**HAKON SWENSON
STIFTELSEN**

Encouraging Consumers to Engage in Sustainable Behaviors

Final report for the project "Encouraging Consumers to Engage in Sustainable Behaviors"

Facts about the project

Project name

Encouraging Consumers to Engage in Sustainable Behaviors

Grant

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Project leader

Aylin Cakanlar

Grant manager

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Foreword
Hakon Swenson stiftelsen

In 2022, Hakon Swenson stiftelsen awarded a grant to the project *"Encouraging Consumers to Engage in Sustainable Behaviors".*

Consumer sustainability behaviors are pivotal in shaping a more sustainable future. This report delves into factors hindering consumer adoption of sustainable behaviors, analyzing individual, social, and system-related factors. The foundation recognizes that this ambitious project makes several significant contributions to both academia and the retail industry, enhancing our understanding of how to encourage consumers to make more sustainable decisions.

Hakon Swenson stiftelsen wants to thank Aylin Cakanlar for a well-executed research project!

Lena Litens,
President Hakon Swenson stiftelsen

Foreword
Project leader

In this popular science report, the results of the research project "Encouraging Consumers to Engage in Sustainable Behaviors" are presented. This multifaceted project, funded by the Hakon Swenson Foundation, was spearheaded by Dr. Aylin Cakanlar. Dr. Cakanlar held the role of an Affiliated Researcher at the Center for Retailing at the Stockholm School of Economics during the course of this endeavor. As a part of this project, 33 experiments were conducted across different domains within the sustainability context, such as the sharing economy, sustainable product purchases, and the perceived environmental impact of sustainable behaviors. The project involved collaboration with various experts in the field, including those in the US and Canada.

Stockholm, October, 2023

Aylin Cakanlar

Summary

Climate change, undeniably a critical issue confronting humanity, has far-reaching implications that threaten both human and planetary wellbeing. This report delves into comprehensive analyses of factors that hinder consumers from adopting sustainable behaviors, while also exploring potential solutions to address these impediments. Specifically, I examine factors at three levels: individual factors (e.g., knowledge), social factors (e.g., social environmental), system-related factors (e.g., fairness of economy). Below, I report the most important implications of our findings which based on 33 experiments and interviews.

Self-related factors

Unique messages and Recycling accuracy

Enhancing the utilization of recycled materials in production is crucial for mitigating companies' environmental impacts and aligns with circular economy principles. The usability of recycled materials is significantly impacted by their quality, underscoring the necessity for well-sorted and uncontaminated waste in the recycling process. To reduce recycling contamination (consumers' habit of placing non-recyclable materials, such as black plastic, into recycling bins with the expectation of recycling):

- o Organizations and public policymakers should make greater use of proscriptive information ("do not recycle these items") to reduce recycling contamination in society.
- o Although numerous organizations encourage recycling behavior through prescriptive information ("recycle these items"), our findings demonstrate that such messages prompt consumers to place non-recyclable items in recycling bins with the expectation of recycling.
- o Unique messages that discourage the recycling of specific items can enhance consumer education. These messages can assist policymakers, the waste management industry, and retailers in purifying recycling streams and facilitating the shift towards a circular economy.

Repair decisions and Brand loyalty

In the marketplace, numerous brands have started to offer repair services (e.g., H&M, Patagonia, Levi's), and these repair services usually promote repair behavior by emphasizing the environmental advantages of opting for repairs. However, our findings indicate that promoting repair behavior as an environmentally friendly choice may not always resonate with all consumers.

- o If a consumer is loyal to a specific brand, promoting repair behavior as a product commitment (e.g.,

"Stay committed to your products") can be a more effective than environmental approach.

o   Brand loyalty is a commonly utilized segmentation variable, discernible through behaviors such as repeat purchases, loyalty program memberships, or mobile app usage. Therefore, brands can readily distinguish between loyal and non-loyal consumers, enabling them to tailor different messages to these two segments.

Social Factors

Becoming a Parent and Sustainable behavior

How does becoming a parent influence consumers' engagement in sustainable behavior? While nonparents predict that their engagement in sustainable behavior would increase upon becoming a parent, our results show that when individuals become parents, they are less likely to engage in sustainable behavior because they emphasize efficiency goals (i.e., saving time).

o   We also demonstrate that this is not the case for all parents and under all circumstances. When parents perceive that adopting sustainable behavior would not require additional time, we do not observe this correlation between parenting and their sustainable choices.

o   Furthermore, as children grow older, we do not observe this correlation either.

o   Retailers and policymakers can encourage sustainable behavior among parents by presenting sustainable options in a manner that helps consumers save time (e.g., "reduce your food waste, save time"), thereby enhancing parents' intention to engage in sustainable behavior.

Perceived Environmental Impact

Our results show that when consumers perceive sustainable behavior as uncommon in their social environment (i.e., only a few people engaging in sustainable behavior in their surroundings), they consider their own sustainable behavior to have less impact on the environment. This perception, in turn, is associated with reduced engagement in sustainable behavior.

o   Presenting the potential positive impact of an individual's engagement in sustainable behavior can help individuals perceive their actions as having a more significant environmental impact, subsequently boosting their engagement in sustainable behavior.

o   These findings imply that retailers, observing low demand for sustainable products in specific areas, should emphasize the potential positive impact of individual engagement in sustainable behavior. For example,

they can highlight the extent of CO_2 savings achievable with every sustainable product purchase. Such messages have the potential to motivate consumers, especially when they perceive sustainable behavior as uncommon in their surroundings.

System-related Factors

Fairness of the economy and Sharing economy

Our results show that consumers who believe the economic system to be fair express stronger interest in peer-to-peer sellers (P2P) than those who believe the economy unfairly distributes economic rewards and punishment. This happens because consumers who believe in the fairness of the economic system perceive peer-to-peer sellers as more entrepreneurial and independent. Interestingly, these beliefs do not influence consumers' interest in traditional commercial sellers, such as established companies.

These results suggest that sharing economy platform should look to segments that justify the economic system to bolster outcomes. How can such segments be identified and targeted? With the proliferation of big data analytics, inferring individuals' beliefs and preferences has never been more feasible, faster, or more efficient.

- o One suggestion is to track segments' (states', cities', or neighborhoods') voting behavior for various economic policies to infer their beliefs about economic fairness.
- o Another is to target programs and channels such as Draknästet, which naturally attract audiences that believe in the fairness of the economic system and markets.
- o A final suggestion is to use brand stories to highlight the entrepreneurial spirit of peer-to-peer and traditional sellers; this can attract consumers who perceive the economic system to be fair who naturally value entrepreneurial qualities in their exchange partners.

In summary, these results suggest that retailers and policymakers should consider these three levels when encouraging consumers to engage in sustainable behavior.

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1. Introduction

Climate change, undeniably a critical issue confronting humanity, has far-reaching implications that threaten both human and planetary wellbeing (Schneider, Zaval, and Markowitz 2021). Mitigating its effects demands transformative shifts in people's consumption habits (Trudel 2019; White, Habib, and Hardisty 2019). Even though most consumers are aware of the imminent dangers of climate change and have expressed positive attitudes toward sustainable actions, many often fail to translate these positive intentions into actual sustainable behaviors (Auger and Devinney 2007; Habib and White 2023).

This report conducts a comprehensive analysis of the factors that impede consumers in adopting sustainable behavior, while also exploring potential solutions to address these barriers. The focal point of this report is an examination of the subsequent factors and their impact on consumers' decisions regarding sustainability. Specifically, I examine factors at three levels.

- Individual factors (e.g., consumers' knowledge, habits, brand loyalty)
- Social factors (e.g., life-role transitions, political beliefs and social environment)
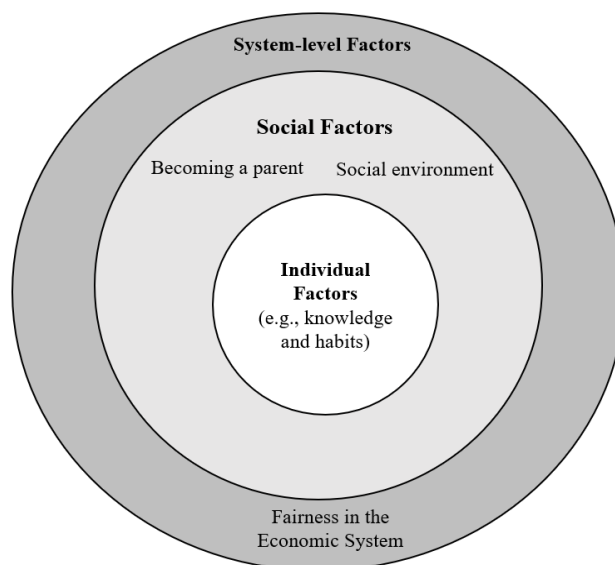- System level factors (e.g., perceptions of the fairness of the economic system).

Figure 1 Factors determine consumers' engagement in sustainable behavior

I use a three-level categorization to investigate sustainable behavior for two primary reasons. These categories stem from factors identified through a literature review and address research gaps. First, prior research underscores the influential role of individual factors—like consumers' knowledge and habits—on their choices regarding sustainable behavior (White et al. 2019). Second, our behavior is significantly shaped by our social surroundings (Hamilton et al. 2021). Consequently, the social context in which we witness others' sustainable or unsustainable actions can impact our sustainable choices (Cakanlar, Nikolova, and Nenkov 2023). However, despite the significance of life-role transitions and social environment, there exists a gap in the literature regarding how these factors shape consumer perceptions of sustainable behavior and their active involvement in such actions. Lastly, the prevailing political landscape, marked by

uncertainties, escalating polarization, and economic inequality, holds profound implications for consumer behavior (Ordabayeva and Lisjak 2022). Despite the relevance of these factors, there is a scarcity of literature shedding light on how they affect our engagement in sustainable behavior, including participation in sharing economy practices.

In this report, I have conducted 33 experiments to explore the ways in which these factors can influence consumers' participation in sustainable behavior. I will begin by providing a brief literature review to elucidate the rationale behind selecting these factors and to underscore the existing research gaps. Following that, I will detail the methodology employed in these experiments. Subsequently, I will present the findings and conclude by discussing the managerial implications derived from these projects.

2. Background, Purpose and Questions

Level 1. Individual Factors

Project 1: Increasing Recycling Accuracy

Recycling accuracy and circular economy
Following decades of recycling promotions, consumers' desire to recycle is quite high today (Catlin et al. 2021); they consider recycling as one of the most impactful behaviors for reducing climate change (Winterich, Reczek, and Makov 2023) and embrace it as a means to contribute to the collective good (van Doorn and Kurz 2021). Because consumers perceive recycling as a moral behavior (Herziger et al. 2020), engaging in this behavior reduces consumers' negative emotions associated with wastefulness and induces positive emotions (Sun and Trudel 2017). However, positive emotions and moral perceptions also create a risk of wish-cycling (i.e., putting unrecyclable items in the recycling bin in the hope or wish that it will be recycled; Catlin et al. 2021). For instance, many consumers recycle black plastic even though it is an unrecyclable item (Schoutsen et al. 2020). Consumers' tendency to put unrecyclable items in the recycling bin exacerbates recycling contamination that has significant environmental, financial, and social costs (Lee et al. 2022) and impedes companies'

transition to a circular economy as contaminated materials pose a significant challenge to the circulation of resources and the recovery of valuable materials from recycling streams (Rosenboom, Langer, and Traverso 2022).

While previous literature has primarily focused on exploring methods to incentivize consumers to recycle recyclable items, it has overlooked the examination of communication strategies to reduce recycling contamination within society. In this project, I investigate the potential of employing persuasive communication to diminish recycling contamination—an aspect that holds profound significance in the transition towards a circular economy.

Research Question (RQ): How can we use persuasive communication strategies to decrease recycling contamination?

Project 2: Brand Loyalty and Repair Decisions

The "3Rs" of sustainable living - reduce, reuse, recycle - have been widely promoted in efforts to mitigate consumption impact on the environment. Among them, recycling has received the most attention from both consumers (Miller 2020; Sun and Trudel 2017) and

scholars (Trudel and Argo 2013; Winterich, Nenkov, and Gonzales 2019). However, consumer practices that reduce consumption waste and reuse products have more direct environmental benefits and should be prioritized over recycling in the "3Rs". Even though reducing consumption waste is a key issue that is at the root of many environmental problems, scant research and few policy and industry efforts have focused on consumption waste reduction. One way to reduce consumption waste is to prolong the use of one's possessions, such as by repairing rather than replacing a product when it malfunctions. However, most consumers tend to buy new products rather than repair their old ones (Sabbaghi et al. 2017). Indeed, recent reports show that "31% of washing machines, 66% of vacuum cleaners, 56% of TVs and 69% of smartphones are replaced for other reasons than being broken 'beyond' repair" (p.66, van den Berge et al. 2021). Given that unnecessary product replacement has significant environmental consequences, product repair plays a crucial role in the circular economy by increasing the length of product life cycles and reducing the environmental impact of consumption (Laitala et al. 2021).

Despite the increasing numbers of companies offering repair services (Munten and Vanhamme 2023), and only a small fraction of consumers engages in repair (Sajin 2019), creating a "throwaway society" (McCollough 2009). Prior research suggests that consumers' decisions to repair depend on various factors (e.g., frugality; McQueen et al. 2022; environment; Laitala et al. 2021). However, prior research has not examined

how intentions to repair vary as a function of consumers' loyalty to the brand of the product in question. It is difficult to predict the repair tendencies of brand loyal consumers. On the one hand, brand loyal consumers are receptive to new product releases (Keller 2003) and product upgrades (Miller, Wiles and Park 2019), which might make them more likely to replace rather than repair their products, but on the other hand, the greater value and emotional attachment they place on their branded possessions might motivate them to extend their lifetime (Dommer and Winterich 2021). Therefore, in this study we examine how consumers' brand loyalty relates to their repair decisions.

RQ: How does consumers' brand loyalty relate to their repair decisions?

Level 2. Social Factors

Project 1: Becoming a Parent and Sustainable Behavior

Considerable research has been devoted to understanding the factors that prevent consumers from engaging in sustainable behaviors (e.g., White et al. 2019; Trudel 2019). Despite the significant research examining consumers' individual engagement in sustainable actions, it is important to recognize that many decisions, including those relating to sustainability, are deeply rooted in the context of social interactions (Liu and Kwon 2023). For instance, recent research indicates that a consumer's sustainable choices are influenced by their romantic partners' (un)sustainable choices

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(Cakanlar, Nikolova, and Nenkov 2023). Building on this research stream, we delve into an unexplored but important facet of interpersonal relationships: parenting motivation (Li, Haws, and Griskevicius 2019; Liang, Huang, and Su 2023). The bond between a parent and child, one of the earliest and most profound relationships established post-birth, catalyzes significant physical, psychological, and behavioral transformations in parents (Saxbe, Rossin-Slater, and Goldenberg 2018). Moreover, parents also constitute an important consumer segment (Liang et al. 2023). Therefore, examining the impact of parenting motivation on consumers' sustainable behavior carries important environmental and social implications. However, previous research has not examined how becoming a parent (or parenting role or thoughts about parenting—parenting motivation) can impact consumers' engagement in sustainable behavior, such as recycling, using reusable products. This research aims to address this gap.

RQ: How does parenting motivation affect consumers' engagement in sustainable behavior?

Project 2: Social Environment and Perceived Impact

Perceived impact is defined as individuals' perceptions of the positive change their actions can make toward a given outcome (Cojuharenco et al. 2016). Consumers show a greater willingness to engage in sustainable behaviors when they perceive that their actions have a positive impact on the environment (Wynes, Zhao, and Donner 2020). In the context of sustainability, there is an increasing body of research indicating that individuals often misjudge the impact of their sustainable behaviors on the environment (Camilleri et al. 2019). For instance, individuals tend to underestimate the environmental impact of certain behaviors, such as adopting a vegetarian diet, while simultaneously overestimating the impact of other behaviors, such as installing energy-efficient lights, or recycling (Cologna et al. 2022). Underestimating the impact of certain sustainable behaviors carries important implications, as individuals may develop trade-off beliefs, thinking that they can prioritize one behavior over others due to its perceived environmental impact (e.g., "I will focus more on x because it is more impactful than behaviors Y and Z"; Wynes et al. 2020). Additionally, feeling environmentally friendly through low-impact behaviors may lead individuals to believe they have done enough, potentially reducing their engagement in other sustainable behaviors (Cologna et al. 2020). Hence, it is important to understand the factors linked to consumers' assessment of the environmental impact of sustainable behaviors.

Despite being largely ignored in the consumer behavior literature because of its objective value, consumers' perceived environmental impact of sustainable behavior holds greater significance as predictors of consumers' involvement in sustainable behavior compared to actual

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effectiveness. Addressing this question, in this research, I examine how consumers form their beliefs about perceived environmental impact of sustainable behavior.

RQ: How do consumers form their beliefs about the effectiveness of sustainable behavior on the environment?

Level 3: System-level Factors

Project: Fairness of the Economic System and Sharing Economy ´

Recent years have witnessed steady growth in peer-to-peer (P2P) exchanges, which are set to reach $335 billion in revenue by 2025 (Price Waterhouse Coopers, 2015). P2P exchanges enable private individuals to share their resources by offering goods and services to other peers (Chung et al., 2022; Pino et al., 2021). In today's technology-mediated sharing economy, such exchanges often occur on online platforms (such as Airbnb) and pose a viable alternative to traditional providers in many domains (Wirtz et al., 2019). Moreover, the expansion of the 'sharing economy' illustrates significant environmental and economic benefits achievable by guiding consumers towards sustainable practices, in this instance, transitioning from product ownership to utilizing pre-existing products and

services (White et al. 2019). However, P2P exchanges also have drawbacks due to limited regulation and low entry barriers which may raise concerns about peers' product offerings (Lin et al., 2019). As more established brands enter the sharing economy through resale and circular platforms (ThredUP 2022), it is important to understand which consumer factors drive P2P demand.

While emerging studies examine how demand for P2P exchanges is shaped by interpersonal factors such as empathy (Costello & Reczek, 2020; Lamberton & Rose, 2012) and consumer traits such as intelligence (Aspara & Wittkowski, 2019), they overlook the role of consumers' ideological beliefs. Yet, in this era of rising economic inequality, consumers' beliefs about the fairness of economic system are increasingly salient and relevant in the marketplace (Jost, 2017; Jung et al., 2017). While studies show that these types of beliefs—whether economic system fairly distributes economic rewards—shape consumers product preferences from companies (Jung et al., 2017), it is unclear how such beliefs influence consumer behavior in P2P exchanges. Addressing this gap, the present research examines how consumers' beliefs about the fairness of economic system can shape their preferences for P2P providers.

RQ: How does consumers' fairness of economic system shape their interest in purchasing from peer-to-peer sellers?

3. Method of the study

Experiments

Experiments were conducted from July 2022 until July 30th. In this project, a total of 33 experiments and 26 interviews were carried out. Table 1 illustrates the distribution of studies across various projects. Various types of studies were conducted within these projects.

Online experiments: The majority of the experiments in these projects were conducted within digital environments using Qualtrics as the design tool. To enlist participants, three distinct platforms - Prolific, Amazon Mechanical Turk (MTurk), and Cloud Research - were utilized. Amazon Mechanical Turk and Cloud Research operate as web-based services intended for recruiting and compensating the required workforce to fulfill designated tasks (Goodman & Paolacci, 2017). Similarly, Prolific is a recently established UK-based online research platform designed for conducting subject experiments (Palan & Schitter, 2018

Field experiments: Field experiments can demonstrate the findings in a more realistic setting (Söderlund, 2018). These projects also include field experiments. For instance, in Project 1 (recycling accuracy), we collaborated with a local municipality in Boston, USA, and examined the actual recycling behavior of local residents after they were exposed to various messages.

Lab experiments: These projects include a few laboratory experiments. These experiments were conducted at the Boston College in the US as I do not have access to the laboratories in Sweden. These experiments are important as they can allow us to examine real sustainable behavior rather than measuring consumers' intention to engage in sustainable behaviors.

Facebook A/B tests: For marketers and experimental researchers looking to identify the most impactful advertisement in terms of generating click rates, the Facebook platform offers specific features (Orazi & Johnston, 2020). These projects also include Facebook A/B test in which we evaluated various advertisements related to repair by targeting different consumer segments in Sweden.

Google Ads Campaign: In Project 2 (repair & brand loyalty), we conducted a Google Ads campaign for Patagonia's repair services. This experiment enabled us to present our findings within a more realistic setting, utilizing tools that hold managerial relevance.

Interviews: We reached out to 26 managers who coordinate repair events and workshops within organizations in the US, UK, and Sweden to understand their existing practices and gather their opinions on our commitment approach.

Measurement of Sustainable Behavior

I measured sustainable behavior in different ways across different experiments:

Consumers' intention to engage in sustainable behavior: Consistent with prior literature, I examined consumers' intention to participate in diverse sustainable behaviors, such as recycling, using reusable products, and engaging in sharing economy practices, across different experiments.

Incentive-compatible choice: In certain experiments, participants were presented with choices involving gift cards, such as a gift card for repair services versus a gift card for purchasing new products. In another experiment, participants chose between a gift card from a conventional grocery store and one from a zero-waste store. These types of choices were integrated to mirror the trade-offs consumers commonly encounter in their daily lives concerning sustainable options, which tend to be more expensive than regular products.

Actual behavior: In some experiments, we observed participants' real behavior within laboratory settings. For example, we tracked their recycling behavior to determine whether our designed communication strategies influenced their recycling actions.

Click rate: Many companies and organizations employ click rates to assess consumers' interest in their products and services (Orazi & Johnston, 2020). Consequently, we also conducted studies utilizing Facebook and Google to ascertain whether our crafted communication messages could enhance the click rate.

Table 1. Overview of the Studies

		Participants	Findings
Project 1: Recycling accuracy	Study 1	Field Study in Boston	"Recycle these items" sign can increase recycling contamination
	Study 2	Lab Study at Boston College (558 participants)	"Do not Recycle these items" label can decrease recycling contamination
	Study 3	Lab Study at Boston College (421 participants)	"Do not Recycle these items" label is perceived as unique and enhances learning, thereby decreases contamination
	Study 4	401 participants Prolific Academic.	Using a sign that is perceived as unique but does not enhance learning does not decrease contamination.
Project 2: Brand loyalty and repair decisions	Interviews	Interviews with managers (26 managers)	Managers predict that environmental approach can be better than the commitment approach to promote repair behavior in the marketplace
	Pilot Study	99 participants from Prolific Academic	Promoting repair as a product commitment fits with brand loyal consumers' motivation.
	Study 1	598 participants from Cloud research	Exposure to a commitment ad increases loyal brand users' willingness to repair their products relative to both their baseline tendencies and to the commonly used approach of promoting repair behavior as an environmental act
	Study 2	917 participants from Cloud research	This study provides causal evidence by manipulating the brand loyalty
	Study 3	416 students at Boston College	This study provides further evidence of our findings by using incentive-compatible choice (choosing a repair gift card vs. a gift card to buy new products)
	Study 4	Facebook Campaign	We conducted a Facebook A/B test in Sweden to show that our commitment approach works with another sample.
	Study 5	Google Ads Campaign	We launched Google Search Ads for Patagonia' existing repair services. The results show that our commitment approach is effective for brands repair services.
Project 3: Parenting motivation and sustainable behavior	Pilot Study	200 participants from Amazon Mechanical Turk	Nonparents estimated that they would be more environmentally friendly upon becoming a parent.
	Study 1	376 participants from Cloud Research	Becoming a parent is associated with both a decrease in sustainable behaviors and an increase in unsustainable behaviors
	Study 2	308 participants from Cloud Research	Parenting motivation (i.e., activating cognitions and actions related to parenting) can decrease consumers' intention to use reusable products
	Study 3	309 participants from Cloud Research	Parenting motivation (i.e., activating cognitions and actions related to parenting) can decrease consumers' intention to recycle
	Study 4	300 participants from Prolific Academic	Parenting motivation can decrease recycling behavior (an incentive compatible measure is used as a proxy for recycling)
	Study 5	602 participants from Prolific Academic	Parenting motivation increases the importance of efficiency goals (i.e., saving time) while reducing the importance of sustainability goals.
	Study 6	564 participants from Prolific Academic	When consumers perceive that opting for sustainable choices will not necessitate a significant investment of time, the adverse effect of parenting motivation on sustainable behavior attenuates.

	Study	Participants	Description
	Study 7	440 participants from Cloud Research	As children grow older and become more independent, parents' emphasis on efficiency decreases, therefore parents' sustainable behavior increases.
	Study 8	707 participants from Prolific Academic	Positioning sustainable behavior as a means to fulfill consumers' efficiency objectives can counteract the negative influence of parenting motivation on their sustainable decisions (i.e., using reusable products)
	Study 9	Laboratory study (180 participants at Boston College)	Positioning sustainable behavior as a means to fulfill consumers' efficiency objectives can counteract the negative influence of parenting motivation on their sustainable decisions (i.e., choosing a more sustainable store)
	Study 10	308 participants from Prolific	We conducted this study to rule out alternative explanations of our findings.
Project 4: Environmental Impact	Study 1	405 participants from Cloud Research	Participants' perceptions of the impact of sustainable behavior vary based on their political ideology independent of climate change beliefs
	Study 2	501 participants from Cloud Research	Liberal participants were more likely to offset their carbon footprint than conservatives because they perceive carbon offset contribution to be more impactful.
	Study 3	401 participants from Cloud Research	Given that individuals may use their perceptions of ingroup behavior as an anchor when forming estimates of prevalence, conservatives perceive a lower prevalence of sustainable behavior. Therefore, they underestimate the extent to which their sustainable behavior can positively impact the environment, which in turn is associated with lower intentions to engage in sustainable behaviors.
	Study 4	402 participants from Cloud Research	We replicated the findings of Study 3 by measuring participants' intention to engage a variety of sustainable behavior that actually differ in their environmental impact
	Study 5	505 participants from Cloud Research	When conservatives (or liberals) are indirectly reminded of the prevalence of sustainable behavior among their group members, this strengthens the observed effects and leads conservatives (vs. liberals) to perceive their individual sustainable behaviors as even less (vs. more) impactful
	Study 6	505 participants from cloud research	Increasing conservatives' perception of individual impact can increase their engagement in sustainable behavior.
	Study 7	326 participants from cloud research	Compared to low, high SES consumers perceive their environmental behavior to be more impactful.
	Study 8	800 participants from cloud research	Perceived effort does not impact perceived environmental impact of sustainable behavior.
Project 5: Fairness of economy and sharing economy	Study 1	Secondary data analysis	We demonstrated the link between ESJ beliefs and P2P demand at the country level by analyzing online traffic directed at the most popular P2P (vs. traditional) accommodation platforms (Airbnb, VRBO vs. Booking.com, Hotels.com, Marriott).
	Study 2	421 participants from Prolific Academic	When participants perceive the economic system to be fair, they are more likely to show interest in P2P providers compared to when they perceive the economy unfair.
	Study 3	445 participants from Cloud research	We replicated the results of Study 3 by manipulating consumers' fairness beliefs.
	Study 4	415 participants from Prolific Academic	Consumers' fairness beliefs predict their interest in sharing economy more than other types of beliefs and measures.

4. Results

Level 1: Self - related Factors

Project 1: Recycling Accuracy

In this project, we examine whether different types of recycling information can decrease recycling contamination— putting unrecyclable items in the recycling bin in the hope or wish that it will get recycled. Persuasive information can be framed as prescriptive (i.e., suggestions about what to do) or proscriptive (i.e., suggestions about what not to do; Pavey, Churchill, and Sparks 2022; Sheikh and Janoff-Bulman 2010). Recycling is typically represented as a prescriptive behavior (i.e., one should recycle), and failure to recycle represents a proscriptive behavior (i.e., not recycling is a failure).

In accordance with the theory, we examined three distinct types of persuasive communication signage: prescriptive (e.g., "Recycle these items"), proscriptive (e.g., "Do not recycle these items"), and mixed informational signage (e.g., "Recycle these items; Do not recycle these items"). We incorporated these three forms of informational signage onto recycling bins and then compared them to the standard informational signage (which adheres to the typical recycling procedure and information in the US; see Figure 2).

Figure 2 Project 1 Materials

We conducted four studies to examine how different types of recycling information can impact recycling contamination. These studies are conducted i) at field (i.e., collaboration with Boston Municipality, ii) at the lab settings at Boston College in the USA and iii) at online platforms (Prolific Academic).

Field Study. We conducted a longitudinal field study in collaboration with a local municipality in Boston. During this study, we gathered data on recycling contamination at two specific instances: 1) at the point of implementing signage containing prescriptive information ("Recycle these items"), and 2) several weeks following the signage implementation. The outcomes of this field study indicate that the utilization of prescriptive point-of-disposal signage ("Recycle these items") can lead to an increase in recycling contamination. This finding suggests that the use of such labels is not effective in reducing recycling contamination.

Lab studies. To measure recycling contamination in the lab settings (see Figure 3), participants were presented with various materials, including recyclables (such as paper and cans) and non-recyclables (like black plastic). A cover story (e.g., a candy taste test) was given to participants to prevent them from realizing that their recycling behavior was being observed. Participants were instructed to clear their desks by placing items in the waste bin beneath their desk. The waste bin was labeled "trash," while the recycling bin bore one of four labels (see Figure 2).

Figure 3 An example picture from a lab study

We measured recycling contamination as disposal of the nonrecyclable items in the recycling bin. The results show that when participants were exposed to proscriptive information ("do not recycle these items") or mixed informational signage ("Do not recycle these items; recycle these items"), their recycling contamination decreased compared to when they were exposed to proscriptive ("recycle these items") or standard recycling label (see Figure 4). This happens because messages discouraging recycling are uncommon and are not typically employed (Luttrell et al. 2019), causing proscriptive information (advising against recycling; "Do not recycle these items") to be perceived as unique in comparison to other forms of information that promote recycling. Such unique information contributes to participants' improved understanding of recycling, ultimately leading to a decrease in recycling contamination.
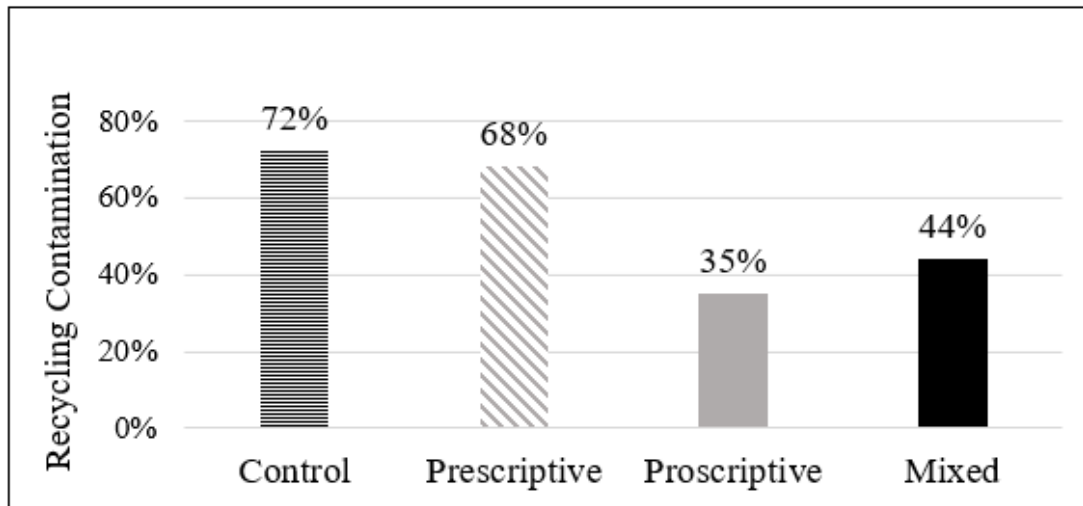
Figure 4 Recycling Contamination Results[1]

[1]Proscriptive signage (Do not recycle these items), Prescriptive signage (recycle these items) Mixed signage (Recycle these items, "Do not recycle these items)

In summary, these findings imply that incorporating proscriptive information ("do not recycle these items") should be more common in order to reduce recycling contamination. The existing practice of employing prescriptive information ("recycle these items") can actually lead to an increase in recycling contamination, resulting in notable social and environmental consequences, while hindering companies' progression towards a circular economy.

Project 2: Repair and Brand Loyalty

We conducted six studies to investigate the correlation between brand loyalty and repair decisions. As an example, one of the studies involved recruiting participants who had bought clothing items from Nike within the last 5 years. Their loyalty to Nike was assessed using a scale from existing literature (e.g., "I am very loyal to Nike"). Subsequently, participants were

exposed to one of these three advertisements (see Figure 5).

Commitment advertisement

Environmental advertisement

Control advertisement

Figure 5 Project 2 -Study 1 Materials

Thereafter, participants imagine that their Nike clothing item was ripped, and they indicated their likelihood to send this clothing item to Nike repair services.

We find that when consumers are loyal to Nike, they are more likely to repair after being exposed to the commitment ad, relative to environmental and control ads. This is because promoting product repair as a commitment to one's product fits with brand-loyal consumers' motivation. Moreover, the difference is not significant between environmental and control, suggesting that highlighting the environmental benefits of repair services does not affect participants' willingness to repair their product. When consumers are not loyal to Nike, the commitment ad actually decreased their willingness to repair compared to the control

advertisement. We replicated these findings across different studies, including a Facebook study in Sweden.

In another example, we conducted a Google ad campaign. We created four campaigns and examined whether our commitment approach can promote brands' repair services more effectively than environmental approach (e.g., highlighting environmental benefits of repair repairs). We wanted to see if loyal consumers to Patagonia would be more likely to click to commitment ad compared to people who are not loyal to Patagonia (non-loyal consumers). The commitment ad featured headlines highlighting commitment (e.g., "Repair is Commitment") and the environmental ad emphasized sustainability ("Repair is Sustainable"). See Figure 6.

We targeted two groups of consumers based on their Google search keywords. Given that brand loyal consumers are more likely to search the brand name, we made sure that the ads appeared when they search for "Patagonia repair" or similar terms with the brand name. The second group (non-loyal) consumers are not loyal to brand, so we showed them the ads when they search for repair without mentioning (Patagonia)

The people who search for "Patagonia repair (or similar terms)" clicked on the commitment-focused ad more than the environment-focused ad. But for those who did not research "Patagonia", there wasn't a difference in how they reacted to the two types of ads. (see Table 2).

In sum, these results suggest that promoting repair behavior as a commitment to products can be more effective than highlighting environmental benefits of repair for brand loyal consumers.
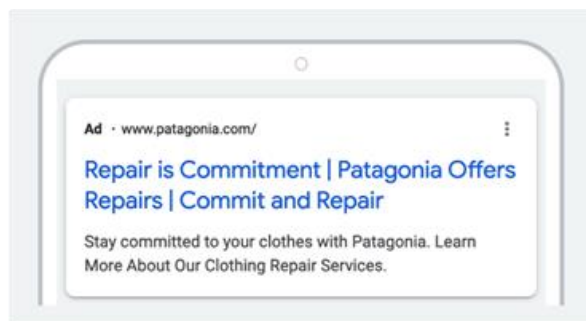
Commitment ad
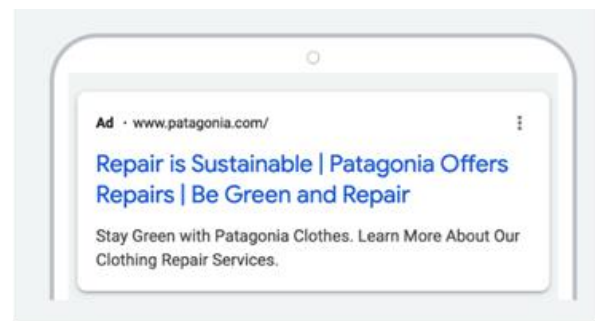
(For desktop search)

Environmental ad

Figure 6 Study 5 Google Ad Campaign Materials

Table 2. Google Ads Campaigns

	Impressions	Clicks	CTR	Average CPC (Cost per click)
Brand-loyal campaign				
Commitment ad	577	185	32.06%	$.19
Environmental ad	1275	287	22.51%	$.54
Non-brand-loyal campaign				
Commitment ad	2736	155	5.67%	$.82
Environmental ad	1212	54	4.46%	$1.13

Level 2: Social Factors

Project 3: Parenting and Sustainable behavior

This project examined whether becoming a parent has any effect on consumers' engagement in sustainable behavior. In this project, we conducted 10 studies in which we recruited parents or manipulated parenting motivation, which is defined as the desire and inspiration to take care of one's children. Existing scholarly works propose that the parenting motivation can be triggered in all adults, irrespective of whether they are parents or not (Li et al., 2019). Specifically, prior literature suggests that through the application of distinct writing tasks and visual stimuli, researchers can evoke parenting motivation within participants, subsequently leading to decision-making processes resembling those of actual parents (Li et al., 2019). In our study, we incorporated this methodology based on prior research.

Based on these findings, to understand whether becoming a parent can affect consumers' engagement in sustainable behavior, in two studies we recruited participants who have recently become parents and compared their engagement in their sustainable behavior to non-parents. In other studies, we manipulated parenting motivation based on prior research to provide causal evidence. Across all studies, we measured sustainable behavior in different ways. For instance, we measure participants' intention to recycle, using reusable products (instead of single use products), and real recycling behavior. After participants made their product choices or indicated their intention to recycle, we measured the extent to which they value efficiency goals on a 7-point scale (1 = not at all, 7 = very much).

The results demonstrate that becoming a parent *decreases* consumers' engagement in sustainable behavior by 6.59% and *increases unsustainable* behaviors (e.g., using single use plastic) by 51%. This happens because parenting motivation increases the importance placed on efficiency goals (i.e., saving time) at the expense of sustainability goals. Given that sustainable behaviors are often more time than unsustainable ones as they typically involve conscious decision-making, resource-efficient practices, and adherence to eco-friendly processes that prioritize long-term benefits over short-term convenience (Whillans and Dunn 2015), parents' focus on time-saving diminishes their involvement in sustainable behaviors (see Figures 7A and 7B).

Nevertheless, parenting does not universally reduce sustainable behaviors across all parents and circumstances. There are certain exceptions.

1)Type of sustainable behavior

While many sustainable behaviors, such as using reusable products and recycling, are more time-consuming than their unsustainable alternatives, retailers have introduced some alternatives—such as a self-cleaning reusable water bottle (Larq 2023)—that are both sustainable and efficient. Based on this, we conducted a study to investigate whether parents would exhibit a greater inclination toward selecting environmentally friendly options when they believe these sustainable options can also offer efficiency benefits.
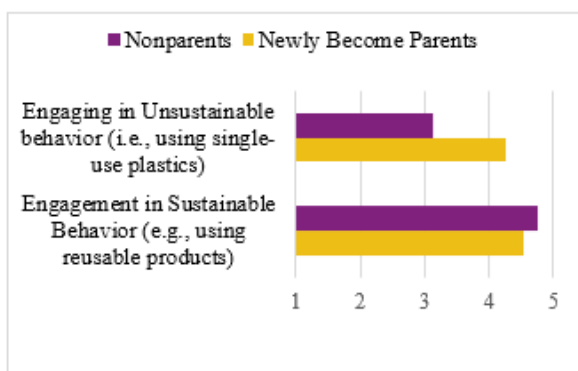

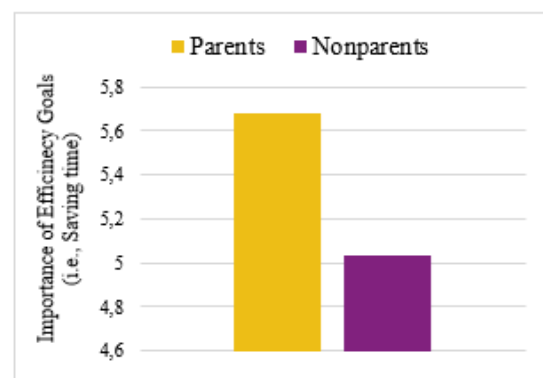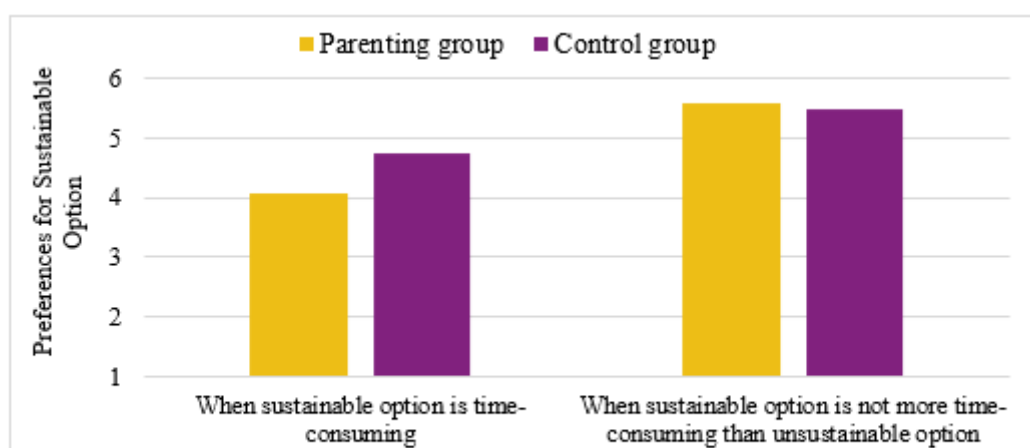
Figure 7A. Experiment 1 Results

Figure 7B. Experiment 5 Results

The findings indicate that parenting motivation led to a decrease in participants' inclination to opt for reusable products. Nevertheless, this influence was not evident when the reusable product's use did not demand more time compared to a single-use counterpart (e.g., a self-cleaning water bottle), suggesting that parenting motivation did not negatively impact consumers' adoption of sustainable practices in such cases. These results imply that parents are more likely to embrace sustainable actions that are time-efficient, like purchasing organic items. However, situations might arise where even time-efficient sustainable behaviors, such as buying organic products, can become time-intensive, as seen when one needs to travel longer distances to access them at farmers' markets. In such scenarios, parenting can decrease sustainable behavior, as highlighted in our study (see Figure 8)
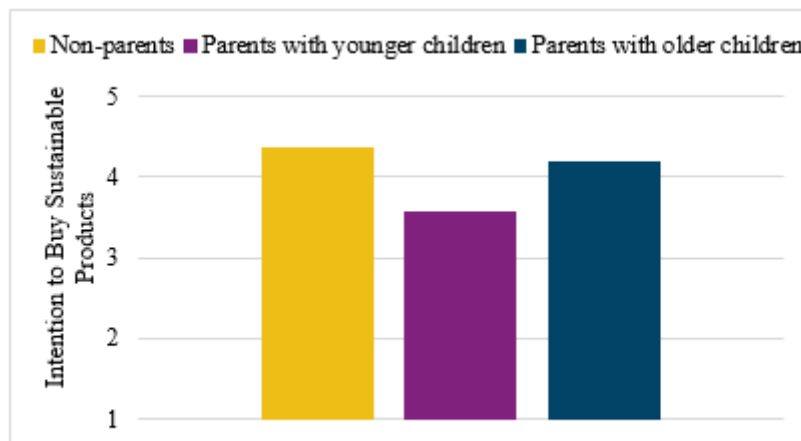

Figure 8. Experiment 6 Results

2)Children's age

Parenting can be particularly time-consuming during the early years of family life, when children are young and require the most care (Craig and Brown 2017; Ngai and Chan 2021), which may render efficiency an even more important goal. Conversely, as children age, they become more independent and require less attention and involvement, attenuating parents' prioritization of efficiency goals. In order to examine whether the relationship between parenting and sustainable behavior depends on children's age, we conducted an experiment. In this experiment, we recruited three groups of consumers i) participants who do not have any children ii) participants who have children born within the last two years iii) participants who have children at college age (18). All participants then completed a writing task, reflecting on their daily routines, how they organize their schedules, and their daily responsibilities. Then we asked participants to imagine that they were shopping for coffee filters, and they had two options: reusable coffee filters or disposable coffee filters. The

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findings reveal that individuals with young children exhibited a higher tendency to favor single-use products when compared to those without children and parents with older children. No significant difference in sustainable behavior engagement was observed between individuals without children and those with college-age children. These outcomes underscore the trend that, as children mature and attain greater independence, parents' emphasis on efficiency diminishes, thereby fostering an elevation in their engagement with sustainable behavior (see Figure 9).

Figure 9. Experiment 7 Results

Project 4: Perceived Impact and Sustainable Behavior

In this project, to understand how individuals' social environment relates to their perceived environmental impact of sustainable behaviors, we relied on consumers' political ideology and their socioeconomic (SES) environment. The rationale for this choice stems from the clear disparities observed between these groups. Notably, conservatives exhibit a lower likelihood of engaging in sustainable behaviors compared to liberals (Kidwell et al. 2013). Consequently, they have fewer interactions with peers who are actively involved in sustainable actions, leading to a perception of sustainable behavior as being less prevalent within their circle. Similarly, individuals with lower socioeconomic status also tend to be less inclined toward adopting sustainable practices (Eom et al. 2018). As a result, they have limited exposure to fellow group members who embrace sustainability, contributing to a similar perception of its low prevalence. By delving into the dynamics of these two distinct groups—namely, liberals versus conservatives and low SES versus high SES—we aimed to gain comprehensive insights into how consumers' social environment, and their perception of the prevalence of sustainable behavior within that environment, significantly influences their own perceptions and attitudes toward sustainable behavior.

In total, we conducted 8 experiments. In each experiment, I measure political ideology in different ways. Thereafter, participants in each experiment imagine

engaging in different types of sustainable behaviors, such as recycling, adopting a plant-based vegetarian diet, avoiding single-use plastic, using energy efficient light bulbs. For each type of behavior, they answered three questions measuring their perception of the impact of sustainable behavior on the environment ("How much of a positive impact on the environment do you think this decision will have?"; "How much of a positive impact on climate change do you think this decision will have?"; "To what extent does this decision reduce your environmental impact?"). Thereafter, they indicated their intention to engage in these sustainable behaviors over the next three months. We also measured their perception of prevalence of sustainable behavior, climate change beliefs, and environmental concerns.

Consistently, the results demonstrate that liberals perceive their engagement in sustainable behavior as having more positive effects compared to conservatives. Consequently, this perception corresponds with their increased participation in sustainable actions. Furthermore, this trend remains consistent when examining participants who hold beliefs in climate change and attribute it to human activities. In other words, regardless of their climate change stances, liberal consumers consistently view their actions as more impactful than conservatives.

Crucially, this discrepancy can be attributed to how they perceive the prevalence of sustainable behavior. The degree to which individuals perceive sustainable behavior to be widespread is significantly influenced by their exposure to peers practicing sustainability. This perception of widespread sustainable behavior plays a pivotal role in shaping individuals' understanding of their own environmental impact. Considering that individuals' perceptions of their behaviors are shaped by their relationship with specific groups, the wider prevalence of sustainable behavior among others leads to the belief that one's own actions contribute positively to the environment. This interplay between perceiving others' sustainable behavior as common and one's own actions as meaningful underscores the intricate dynamics of group and self-relationships (see Figure 10).
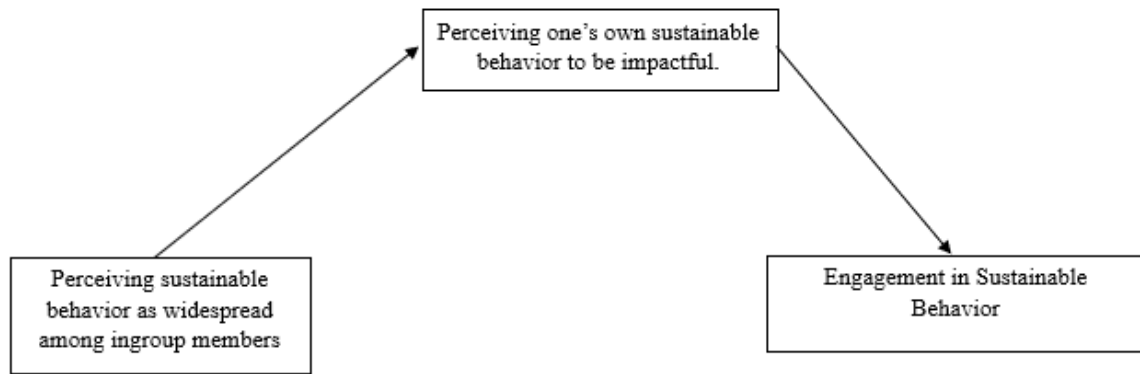
Figure 10. Experiment 3 Results

Moreover, it is worth noting that the perception of impactful sustainable behavior extends beyond just liberals. We also conducted a study aimed at exploring whether people's socioeconomic status influences how they perceive the environmental impact of their sustainable actions. Similar to previous studies, the setup remained consistent, but we introduced an additional element: evaluating participants' socioeconomic status using established scales drawn from existing research. The results reveal that individuals with a higher socioeconomic status perceive their sustainable behaviors as having a more positive environmental impact compared to those with lower socioeconomic status. This distinction in perception can also be attributed to the concept of the perceived prevalence of sustainable behavior. Given that individuals from lower socioeconomic backgrounds are less inclined to adopt sustainable practices, their exposure to fellow group members engaging in such behaviors is limited in comparison to their counterparts from higher socioeconomic backgrounds. Given that addressing complex global issues like climate change requires collective action, as the impact of a single person's sustainable choices is insufficient (Barth, 2021), individuals who perceive sustainable behavior to be less prevalent in their environment hold the belief that their individual sustainable actions exert minimal influence on the environment.

Level 3: System-Related Factors

Project 5: Sharing Economy

Do you think that the economic system is fair? In this project, we find that consumers' answer to this question have implications for your interest in purchasing from peer-to-peer sellers on platforms such as Airbnb. In order to examine this, we conducted four experiments.

Our results show that consumers who believe the economic system to be fair express stronger interest in peer-to-peer sellers than those who believe the economic unfairly distributes economic rewards and punishment. This happens because consumers who believe in the fairness of the economic system perceive peer-to-peer sellers as more entrepreneurial and independent. Interestingly, these beliefs do not influence consumers' interest in traditional commercial sellers, such as established companies.

For example, in one study, we analyzed online traffic on major peer-to-peer accommodation websites (Airbnb and VRBO) and their traditional commercial counterparts (Booking.com, Hotels.com, and Marriott) in over 100 countries (including Sweden). We examined how much of the total online traffic registered on these five websites was directed at the two peer-to-peer

options. The analysis revealed that countries that scored higher (versus lower) in economic system justification (i.e., beliefs about the fairness of the economic system) also registered a higher share of online traffic on peer-to-peer platforms.

Similar results emerged in an online experiment that focused on participants' economic system beliefs and interest in booking the services of a peer-to-peer or a commercial accommodation provider. Participants who scored at the top of the economic system justification scale (e.g., those who strongly believe that the economic system is fair) were up to 32% more likely to book a room from a peer-to-peer seller than participants who scored at the bottom of the scale. However, economic system justification beliefs did not influence participants' interest in the traditional commercial seller (hotel).

In a separate experiment, we nudged participants to view the economic system as fair or unfair by exposing them to a news article that made the case for the system's fairness or unfairness. Participants then indicated their willingness-to-pay for the services of a peer-to-peer or a traditional accommodation provider, and they rated the entrepreneurial spirit of the provider. Reading an article that portrayed the system as

fair (versus unfair) bolstered participants' belief that the peer-to-peer provider is entrepreneurial. This, in turn, translated to participants' 9.6% higher willingness-to-pay for the services of a peer-to-peer provider. Framing the system as fair or unfair in the news article did not influence participants' perceptions of and interest in the commercial provider. An additional study confirmed that these patterns continue to hold when consumers consider the services of peer-to-peer (vs. traditional) home repairs providers, such as TaskRabbit, and that the results are specific to consumers' views of the economic system rather than broader society or political ideology.

These findings indicate that consumers' beliefs about the economic system matter in the marketplace, as consumers align their purchase decisions with their beliefs. With the proliferation of peer-to-peer platforms and sellers, identifying strategies for attracting the right audience can bolster platforms and sellers' outcomes in the competitive marketplace.

5. Implications and practical significance for the retail industry

These consistent findings from various projects carry significant implications for retailers, marketers, and public policymakers. Based on my classification of these six projects, the outcomes indicate that retailers should prioritize three factors: first, consumers' self, implying an increase in consumer knowledge and a recognition that emphasizing environmental benefits might not universally enhance engagement in sustainable behavior. Second, retailers should pay attention to the social context of the target group. For example, if sustainable product sales are low in a specific area, retailers could spotlight the individual impact of sustainable choices on the environment in their advertising. Third, aligning messages with consumers' focal points is crucial. The emphasis that parents place on efficiency objectives (timesaving) holds significant implications for how retailers can reframe messages to heighten parental engagement in sustainable behaviors. Below, I expound upon the specific implications for each project.

Why and How to Increase Recycling Accuracy

Increasing the utilization of recycled materials in production can alleviate the negative environmental impacts of companies' production processes (Meng and Leary 2019), and is one of the fundamental principles of the circular economy (Jahan et al. 2022). The ability of companies to utilize recycled materials is dependent on the quality of those materials, underscoring the importance of well-sorted and contamination-free waste in the recycling process (Rosenboom, Langer, and Traverso 2022). As such, recycling contamination has a negative impact on the transition to a circular economy (Runsewe et al. 2023). Our results suggest that retailers, organizations, and public policymakers should make more frequent use of proscriptive information ('do not recycle these items') to effectively reduce recycling contamination in society. While many organizations promote recycling behavior through prescriptive information ('recycle these items'), our findings indicate that these types of messages lead consumers to place non-recyclable items in the recycling bin with the hope that they will be recycled. In this context, unique messages advising against the recycling of specific items can enhance consumer understanding. Such messages can assist policymakers, the waste management industry, and retailers in purifying recycling streams and facilitating their transition to a circular economy.

Increasing consumers' engagement in repair behavior instead of replacement

In the marketplace, many brands have initiated repair services (e.g., H&M, Patagonia, Levi's), and these services are

anticipated to become more prevalent due to the fashion industry's adverse environmental impact. However, the question remains: how can these organizations effectively promote their repair services? We scrutinized 59 online campaigns aimed at encouraging consumers to repair their products. Among these, 46% positioned repair behavior as an environmental gesture, 23% emphasized the social advantages of repair behavior (e.g., 'independent shops keep repair fair'; iFixit 2023), and only 5% accentuated consumers' connection with their products. When we conducted interviews with managers, they also indicated that an environmental approach (i.e., highlighting the environmental benefits of repair) is the most efficacious method to encourage consumer engagement in repair practices. Nevertheless, our findings demonstrate that the environmental approach is ineffective for consumers who exhibit brand loyalty. For brand-committed consumers, promoting repair behavior as a sign of product commitment (e.g., 'Stay committed to your products') is more effective than an environmental approach.

Brand loyalty is a commonly employed segmentation criterion, identifiable through behaviors such as repeat purchases, loyalty program membership, or mobile app usage. Consequently, brands can readily distinguish between loyal and non-loyal consumers, tailoring distinct messaging for these segments. For instance, loyal consumers are likely to interact with a brand more frequently through mobile apps than websites. Hence, our findings suggest that brands offering product repair services could

present their services as a means for consumers to express commitment to branded products within the app (targeting loyal consumers). For non-loyal consumers, repair behavior could be promoted as an environmental action or a cost-saving measure.

Becoming a Parent and Sustainable behavior

We recruited 100 participants who are currently not parents and asked them whether they would be more or less likely to engage in sustainable behavior when or if they become parents. The results show that nonparents predict that their engagement in sustainable behavior would increase upon becoming parents, as parents might consider future generations more, prompting them to make more sustainable choices. However, our results contradict this intuition. Upon becoming parents, individuals are less inclined to engage in sustainable behavior due to an emphasis on efficiency goals (i.e., timesaving). We also demonstrate that this is not universally applicable to all parents or under all circumstances. When parents perceive that engaging in sustainable behavior would not require extra time, we do not observe this negative relationship between parenthood and sustainable choices. Furthermore, as children age, we no longer observe this negative relationship; instead, parents' engagement in sustainable behavior increases compared to when their children were young.

But what strategies can retailers adopt to enhance new parents' engagement in sustainable behavior? Previous research indicates that individuals are more likely

to respond to messages aligned with their goals and objectives (Joyal-Desmarais et al. 2022). Presenting sustainable alternatives as pathways to achieve efficiency objectives can resonate with parents' preference for efficiency and counteract the negative influence of parenting on sustainable behaviors. To explore this concept, we conducted an experiment. One group of participants was exposed to a reusable product within a context that highlighted its potential to enhance efficiency (e.g., emphasizing how reusable mugs can help save time in coffee shop lines), while the other group was introduced to the reusable product without such information. The findings reveal that when sustainable options were not presented as efficient alternatives, parenting led to reduced engagement in sustainable behaviors among consumers. However, when sustainable options were positioned as efficient choices, parenting did not impact consumers' engagement in sustainable behavior. In other words, presenting sustainable options in a manner that aids consumers in saving time (e.g., 'reduce your food waste, save time') enhances parents' intent to engage in sustainable behavior. These outcomes carry substantial implications, given that parents constitute a significant consumer segment in the marketplace.

Perceived Environmental Impact and Sustainable Choices

Our results reveal that when consumers perceive sustainable behavior as uncommon within their social environment, they also perceive their own
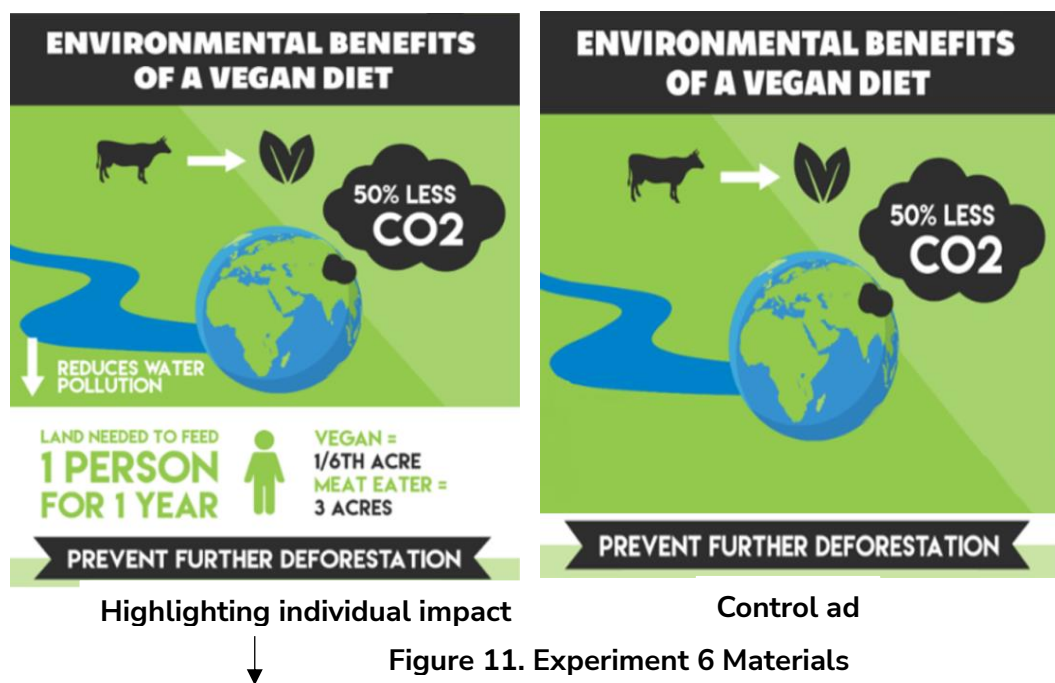
sustainable behavior to have lesser impact, consequently leading to reduced engagement in sustainable practices. An implication of these findings is that conventional methods to motivate sustainable behavior (e.g., 'If everyone in the United States washed their clothes with cold water instead of hot, we would save around 30 million tons of CO_2 per year') may be ineffective if individuals do not observe others adopting sustainable practices in their social surroundings. Instead, highlighting the individual impact achievable through sustainable behavior becomes crucial in such scenarios. To examine whether presenting potential positive impact on environment have any bearing on consumers' involvement in sustainable behavior, we carried out two experiments. During these experiments, we presented participants with an advertisement highlighting the substantial contrast in land usage between a meat eater, requiring 3 acres per year, and an individual following a vegan diet, necessitating only 1/6 acre. For the second group of participants, this specific advertisement was not shown. After being exposed to this ad, participants were instructed to imagine themselves in a restaurant scenario where they encountered an advertisement for a plant-based burger on the menu. Subsequently, they were asked to indicate their likelihood of purchasing the plant-based burger.

The findings indicate that individuals who view sustainable behavior as less common within their surroundings— specifically, conservatives and consumers with lower socioeconomic status—are

more inclined to opt for the plant-based choice when we emphasized the individual effect of sustainable behavior, as opposed to when we did not emphasize it. In cases where the perception of sustainable behavior's prevalence is high, there was no observable difference in results between the two conditions. (see Figure 11).

These results suggest that if retailers observe that the demand for sustainable products is not high in specific areas should highlight potential positive impact of an individuals' engagement in sustainable behavior. For instance, they can highlight the extent to which CO2 savings can occur for every sustainable product purchase. These types of messages can motivate consumers when they think sustainable behavior is not common in their surroundings.

Highlighting individual impact **Control ad**

Figure 11. Experiment 6 Materials

Increases intention to sustainable

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Increasing Participation in the Sharing Economy

Our results show that consumers who believe the economic system to be fair express stronger interest in peer-to-peer sellers than those who believe the economic unfairly distributes economic rewards and punishment. This happens because consumers who believe in the fairness of the economic system perceive peer-to-peer sellers as more entrepreneurial and independent. Interestingly, these beliefs do not influence consumers' interest in traditional commercial sellers, such as established companies.

These results suggest that sharing economy platform should look to segments that justify the economic system to bolster outcomes. How can such segments be identified and targeted? With the proliferation of big data analytics, inferring individuals' beliefs and preferences has never been more feasible, faster, or more efficient. One suggestion is to track segments' (states', cities', or neighborhoods') voting behavior for various economic policies to infer their

beliefs about economic fairness. Another is to target programs and channels such as Draknästet, which naturally attract audiences that believe in the fairness of the economic system and markets. A final suggestion is to use brand stories to highlight the entrepreneurial spirit of peer-to-peer and traditional sellers; this can attract consumers who perceive the economic system to be fair who naturally value entrepreneurial qualities in their exchange partners.

In situations where consumer trust in the economic system is lacking, companies have the opportunity to emphasize various advantages of sharing economy platforms, such as environmental benefits or cost savings.

Overall, these findings indicate that enhancing consumer awareness through distinct informational messages, aligning messages with consumer motivations and objectives, and showcasing the potential positive outcomes of individual participation in sustainable behavior can effectively encourage consumers to adopt sustainable practices, thus mitigating the detrimental environmental effects of consumption.

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