete events) will make consumers prefer improving sequence and hence delayed discounts to immediate ones.

Differences between Consumers' Sense of Community and Brand Attitudes against Different Brand Rejection Types

Mehmet Yanit, University of Manitoba, Canada
Wendy Yan, Futurpreneur, Canada
Fang Wan, University of Manitoba, Canada

When marketers select a target market, they are implicitly rejecting consumers who are not in the target market. Prior research examined individuals' negative reactions to brand rejection. Extending this scope from individual to community perspectives, we examine how brand rejection shapes consumers' sense of community and, in turn brand attitudes.

Construing in Purchases: The Effect of Purchase Type on Level of Construal

Yu Gu, Tsinghua University, China
Rong Chen, Tsinghua University, China

The different cognitive outcomes of thinking about experiential purchases and material purchases received rare attention in extant literature. Through six studies, this research demonstrates that thinking about experiential purchases evokes a higher construal level than thinking about material purchases. Analytical and affective processing modes mediate this effect.

The Role of Perceived Movement in Digital Brand Recovery Efforts

Laura Boman, Mercer University, USA
Lam An, University of Winnipeg, Canada
Ganga Hewage, Bryant University, USA
Jonathan Hasford, University of Tennessee, USA

Across one real choice and two lab studies, the current research shows that brand failure recovery strategies in digital media including low (versus high) perceived movement visual messaging cues lead to more favorable consumer outcomes. This effect is mediated by perceived stability of the firm.

Sensing Privacy: A Consumer Culture Theory Perspective

Johanna Horppu, Tampere University, Finland

This conceptual paper proposes new perspectives for studying privacy within consumer research and highlights the potential in a more interpretive and relational approach to studying the concept. This approach can help reveal the more diverse, fluid, and affective nature of privacy that better corresponds the reality of the always-connected consumers.

Unpackaging for Mac and Packaging for iPhone: The Interactive Effect of Product Presentation and Purchase Device on Food Choice

Meng Lu, Renmin University of China, China
Jun Pang, Renmin University of China, China
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong

Packaging has been referred to as the "silent salesman". This research suggests that, consumers are more likely to choose the brand presenting packaged cookies when they use direct-interaction devices (e.g., cellphone).than indirect-interaction devices (e.g., PC) , which is continuously driven by perception of contagion.

Your Money or Your Life: The Role of Message Framing in Reducing Smoking Behavior

Nurit Nobel, Stockholm School of Economics, Sweden

This study explores the efficacy of two types of framings of smoking cessation consequences: appeal type (Time/Money) and valence (Gain/Loss). A randomized controlled field experiment with 2,935 participants conducted via a digital therapeutics app found effects for both framings on short-term cigarette reduction but no long-term difference in smoking cessation.

Moral Justifications of Food Waste: Students in a University Cafeteria

Selin Özokcu, Middle East Technical University, Turkey
Eminegül Karababa, Middle East Technical University, Turkey

The topic of waste interlocks the climate crisis and consumption debates, yet understanding food waste is unattended. This study explores how students morally justify their food waste practices at the university cafeteria in Turkey. While it integrates consumption and food waste literature, it provides novel insights by employing pragmatic sociology.

The Effect of Default Design in a Multi-dimensional Rating System

Peiliang Sun, Harbin Institute of Technology, China
Jill Lei, The University of Melbourne, Australia

In a multi-dimensional rating system, a default design enters a consumer's overall rating as the default value of attribute ratings. Using both field and lab data, we found that a default (vs. non-default) design increases rating variance across different attributes but decreases the average volume of attribute ratings being submitted.

The Self Under COVID-19: Social Role Disruptions Undermine Self-Authenticity

Jingshi Liu, City, University of London, UK
Amy Dalton, Hong Kong University of Science & Technology, Hong Kong
Jeremy Lee, Hong Kong University of Science and Technology, Hong Kong

COVID-19 significantly impacts consumers' social roles and routines. We find that changes in important roles undermine consumers' self-authenticity, but this is mitigated when focusing on the present (vs. past/future). This has implications for healthcare messaging, which should encourage present-focused thinking to cope with role changes.

Wonderful or Scary? Consumers' Reactions to More or Less Human-Like Virtual Models

Claudia Franke, Saarland University, Germany
Andrea Groeppel-Klein, Saarland University, Germany
Julian Dincher, Saarland University, Germany
Annika Ecker, Saarland University, Germany

Virtual models, fictive computer-generated personalities found their way into brand communication. Using three studies, we analyze consumers' reactions towards this new phenomenon and find that disclosing about the virtuality of the model, a human-like instead of cartoon-like design and the use of backstories can reduce virtual model uncanniness.

Should I Help You or Should I Not? The Role of Social Comparison on Helping Behavior Among Consumers

Renata Martins, FGV EAESP, Brazil
Lucia Barros, Fun, Brazil
Felipe Zambaldi, FGV EAESP, Brazil

We are the first to investigate the effect of social comparison on helping behavior among consumers. Those who feel better than others help more due to self-enhancement. However, consumers who feel better (worse) off tend to make more (less) effort helping those whom they see (do not see) as similar.

When People Are More Favorable Toward "White-Collar" AI: Self-Protection Motivation Mitigates Consumers' Aversion to Artificial Intelligence in Professional Domains

Haejoo Han, Seoul National University, Korea, Republic of
Sujin Park, Seoul National University, Korea, Republic of
Kyoungmi Lee, Seoul National University, Korea, Republic of

Across two studies, we find that consumers are more averse to artificial intelligence (AI) in professional versus nonprofessional domains. Such aversion to AI can be attenuated when people feel vulnerable and heightened in self-protection motivation, presumably because people rely on competent entities.

Development and Validation of a Multidimensional Product Perceived Newness Scale

Claire-Lise Ackermann, Rennes School of Business, France
Blandine Hetet, IDRAC, France
Imene Belboula, Universite Lounici Ali, Blida 2, Algeria

This research builds on consumption value taxonomies to suggest that there are four dimensions of Product Perceived Newness: functional, emotional, social and epistemic. This working paper details an ongoing research project aiming to develop a scale that incorporates these four dimensions. Initial results provide support for structural and nomological validity.

Location of Color on Package and Benefits Perception: A Regulatory Focus Perspective

Mitsuru Kaneko, Kyoto Women's University, Japan

We examined how the location of color on package affects consumers' benefit perception. Three experiments show that while prevention benefit is perceived more when the color is on the top, promotion benefit is not perceived irrespective of the location.

Psychological Ownership and Control in Virtual Retail Experiences

Ezgi Merdin Uygur, Kadir Has University, Turkey
Gulen Sarial-Abi, Copenhagen Business School, Denmark

During the Covid19-pandemic, the imposed physical distance facilitated the emergence of virtual experiences. In order to resolve the conflicting previous findings suggesting disrupted vs. increased psychological ownership (PO) for digitals or intangibles; we analyze attitude, control, PO, WOM and visit intentions data collected from real and virtual retail store visitors.

The Shape of Crowding: The Impact of Social Crowding on Shape Preference

Ruiqin Li, Renmin Business School, Renmin University of China, China

The present research suggests that social crowding induces need for belongingness, and then increases preference for circular shapes. Moreover, the effect of social crowding on preference for circular shape only occurs when individuals think high of belongingness and when the component of crowding is outer group.

Circular Shapes with Life: The Impact of Nostalgia on Shape Preference

Ruiqin Li, Renmin Business School, Renmin University of China, China

People have the lay belief that circular shapes are associated with vitality. When people feel nostalgic, the need for connectedness and competence can be satisfied, which can improve sense of vitality. According to self-congruence theory, people full of vitality prefer objects full of vigor and vitality, that is circular shapes.

Sectorial Brands as a Legitimation Tool for Emerging Market Firm's Internationalization: The Case of 'Din Inimă' Umbrella Brand in Moldova

Zahra Sharifonnasabi, Queen Mary University of London, UK
Mirela Barbu, University of Sussex, UK

We examine how sectorial brands facilitate legitimation of emerging market firms aiming to internationalise. Using a longitudinal case of '*Din Inimă*', a sectorial fashion brand in Moldova, we identified three brand-mediated legitimation mechanisms: *material* (expanding international networks), *rhetorical* (selective framing to reposition understandings of Moldovan producers), and *symbolic collectivity* (community).

Sexual Orientation Moderates the Relationship between Digit Ratios (a proxy for prenatal testosterone exposure) and Risk-Taking Propensity

Fabiane Cavalcante, State University of Ceará, Brazil
Danielle Gomes, State University of Ceará, Brazil
Samuel Câmara, State University of Ceará, Brazil
Lilian Carvalho, FGV EAESP, Brazil
Delane Botelho, FGV EAESP, Brazil

Exposure to prenatal testosterone might influence consumer risk propensity. However, previous results on the relationship between digit ratios (a proxy for prenatal testosterone exposure) and risk-taking have been mixed. The results suggest that sexual orientation (declared by the participants) moderates that relationship, consequently future research should account for sexual orientation.

Consumers, Short videos, and the Growing "Consumer Sphere" in China

Zizheng Yu, Cardiff University, UK

Bringing together the literature on the public sphere and focusing on how Chinese consumers deploy short video technologies to make appeals, this article elaborates on a "consumer sphere" model in China, which more comprehensively explains the interactions between businesses, media and government departments within the short video activism tactic.

Empowering Victims Through Choice: The Impact of Being Chosen on Consumer Charitable Support

Zuzanna Jurewicz, Ivey Business School, Western University, Canada
Kirk Kristofferson, Ivey Business School, Western University, Canada

We examine responses to an emerging strategic change in charitable marketing: victim empowerment. Across multiple charitable relationship contexts, we find that being chosen by (vs. choosing) a victim has opposing psychological effects on donors: it increases perceived relationship quality but decreases free will, which increases/decreases program support and long-term commitment.

The Impact of Color on Consumer Perceptions of Product Efficacy

Lauren Labrecque, University of Rhode Island, USA
Christy Ashley, University of Rhode Island, USA
Stefanie Sohn, University of Southern Denmark, Denmark
Barbara Seegebarth, Technische Universität Braunschweig, Germany

Color can communicate important marketing elements such as brand personality, healthiness, flavor, scent, and size. But can color communicate efficacy (i.e., how well the product works)? We explore this important question in this research through three experiments and find that color can impact consumers' perceptions of a product's efficacy.

The Influence of Reward Framing on Food Choices

Luxi Chai, Missouri Southern State University, USA
Marija Grishin, University College Dublin, Ireland

The current research examines the impact of gratification-enhancing framing on healthy food-related decision making by demonstrating that after completing a self-control depleting task, framing the healthy (vs. unhealthy) food option as a reward increases the rewarding feeling and purchase intention.

Simulating Self-Improvement: Need for Cognitive Closure Shapes Preference for Process- and Outcome-Focused Products

Alberto Barchetti, University of Cincinnati, USA
Joshua Clarkson, University of Cincinnati, USA
Ashley Otto, Baylor University, USA

Two experiments show that consumers seeking closure prefer self-improvement products with an outcome (vs. process) focus. This effect is driven by a heightened sense of immediacy in goal attainment and reverses when attainment is unlikely. These findings offer insight into antecedents of self-improvement preferences and the strategic nature of closure.

Exploring the Influencing Factors of Consumers' Willingness to Consume Aging Produce with a Focus on Health and Safety Perception

Christina Neubig, Technical University of Munich, Germany
Jutta Roosen, Technical University of Munich, Germany

This study investigates what factors increase or decrease willingness to consume aging produce. Results show that providing information on healthfulness or safety and the resulting health and safety perception increase willingness to consume; while food disgust sensitivity, reliance in expiration dates, and food waste propensity decrease willingness to consume.

Trickle Down Spending: Relative Income Effects on Consumer Spending in Social Relationships

Max Alberhasky, University of Texas at Austin, USA
Andrew Gershoff, University of Texas at Austin, USA

Income disparity is known to influence economic, health, educational, and psychological outcomes. Yet little is known about how it affects consumer decisions. Five studies show that people spend more on purchases for those who earn less, even when controlling for absolute income. This is driven by feelings of situational sympathy.

To Reward or to Cheer Up: Self-Gift Motivations Change Preferred Gift Types Through Construal-Level

Sujin Park, Seoul National University, Korea, Republic of
Kyoungmi Lee, Seoul National University, Korea, Republic of

This research suggests that the self-gift motivation for rewarding one's achievements activates a low-level construal with vivid mental imagery, resulting in preferences for material self-gift. In contrast, the self-gift motivation for cheering the self up from depressing situations activates a high-level construal, leading to the preferences for experiential self-gift.

Perception, Assemblage and Consumption of Light; A Step Through Consumer-Produced Domestic Atmospheres

Eminegül Karababa, Middle East Technical University, Turkey
Utku Ay, University of Arizona, USA

This study explores how consumers perceive, assemble, and implement light, deliberately or unconsciously, that lead a pathway towards consumer-produced atmospheres in domestic environments. Consumers actively utilize light through domestic practices, constituting layered structures based on networks, involving multiple material and immaterial elements; experiences, emotions, aesthetic reflections, people, objects, and spaces.

Consumers Prefer Complex Algorithms

Zarema Khon, University of Bath, UK
Samuel Johnson, University of Warwick, UK
Haiming Hang, University of Bath, UK
Stephanie Chen, London Business School, UK

Two studies (*N*=195) test a novel factor that drives consumers' adoption of algorithms— complexity. The results showed that consumers generally prefer more complex algorithms to simple ones. The effect is especially pronounced when complex algorithms are used for doing inherently complex tasks, or when the tasks are considered more objective.

A Group of Crying Victims Deserve More Money? Effects of Victim Image, Facial Expression and Victim Identifiability in Charity Advertising

Hsiao-Ching Lee, National Kaohsiung University of Science and Technology, Taiwan
Chun-Tuan Chang, National Sun Yat-sen University, Taiwan
Chia-Han Chang, National Sun Yat-sen University, Taiwan
Jia-Ling Li, Liudui Hakka Cultural Park, Taiwan

We examine how victim image and facial expression in charity advertising affect people' giving behavior. Experiments show that multiple happy-faced victims or one single sad- faced victim increases giving behaviors. Entitativity enhances the effects of happy-faced victims. Victim identifiability reduces the interactive effect of victim image and facial expression.

Showing Dual Concern: The World Needs to Learn How to Criticize with Care

Katie Mercurio, California State University, Chico, USA
Nathan B. Warren, BI Norwegian Business School, Norway
Troy H. Campbell, Chief Scientist at On Your Feet, USA
Lauren C. Howe, University of Zurich, Switzerland
Steven Shepherd, Oklahoma State University, USA

This work introduces dual-concern messaging, which communicates that a target group causes harm while expressing concern for the target group. Five studies show that dual concern reduces the inference that a messenger lacks moral concern for the criticized group and improves criticism acceptance and purchase intentions among the target group.

When the Breadwinner is Locked at Home: Interaction of Domesticity and Masculine Identity

Tanvi Gupta, Assistant Professor of Marketing, Indian Institute of Management Udaipur, India
Vidushi Trivedi, Doctoral Student of Marketing, Indian Institute of Management Udaipur, India
Rupali Kapoor, Research Officer, Indian Institute of Management Udaipur, India

Through a qualitative study, this research explores gender performativity of the breadwinner identity among Indian men, forced to experience domesticity during the pandemic. By applying the concepts of emotional labor and dramaturgy, it finds that male consumers cope with domesticity by symbolic means of appropriation and re-interpretation of their home.

Receptive to the Past: Nostalgia Increases Acceptance of Ugly Food

Yi (Fionna) Xie, Xiamen University, China
Yanfen You, University of Massachusetts Amherst, USA

We propose that nostalgia can facilitate consumer acceptance of ugly foods via enhanced consumer tolerance. We show that nostalgic consumers are more likely to purchase ugly vegetables and fruits, buy snacks made from ugly foods, and are more willing to participate in and share information about an ugly food campaign.

The Impact of Childhood Socioeconomic Status on Risk Preferences in Domains of Loss and Gain

Huizhong Li, Peking University, China
Chenhan Ruan, Fujian Agriculture and Forestry University, China

In this paper, we explored the relationship between childhood socioeconomic status on risk preferences based on inconsistent evidence in previous research. By three studies including second-hand data analysis and experiment studies, it is shown that ones from different childhood SES show different risk preferences in domains of loss and gain.

Economic Inequality Increases Education Spending

Jinyan Xiang, Virginia Tech, USA
Mario Pandelaere, Virginia Tech, USA

Across three experiments, we find that economic inequality increases education spending, because consumers perceive a greater income premium of better education in more unequal societies. This research contributes to literature on economic inequality and education and provides insights to education marketers.

Financial Well-Being for Low-Income Populations in Developing Countries

Luiz Cruz Neto, State University of Ceará, Brazil
Caio Victor, State University of Ceará, Brazil
Verónica Peñaloza, State University of Ceará, Brazil

This research seeks to detect the components of financial well-being (FWB) in the low-income consumers of developing countries. An exploratory study was carried out with qualitative and quantitative aspects. The result showed that the FWB dimensions of the low-income consumer with the consumers in developed countries has some differences.

The Transparency Paradox: Asking for Personal Information Increases Consumers' Value of It

Kyle Murray, University of Alberta, Canada
Tim Derksen, University of Alberta, Canada

In this research we explore how consumers value their private information. We find that simply being asked for personal data increases the perceived value of that information. Underlying this effect is a negative emotional response to the request. The impacts of information bundling and the data breaches are also examined.

How Digital Influencers' Techniques Can Improve Direct Selling Performance

Jordan Rizetto, FGV EAESP, Brazil
Benjamin Rosenthal, FGV EAESP, Brazil

This research aims to understand how direct selling representatives (DSR) can use social media to improve sales. Specifically, this research adopts a mixed-methods approach to investigate how DSR in the field of wellness products uses digital influencers' techniques to enhance the relationship with customers, improve sales, and build brand reputation.

Exploring an Incongruence Frame for Online Reviews

Praveen Sugathan, Indian Institute of Management Kozhikode, India
Subin Sudhir, Indian Institute of Management, Indore, India

Online reviews often include a combination of informational cues such as numeric (i.e., star) ratings and qualitative text. In an effort to understand conflicting informational cues, this research conceptualizes and tests an incongruence frame. Across five studies the incongruence effect is shown to undermine review usage.

75 Years of Internal Reference Price Research: A Review, Calibration of Taxonomy and Classification Framework

Isabel Son, Leiden University, Netherlands
Jean Pierre van der Rest, Leiden University, Netherlands

This paper presents a semi-systematic review of 75 years of operationalization in (internal) reference price research. Conceptual problems in terminology are addressed and a taxonomy of the core constructs is developed. Lowengart's (2002) classification framework is expanded to include six categories, covering three time-intervals, discerning 12 different price cue clusters.

Make It Sporty: Conceptualization, Measurement and Consumer- and Brand -Related Effects of Perceived Sportivity

Reynald Brion, Kedge Business School, France
Renaud Lunardo, Kedge Business School, France
Jean-Francois Trinquecoste, Université de Bordeaux, France

Through six qualitative and quantitative studies, we refine the concept and develop a measure of perceived sportivity. Results show that perceived sportivity is a reflexive second order construct composed of three dimensions – physicality, commerciality, and equipment– that has broad effects on consumer engagement and behaviour.

What Goes Around Comes Around: Belief in Karma Predicts Ethical Consumption

Summer Kim, University of Kansas, USA
Jessica Li, University of Kansas, USA

Consumers with higher beliefs in karma are more likely to engage in ethical consumption by supporting ethical brands and rejecting unethical brands. This link is partly explained by a belief that the unethical brand's immorality transfers to consumers who support the unethical brand.

Cashbacks: Buying More or Less?

Shweta Jha, Indian Institute of Management, Indore, India
Sanjeev Tripathi, Indian Institute of Management, Indore, India

While prior research on cashbacks highlighted its benefits, this study investigates the cost of offering cashbacks. We find that in certain conditions, cashbacks can negatively affect retailers as they lead to consumers reducing the ticket size of the transactions.

Impulsively Sustainable: Can an Inhibitory Control Training Help Consumers to Reduce Fast Fashion Consumption?

Oliver Büttner, University of Duisburg-Essen, Germany
Benjamin Serfas, University of Duisburg-Essen, Germany
Julia Wilberg, University of Duisburg-Essen, Germany
Saskia Flachs, University of Duisburg-Essen, Germany

We examined whether an inhibitory control training based on a Go/NoGo task can help consumers to buy less fast fashion items. Results show that for impulsive buyers, the Go/NoGo training reduced urge to buy clothing, intention to buy fast fashion, and liking of shopping for clothes.

Social Distancing & Mask-Wearing in Response to COVID-19: How Conflicting Physical and Social Threats Compete to Influence Behavior

Julie Schiro, University College Dublin, Ireland
Lauren Min, University of Kansas, USA

Mask-wearing and social distancing can mitigate the physical threat of COVID-19 but at a social cost (e.g., social judgment). We investigate how people make this tradeoff across two experiments. Our findings have important theoretical implications for classic models of protective behavior and substantive implications for health-related marketing communications.

Animal-Friendly Consumption: Power Begets Responsibility

Sunyee Yoon, University at Buffalo, USA
Danny J. M. Kim, University at Buffalo, USA
Jeffrey P. Boichuk, University of Virginia, USA

This research introduces the construct of animal-friendly consumption and explores the sense of power as a predictor of consumer demand for animal-friendly consumption. We show that feeling powerful increases one's demand for animal-friendly products via perceived responsibility.

Psychological Ownership Increases Subjective Knowledge and Risk-Taking Behavior

Y. Rin Yoon, Cornell University, USA
Suzanne Shu, Cornell, USA

Does owning a free share of stock increase future investment? Psychological ownership of a product increases subjective knowledge and thus risk-taking behavior in product-relevant domains. This is because the ownership of a product induces consumers to overestimate how much they learn from product information.

Better Repeated? Effect of Repetitive Number Price on Bundling

Jintao Zhang, Drexel University, USA
Hongjun Ye, Drexel University, USA
Siddharth Bhatt, Penn State Harrisburg, USA
Haeyoung Jeong, North Carolina Central University, USA
Raj Suri, Drexel University, USA

Our study examines the effect of repetitive numbers on bundling price (i.e., 2 for $2.22 vs. 2 for $$2.12) that consumers have higher intentions to purchase bundling products with repetitive number prices, the ease of processing would explain the effect rather than unit price calculation.

Self-Tracking: Topics, Approaches, and Paths for Researching and Theorizing Consumption

Marina Viotto, FGV EAESP, Brazil
Eliane Brito, FGV EAESP, Brazil
Carole Zanette, NEOMA Business School, France

This article presents preliminary results of a semi-systematic literature review aiming to map the main topics and approaches of studies on the self-tracking phenomenon. The intended contributions reside in showing how research on consumption can benefit from investigating self-tracking and in tracing paths for future studies.

Don't Eat Me: The Interactive Effect of Anthropomorphic Food Characters and Gender on Food Consumption

Jennifer Stoner, University of North Dakota, USA
Rijana Adhikari, University of North Dakota, USA
Michael Covey, University of Minnesota, USA

Our research aims to explore the impact of anthropomorphism on consumption of the food. We find an interaction effect of gender with anthropomorphism where women eat less when presented with an anthropomorphic food character. This effect is not seen in men.

The Less in Luxury: Luxury Consumption and Word-of-Mouth Inhibition

Denny Huynh, Duke University, USA
Tanya Chartrand, Duke University, USA

Luxury consumption allows people to communicate status, expertise, and mate value to observer without having to directly engage the observers, but how do people communicate their luxuries outside of observation and ultimately directly to others? Our work suggest that people downplay their consumption due to impression management concerns.

Asymmetric Variety Seeking in Hierarchical Choices

Akshina Banerjee, University of Chicago, USA
Yuji Winet, University of Chicago, USA

In this project, we investigate whether people differentially seek variety at different hierarchical levels of consumption. We distinguish hierarchical levels from categorizations and show that people are more variety-seeking at higher levels of consumption (e.g., choice between restaurants) but more choice-concentrated at lower levels (e.g. choice between food items).

Covid-19 Fear and Perceived Knowledge: Transition towards Sustainability through Religious Coping

Aysha Batool, Government College University Faisalabad, Pakistan
Rizwan Shabbir, Government College University Faisalabad, Pakistan

The study aims to investigate the impact of Covid-19 fear and perceived knowledge on sustainable consumption behaviour of Muslims through mediating role of religiosity. 417 responses, collected during first country-wide lockdown in Pakistan, are analysed through SEM-Smart PLS. Muslims cope with crisis by inclining towards religiosity and sustainable consumption behaviour

Is a (money) problem shared, a problem halved?

Matt Meister, University of Colorado Boulder, USA
Joe J. Gladstone, University of Colorado Boulder, USA

Does talking about one's money problems reduce financial anxiety? Analyzing 360,398 posts scraped from a web forum, the authors find that financial anxiety falls with the cumulative number of posts made. Consistent results are found in large-scale survey data and preliminary experiments.

Representations of Older Women in Advertising: How Older Women Make Sense of Their Images

Carla Abdalla, Faculdade Armando Alvares Penteado, Brazil
Flavia Cardoso, Universidad Adolfo Ibanez, Chile
Benjamin Rosenthal, FGV EAESP, Brazil

To understand how advertising campaigns portray older women in an aging society and how older women make sense of advertising campaigns, we analyzed 626 advertisements and interviewed 14 women with self-reported ages between 65 and 77 years old. We found two main themes: social body and quality time.

Source Memory is More Accurate for Subjective Claims than for Objective Claims

Daniel J. Mirny, UCLA Anderson School of Management, USA
Stephen A. Spiller, UCLA Anderson School of Management, USA

Recalling the source from which a claim originated (source memory), is an important aspect of consumer decision making. Across six pre-registered experiments (N=2,807) we investigate the effect of claim objectivity on source memory. We find that source memory is more accurate for subjective opinions than for objective factual statements.

(Un-)Ethical Consumer Behavior and Dehumanization – When Wealthy Consumers are Perceived as Less Human

Meikel Soliman, Leuphana University Lüneburg, Germany
Jurgen Willems, WU Vienna, Austria
David Loschelder, Leuphana University Lüneburg, Germany

This article examines morality judgements when (non-)wealthy consumers behave (un-) ethically. Three studies show that individuals morally judge and dehumanize wealthy (vs. non-wealthy) consumers more. While prosocial jobs (vs. non-prosocial jobs) buffer this moral judgment and dehumanization of wealthy consumers, we find no differences for self-achieved wealth (vs. given wealth).

Optimal Algorithm Explanations for Consumer Empowerment and Firm Benefit

Mehdi Mourali, University of Calgary, Canada
Dallas Novakowski, University of Calgary, Canada
Ruth Pogacar, University of Calgary, Canada
Neil Brigden, Bow Valley College, Canada

Algorithms' lack of transparency is often blamed for algorithm aversion in consumers. Two experiments demonstrate that algorithmic explanations can improve behavioral intentions, in addition to perceptions of transparency and empowerment. In particular, participants responded favorably to explanations that highlight concrete and feasible steps for consumers to change their future outcomes.

Not in My Group: Racial Minorities' Enforce Stricter Ingroup Boundaries to Avoid Stereotype-Confirmation

Jorge Rodrigues Jacob, IESEG School of Management, France
Jacqueline Chen, University of Utah, USA

We identify one mechanism by which minority perceivers manage threats to their in-group's reputation: categorization. Across four studies, we show that when perceivers are able to exclude targets who reinforce negative stereotypes about the ingroup, they will do so to maintain the group's public reputation.

Ten Years of Research on Food Well-Being: A Review and Research Agenda

Rodolfo Rocha, University of São Paulo, Brazil
Andres Veloso, University of São Paulo, Brazil

In 2011, Block et al. proposed the concept of food well-being (FWB). Several studies were inspired by FWB, approaching it with different lenses. This systematic review aims to contribute to both the FWB and consumer behavior literature by identifying the advances in FWB research and indicating directions for future studies.

Racial Discrimination toward AAPIs and their Resilience Building: Online and Offline Discrimination and Social Support

Sanga Song, Indiana University East, USA
Hyejin Kim, DePaul University, USA

Drawing on minority stress theory and the resilience conceptual framework, we tested a model describing the impact of online and offline discrimination, as race-based stress factors, and of social support, as a protective factor, on the psychological distress of individuals in the AAPI community during the COVID-19 pandemic.

The Language of Apologies in Responses to Customer Reviews

Shereen Chaudhry, University of Chicago, USA
Akshina Banerjee, University of Chicago, USA

We use natural language processing to examine the linguistic features of apologies in manager responses to online customer reviews. We ask what features are essential for a response to be perceived as an apology by third-party observers. Further, we examine the relationship between apologies and customer satisfaction with the response.

Organizing Subcultural Lives and Mobilizing them into Social Movements: Through the Lens of Critical Performativity

Emre Ulusoy, Youngstown State University, USA
Handan Vicdan, Emlyon Business School, France

Drawing on critical performativity, we articulate the subcultural organization and mobilization process of alternative music consumers into social movements and transformations towards social change.

You Are What You Use? Perceptions of Consumers Using Digital versus Analog Goods

Han Young Jung, University of Minnesota, USA
Kathleen Vohs, University of Minnesota, USA

The current research investigates a variety of qualities people infer from a person using digital versus analog products. Two studies (*N*=244) showed that participants perceived a person using digital (versus analog) products as lower in patience, tolerance, ethicality, trustworthiness, reliability, and expertise.

Mindful Consumption Mediates Effect of Mindfulness on Life Satisfaction

Sharad Gupta, Delhi School of Business, VIPS-TC, India
Harsh Verma, University of Delhi, India

We establish the mediating role of mindful consumption in the relationship between mindfulness and life satisfaction by analyzing competing models for moderation (three models), moderated mediation (two models), and post-hoc analyses (three models) using Hayes' Process for Path Analysis. Gender, household income, and socioeconomic status do not impact results.

A Primer and Case Study on What EEG Can Do for Marketing Research

Oriana Aragon, Wilbur O. and Ann Powers College of Business, Clemson University, USA

Marketers expend valuable resources studying consumer behavior through neuromarketing. Electroencephalogram (EEG) investigations have thus far gauged consumers' preferences for presented products. However, EEG offers more utility than product choice from preference. Here we provide a tutorial on EEG classifications, capabilities, and provide information into the practical application of this technology.

Do Consumers Want to be Close With all Their Most Preferred Brands?

Luis Abreu, Duke University, USA
Gavan Fitzsimons, Duke University, USA

Marketers want their brands to have close consumer-brand relationships. But, do consumers want to be close with all their brands? Across a wide variety of categories, we find consumers do not always develop close relationships with their most preferred brands. We explore possible reasons using natural language processing techniques.

Do You Have a Reservation? How Consumer Privacy Concerns Jeopardize Online Tourism Agencies Evaluation

Stéphane Bourliataux-Lajoinie, CNAM, France
Julien Cloarec, IAE Lyon School of Management, Université de Lyon, France

The Dutch Data Protection Authority has fined Booking.com 475,000 euros for late notification of a leak of personal data, following a phone scam in December 2018. We show that ease of use strengthens the indirect effect that runs from privacy concerns to the service evaluation, via trust/risk beliefs.

The Effect of Image Color Saturation and Framing on Prosocial Behavior

Yiping Li, University of Massachusetts Lowell, USA

Low saturation signals deprivation and weakness, whereas high saturation signals rigor and power. Accordingly, we find that when prosocial messages are hope-framed, higher image color saturation elicits greater intentions for prosocial behavior. However, prosocial messages framed as need elicit higher prosocial behavior intentions when they use low color saturation.

Consumer Vulnerability to Resilience: Resource Integration by COVID-19 Survivors in India

Sumit Saxena, Indian Institute of Technology Ropar, India
Amritesh Amritesh, Indian Institute of Technology Ropar, India

This research explores the nature of COVID-19 induced vulnerability among healthcare consumers and analyzes their resource integration practices in their process of recovery and well-being by using a 'passive netnography' approach. The study reveals three critical situational factors of consumer vulnerability and the primary operant resources used to address those.

Genderation of LGBTQ+ Identity in the Digital Marketplace

Gillian Oakenfull, Miami University, USA

This research draws from queer theory, social identity theory, and generation theory to explore the construct of *Genderation*, generational differences in sexual and gender identity and expression that exist within the LGBTQ consumer population. A conceptual model is proposed that identifies socio-cultural antecedents of Genderation. Marketplace implications are also considered.

AI is Blamed More Than Humans When it Falters, But Less so When it Discriminates

Tripat Gill, Wilfrid Laurier University, Canada
Sakshi Korde, Wilfrid Laurier University, Canada
Shirley (Shuo) Chen, Wilfrid Laurier University, Canada

While people are reluctant to use AI (artificial intelligence)-based decision agents, little research has examined blame assignment when such agents falter. In two studies, we find that while AI agents are generally blamed more than humans for adverse outcomes, they garner lesser blame and lower moral outrage for discriminatory behaviour.

Fairness in Joint Consumption Decision Making

Nikkita Sarna, University of Texas at Austin, USA
Andrew Gershoff, University of Texas at Austin, USA

We examine how a desire to be perceived as fair can interplay into joint consumption decision making. Four studies (n=~800) show evidence for this concern as consumers purposefully chose to avoid their preferred alternatives when making decisions for shared experiences, even without knowledge of others' preferences.

Toward Financially Accountable Brand Awareness Building: Predicting the Effects of Altering Brand Recall on Choices

Siyana Hristova, University of California, Berkeley, USA
Zhihao Zhang, University of California, Berkeley, USA
Ming Hsu, University of California, Berkeley, USA

We present an ongoing study that aims to quantitatively predict how changes in brand awareness translate into brand choices, based on a newly-developed formal model of memory-based choices. Findings can have significant implications for marketers who face increasing pressure to justify the financial return on marketing investments.

How Bundling Messages Increase the Likelihood of Going Back to Checkout

Lina Xu, New Mexico State University, USA
Mihai Niculescu, New Mexico State University, USA

How do marketers improve the shopping cart abandonment rate? This research offers a novel approach—using the proportionality of the prices to create dynamic product bundles. Two ongoing studies demonstrate that percentage-framed price changes can ease shoppers' pain of paying and increase their likelihood of going back to checkout.

Tracking Comfort with Interpersonal Touch Over Time: The Effect of #MeToo and COVID-19 on Preferences for Touch

Andrea Luangrath, University of Iowa, USA
Suyeon Jung, University of Wisconsin-Madison, USA
Joann Peck, University of Wisconsin-Madison, USA

Compiling data from 30 studies conducted between 2011-2021 (N = 12,391), we track individual's comfort with interpersonal touch (CIT) over time. We observe that comfort with both initiating and receiving touch decrease significantly after #MeToo (more severely for women) but not further after COVID-19.

Critical Discourse Analysis on Public Advertisements on Minoritized Communities in Milwaukee

Francisco Hernandez, Marquette University, USA
Kevin Thomas, Marquette University, USA

Employing a critical discourse analysis this study appraises the level of racial and cultural sensitivity contained in Milwaukee County Transit System advertisements depicting minoritized consumers. These ads represent a pervasive form of social communication and should project consumer racial and cultural acuity; however, our preliminary findings suggest otherwise.

You Look Like a Man: A Look at Prescriptive Notions Regarding Femininity in the Fitness Culture

Javier Contreras, University of Birmingham, UK

This research aims at understanding the consequences of body image promoted by fitness mainstream culture on body self-perception and women's self-appreciation, the notion of the ideal "feminine" body and the potentially negative stereotypes derived from it by analysing the interaction in social media platforms and through in-depth interviews.

Probability or Outcome - The Importance of Emphasis Framing in Healthcare Messages

Arslan Javed, ESSEC Business School, France
Reetika Gupta, ESSEC Business School, France

Our research underscores the importance of emphasis framing in health communication by examining the competing role of two disease attributes (probability, outcome) for diseases associated with uncertainty. We recommend to policymakers that health messages should focus on the probability of contracting a disease to promote preventative health behaviors (e.g., vaccination).

A Political Body without Place: Feminist Experiences in Suspension

Karla Angelkorte, COPPEAD UFRJ, Brazil
Leticia Casotti, UFRJ, Federal University of RIo de Janeiro, Brazil

This ethnographic study explores the process of de-domestication through feminist experiences cycles resulted from a constant search for emancipation until the suspension generated by the virtualization of experiences. This search guided through collective experiences loose meaning in a domestic space with technologies in a social isolation context.

Resource Scarcity Decreases Ethical Behavior

Todd Haderlie, Florida International University, USA
Jaehoon Lee, Florida International University, USA

We identify a novel relationship between scarcity and ethical behavior. When resource scarcity is made salient, consumers engage in less ethical behavior. Furthermore, the effect of resource scarcity on ethical behavior is stronger for consumers with high (vs. low) levels of the inclusion of others in the self (IOS).

Consumers' Perceptions of Corporate Communications

Hyebin Kim, Washington University in St.Louis, USA
Sydney Scott, Washington University in St Louis, USA
Rachel Gershon, San Diego, USA

Sellers regularly communicate with customers to build relationships. For thank you notes and apology notes, we find that notes from an individual seller are evaluated more positively than notes from a company. However, when a gift is included with the note, notes from individual sellers and companies are evaluated similarly.

Social Acceptance Scoring: First Steps Towards a Novel Quantification of Acceptance in Transitive Sectors

Regina Mukhamedzyanova, Faculty of Business Administration and Economics
Heinrich-Heine-Universität, Universitätsstraße 1, 40225 Düsseldorf, Germany
Nadine R. Gier, Faculty of Business Administration and Economics
Heinrich-Heine-Universität, Universitätsstraße 1, 40225 Düsseldorf, Germany

Social acceptance is crucial within transitive sectors to establish a change within society. However, the quantity and quality of social acceptance especially in transitive sectors are only roughly quantifiable. Drawing on acceptance theory, a Social Acceptance Scoring (SAS) is conceptually defined, providing an innovative framework of acceptance across multiple dimensions.

Danger!? The Effect of Color Red on Construal Level.

Xiaolei Su, City University of Hong Kong, Hong Kong
Nakaya Kakuda, City University of Hong Kong, Hong Kong
Hisashi Kawamata, Waseda University, Japan
Yves Dupuis, Concordia Universiy, Canada

This research investigated the effect of color (red vs blue) on construal level. Surprisingly, results were inconsistent with prior research which suggests that red background should lead to concrete construal when answering an online survey. Two studies from different cultures are employed.

Moral Emotion Laden Markets: A Study of Market Participants Seeking Donor-Assisted Conception

Anna Hartman, University of Melbourne, Australia
Eileen Fischer, York University, Canada

This paper illuminates the institutional factors contributing to a market laden with moral emotions by studying the experiences of consumers undertaking donor-assisted conception in the United States. We highlight how consumers in this market engage in *emotion-legitimacy work* to shape evaluations (legitimacy judgments) and associated emotions involved in market participation.

Brief Intervention for Changing Negative Attitudes Toward Opioid Agonist Treatment within Criminal Justice System: Results from a Pilot Study in Ukraine.

Maxim Polonsky, Yale University, USA

Our brief intervention targets attitude change via a perceived ownership of a solution to a problem, where the investment of time in a brief problem-solving task results in psychological ownership of ideas. Our intervention improved attitudes toward evidence-based treatment for substance abuse disorders among criminal justice personnel in Ukraine.

Seeing is Believing: The Impact of Transparency of Electronic Product Design on the Product Evaluation

Keyin Liang, Zhejiang University, China
Lili Wang, Zhejiang University, China

People are interested in how electronic products work. We find that transparency of electronic product design increases consumers' purchase intention and this effect is mediated by perceived product efficacy. We also identify two moderators: type of product and product orientation to provide practical implications.

How to Undo the Beautiful is Good Stereotype: Get Familiar with Ugly Produce

Angela King, University of California, Irvine, USA
Loraine Lau-Gesk, University of California, Irvine, USA

This research examines factors that help consumers undo the 'beautiful is good' stereotype when fresh produce shopping. Findings suggest that high familiarity enables consumers to ignore good looks. In contrast, low familiarity breeds ignorance. Consumers with more (vs. less) cognitive resources believe that pretty (vs. ugly) produce tastes better.

Motivating Consumers to Reduce Their Smartphone Screen Time

Yusu Wang, University of Chicago Booth School of Business, USA
Chuck Howard, Texas A&M, Mays Business School, USA

Consumers underestimate their smartphone screen time. Making this perception-reality gap salient increases motivation to reduce screen time more than only making reality salient. Greater motivation to reduce screen time is associated with lower planned screen time, and lower planned screen time is associated with lower actual screen time.

Self-image on the Line: How Face Payment Fosters Self-regulation in Making Healthier Food Choice

Lifeng Yang, ShanghaiTech University, China
Guangxin Xie, University of Massachusetts Boston, USA
Yuhao Lu, ShanghaiTech University, China

Two field experiments provide preliminary evidence that the current face payment technology could activate one's healthy consumption intention, rendering individuals to choose healthier food options more likely. When a cognitive load is implemented simultaneously in the face payment process, this effect above dissipates, suggesting that self-attentiveness mediates the process above.

Customer Preferences for Face Masks Reveal Trade-offs between COVID-19 Safety and Emotional Communication

W. Craig Williams, Fox School of Business, Temple University, USA
Chelsea Sposit, Fox School of Business, Temple University, USA
Vinod Venkatraman, Fox School of Business, Temple University, USA

Face masks have proven vital for reducing the spread of COVID-19, but little is known about how masks impact consumer interactions. Over two pre-registered studies, participants preferred that employees wear masks when showing neutral versus happy expressions—via increased satisfaction and tipping—revealing trade-offs between safety and emotional communication.

Examining Role of Anthropomorphism in Customer Switching Behavior

Gurbir Singh, Indian Institute of Management Amritsar, India
Archit Vinod Tapar, Indian Institute of Management Rohtak, India

This study investigates the moderating role of anthropomorphism in the relationship between service failure (low vs. high severity) and switching in a post-failure context. The results showcase a dual effect of anthropomorphism, where it reduces the switching behaviour in low-severity condition and enhances the switching behaviour in high-severity condition.

Doing Green or Buying Green? Differential Effects of Pro-Environmental Activities on Self-Signaling

Marie Ozanne, Cornell University, USA
Helen Chun, Cornell University, USA

Both "doing" and "buying" green (recycling or buying recycled materials) are activities helping to protect the environment. Across different green actions and purchases, we find that doing (vs. buying) green leads consumers to take more credit for their green contribution and create positive signals to the self and others.

Pro Equality Behaviors in Marketing, Anti-Racism Matters

Ania Rynarzewska, Mercer University, USA

Consumer hyper exposure to media mid-pandemic drew consumer's attention to most problems with still ever prevalent racism and inequality. This study provides evidence for support of social justice and equality regardless of race in organizational marketing practices to benefit organization and the world.

Effect of Price Change Allocation in Multidimensional Pricing on Consumers' Price Perceptions

Igor Makienko, University of Nevada Reno, USA
James Leonhardt, University of Nevada Reno, USA

In this paper we investigate how allocation of price change among different pricing components affects consumers' perceptions of such changes. We limit our investigation to a situation when a company offers products with shipping and handling fee. We build our conceptual framework based on partitioning pricing and bundling pricing literature.

Film Festival 2021

The Personal Benefits of Seeking Out Wildlife Encounters: Birdwatching

Ai Nhan Ngo, University of Texas Rio Grande Valley, USA
Ross Murray, University of Texas Rio Grande Valley, USA
Michael Minor, University of Texas Rio Grande Valley, USA

This film explains consumers' personal benefits from birdwatching as a hobby or lifestyle and extends biophilia hypothesis (Wilson, 1984) and attention restoration theory (Kaplan & Kaplan, 1989). The 15 interviews reveal several important themes: purpose, joy, exercise and social activities, camaraderie with others, and peace.

Violence Against Doctors: A customer incivility perspective

Rajesh Chandwani, Indian Institute of Management Ahmedabad, India

This videography attempts to understand the phenomenon of customer incivility against employees in healthcare services by providing a processual analysis of violence against doctors based on doctors' perspectives. The study furthers our understanding about prevention of aggressive customer behaviour in the healthcare- an under-researched area.

A Manhattan Spring Chronicle: The untold Maslow story of COVID-19

Iris Mohr, St. John's University, USA

The film, A Manhattan Spring Chronicle: The Untold Maslow Story of Covid-19, takes place in New York City during Spring 2020. As the Maslow hierarchy of needs is reflected on, the film seeks to answer through observation and media footage whether the theory holds up considering the pandemic.

The Intersections of Food, Health, Poverty, and Dignity

Sharon Schembri, Fisk University, USA

This study focuses on food consumption for impoverished consumers and aims to contribute to research on vulnerable consumers. A visual ethnographic research design includes 20 onsite interviews and participant observation. A short film documents the findings demon-stratiing the intersections of food, health, poverty, and dignity.

Cultured Meat in Singapore: The Moral and Practical Paradoxes

Cindy Ho, National University of Singapore, Singapore
Emilea Teo, National University of Singapore, Singapore
Sean Chaidaroon, National Univeristy of Singapore, Singapore

This video presents interviews with prospective consumers, a vegetarian food seller and experts to elicit their receptivity and concerns of cultured meat. As the first country to approve cultured meat for sale, these interviews enliven local Singaporean voices in sharing their genuine perspectives on the consumption of scientifically invented meat.

Luxury in Flux: An Examination of Producer and Consumer Perceptions Amidst COVID-19

Moumita Gyomlai, Ohio University, USA
Jacob Hiler, Ohio University, USA

This film explores the changing definitions and perceptions of luxury amidst the worldwide pandemic from the viewpoint of both consumers and producers through a hermeneutic and phenomenological lens. It aims to uncover shifting consumer mindsets and how these effects will continue to change the luxury industry in a post-pandemic world.

Time Compression: A Rhythmanalysis of a Consumer's Everyday Life

William Walczak, University of British Columbia, Okanagan, Canada
Seger Nelson, University of British Columbia, Okanagan, Canada
Eric Li, University of British Columbia, Okanagan, Canada

This experimental documentary employed Lefebvre's rhythmanalysis approach to showcase a time-compressed consumer's everyday life. While brands and consumer goods have become indispensable components of our work-home-social lives, our film illustrated the vulner-ability and mundanity aspects of our consumer society.

Knowledge Forums

FORUM
Let's Get Digital: A Virtual Knowledge Forum on Marketing in the Age of Digitalization and Artificial Intelligence

Chairs:
Gizem Yalcin, Rotterdam School of Management, Erasmus University, Netherlands
Gil Appel, George Washington University, USA
Andrew Stephen, University of Oxford, UK
Markus Giesler, York University, Canada
Wendy Moe, University of Maryland, USA
Das Dasgupta, University of Southern California, Saatchi & Saatchi, USA
Christ George, Subscription Trade Association
Amanda Mizrahi, Edelman
Pamela Dunaway, Marketing Science Advisors, USA
Emmanuel Frankforter, Contilt, Israel

The digital age has driven an unparalleled expansion of human knowledge, both in academia and the practice. This forum brings together a panel of academics and practitioners to discuss the latest insights on digital marketing and try to identify potential gaps between theory and practice.

FORUM
How to Do Automated Text Analysis

Chairs:
Jonah Berger, Penn, USA
Grant Packard, Schulich School of Business, York University, Canada
Ming Hsu, University of California, Berkeley, USA
Matthew Rocklage, University of Massachusetts Boston, USA
Ashlee Humphreys, Northwestern University, USA
Gideon Nave, The Wharton School of the University of Pennsylvania, USA
Andrea Luangrath, University of Iowa, USA
Sarah Moore, University of Alberta, Canada
Christopher Olivola, Carnegie Mellon University, USA
Michael Yeomans, Imperial College London,UK

More and more consumer research is leveraging automated textual analysis. But doing so correctly requires understanding the available tools, and how they can be applied. This forum provides a helpful how-to, covering some main techniques, how to use them, and how they can be applied to a variety of questions.

Forum
Marketplace Exclusion of Financially Vulnerable Consumers

Chairs:
Anastasiya Pocheptsova Ghosh, University of Arizona, USA
Jenny Olson, Indiana University, USA
Sydni Do, University of Arizona, USA
Kate Barasz, Univ. Ramon Llull, ESADE, Spain
Wendy De La Rosa, University of Pennsylvania, USA
Rebecca W Hamilton, Georgetown University, USA
Ron Hill, American University, USA
Erick Mas, Indiana University, USA
Taylor Nelms, Filene Institute, USA
Mike Palazzolo, University of California, Davis, USA
Vanessa Perry, George Washington University, USA
Maura Scott, Florida State Universi, USA
Eesha Sharma, Dartmouth College, USA
Steven Shepherd, Oklahoma State University, USA
Dilip Soman, University of Toronto, Canada
Broderick Turner, Virginia Tech, USA
Steve Wendel, MorningStar, USA
Kalinda Ukanwa, University of Southern California, USA

This Forum examines the unique consumption barriers that financially vulnerable consumers encounter in the marketplace, and how these barriers affect consumers' financial access and decision-making. Academic and industry researchers will further discuss novel solutions to improve marketplace outcomes for consumers themselves, marketers, and policy makers.

Forum
What the World Needs Now: Better Marketing for a Better World

Chairs:
Gita Johar, Columbia University, USA
Shilpa Madan, Virginia Tech, USA
Jonah Berger, Penn, USA
Pierre Chandon, INSEAD, France
Rebecca W Hamilton, Georgetown University, USA
Leslie John, Harvard Business School, USA
Aparna Labroo, Northwestern University, USA
Peggy Liu,, University of Pittsburgh, USA
John Lynch, University of Colorado, USA
Nina Mazar, Boston University, USA
Nicole Mead, York University, Canada
Vikas Mittal, Rice University, USA
Michael Norton, Harvard Business School, USA
Dilip Soman, University of Toronto, Canada
Madhu Viswanathan, University of Illinois at Urbana-Champaign, USA
Katherine White, University of British Columbia, Canada
Rajesh Chandy, London Business School, UK
Christine Moorman, Duke University, USA
John Roberts, University of New South Wales, Australia

The gap between what marketing has studied and what marketing can do for improving people's lives remains substantial (Chandy et al. 2021). In conversation with senior researchers, this knowledge forum leverages a novel format to identify the anatomy of impactful papers that seek to make the world a better place.

FORUM
Children as Consumers: Past and Future Research Directions

Chairs:
Margaret Echelbarger, University of Chicago Booth School of Business, USA
Michal Maimaran, Kellogg School of Management, Northwestern University, USA
Lan Chaplin, University of Illinois at Chicago, USA
Deborah John, University of Minnesota, USA
Mary McIlrath, University of Illinois, USA
Sophie Nicklaus, Centre for Taste and Feeding Behavior, INRAE, France

Children are consumers, yet, compared to adults, we know relatively little about their consumption experiences. We bring together marketing scholars working with children to discuss the state of child consumer behavior literature, identify opportunities to collaborate and complement each other's work, and highlight best practices for working with children.

FORUM
Mental Health Matters: Making Mental Well-Being a Marketing Research Priority.

Chairs:
Jane Machin, Radford University, USA
Ann Mirabito, Baylor University, USA
Elizabeth Crosby, University of Wisconsin-Lacrosse, USA
Natalie Adkins, Drake University, USA
Justine Farrell, University of San Diego, USA

Millions suffer from mental illness every year and the mental wellness economy is booming, but research from marketing academics on mental health is scarce. In this Knowledge Forum, discover why our field should care about mental well-being in the marketplace and explore techniques to study this important group of consumers.

FORUM
Beyond Beauty: How Can Aesthetics and Design Be Leveraged to Enhance Consumer and Societal Wellbeing?

Chairs:
Freeman Wu, Vanderbilt University, USA
Martin Reimann, University of Arizona, USA
Luca Cian, University of Virginia Darden School of Business, USA
Xiaoyan Deng, The Ohio State University, USA
Linda Hagen, University of Southern California, USA
Henrik Hagtvedt, Boston College, USA
Kelly B. Herd, University of Connecticut, USA
Yuwei Jiang, Hong Kong Polytechnic University, Hong Kong
Page Moreau, University of Wisconsin-Madison, USA
Vanessa M. Patrick, University of Houston, USA
Laura Peracchio, University of Wisconsin-Milwaukee, USA
Adriana Samper, Arizona State University, USA
Maura Scott, Florida State University, USA
Julio Sevilla, University of Georgia, USA
Claudia Townsend, University of Miami, USA

This knowledge forum explores novel ways in which aesthetics and design can be leveraged to improve consumer decision-making, particularly in substantively important domains such as aesthetics-based nudges, consumer-technology interactions, and inclusive design. This forum aims to provide an opportunity to generate new research ideas related to these topics.

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Forum
Fields of Gold: Generating Relevant and Credible Insights Via Web Scraping and APIs

Chairs:
Johannes Boegershausen, Erasmus University Rotterdam, Netherlands
Abhishek Borah, INSEAD, France
Hannes Datta, Tilburg Universty, Netherlands
Andrew Stephen, University of Oxford, UK

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Researchers increasingly use publicly available web data to examine consumer research questions. Much of the design decisions involved in collecting web data have remained neglected and undiscussed. This knowledge forum highlights the key design decisions that help to maximize the relevance and credibility of research findings based on web data.

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Forum
Product Disposition: Consumer Research Issues, Opportunities and Challenges

Chairs:
Alice Wang, University of Iowa, USA
Cathy Cole, University of Iowa, USA
Bingyan Hu, Mississippi State Univeristy, USA)
Aaron Ahuvia, University of Michigan-Dearborn, USA
Aaron Brough, Utah State University, USA
Cait Lamberton, University of Pennsylvania, USA
Michael Norton, Harvard Business School, USA
Mary Gilly, University of California, Irvine, USA
Aimee Drolet, UCLA Anderson School of Management, USA
Karen Page Winterich, The Pennsylvania State University, USA
Rebecca Reczek, Ohio, USA
Annamma Joy, University of British Columbia, Canada
Linda Price, University of Wyoming, USA
Grant Donnelly, The Ohio State University, USA
Silvia Bellezza, Columbia Business School, USA
Karen Fernandez, University of Auckland, New Zealand

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Marketers encourage consumers to buy products to express their identities but think relatively little about how consumers will get rid of these products. Processing excess products place a massive burden on the environment (e.g., decomposition) and on consumers' personal lives (e.g., hoarding, taking up living space). We will host a panel discussion around the topic of how consumers dispose of their used, but still useful material possessions. We will divide the time into a discussion of the research issues, opportunities and challenges in three subtopics.

The first subtopic is: What is product disposition and why is it important?

The majority of extant marketing literature has focused on strategies to help firms attract and persuade consumers to *buy* products and engage in *repeat* purchases. However, very few products get completely consumed such as water and food. The interesting problem that emerges is how to motivate consumers to keep used items out of the landfill.

The second subtopic emphasizes how individual differences (loneliness, social isolation, and age) affect material attachment and disposition decisions. Material attachment varies in intensity and reflects the relationship between an individual and a specific material object. Individual differences such as loneliness and social isolation may explain why some people become more attached to objects than others.

Finally, we'll discuss a third managerial sub-topic about interventions. Interventions, such as encouraging consumers to take pictures or to adopt a fresh start mindset, may work better at influencing disposition decisions than current practice.

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Forum
Studying Race in Marketing: Making Race More Than A Variable We Collect

Chairs:
Marcel Rosa-Salas, University of Illinois at Chicago, USA
Broderick Turner, Virginia Tech, USA
Esther Uduehi, University of Washington, USA

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This forum considers new conceptualizations for the study of race, consumer behavior, the structure of markets, and marketing industry practices. Through current research projects and interactive discussion, panelists will showcase race-related research and tools to inform marketers on handling race-focused issues within business.

Author Index

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