

Živilė Kaminskienė

Consumer Judgment and Decision Making in the Sustainability-related Domain: Drivers Fostering Efficient Change

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Živilė Kaminskienė

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Supervisor: Prof. Dr. Justina Baršytė (ISM University of Management and Economics, Social Sciences, Management – S 003).

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KEY DEFINITIONS

Sustainable consumption – consumption with the aim to preserve our planet, people, and economic resources (World Commission on Environment and Development, 1987).

Circular consumption – the acquisition and consumption of products transformed by repairing, reconditioning, refurbishing, remanufacturing, or recycling (Ellen MacArthur Foundation, 2013; European Parliament, 2022).

Meaning in life – a subjective feeling state constituted of such central components as (1) felt significance, (2) purpose, and (3) coherence (Heintzelman & King, 2014; King et al., 2006; Martela & Steger, 2016; Park & George, 2016). Meaning in life has two dimensions: (1) the presence of meaning in life that refers to individuals feeling his/her life as meaningful, and (2) searching for meaning in life that has been defined as the drive to find meaning in one's life (Steger et al., 2006).

Meaning threat – “experiences that are inconsistent with the expectations that follow from our understandings“ (Proulx & Inzlicht, 2012). Meaning threat results in a sense of lost meaning.

Dispositional greed – “a selfish motivation to acquire an unfairly excessive amount of a resource at the expense of others” (Cardella et al., 2019). Greed is probably the most prototypical extrinsic motivational drive. Prior research has shown that greed is associated with an irrational extrinsic aim to acquire more and more (Seuntjens et al., 2015a; Seuntjens et al. 2015b; Krekels & Pandelaere, 2015), not only material goods, but they also strive for power, status (Seuntjens et al., 2015a; Seuntjens et al., 2019), or influence (Jett, 2000).

Openness to experience refers to intellectual openness and flexibility (Goldberg, 2013; Matzler et al., 2006; Markowitz et al., 2012), rich, abstract thinking, and an appreciation for variety and unusual experiences (Brick & Lewis, 2016). People who tend to be high in the trait of openness are curious, thoughtful, creative, and enjoy novelty and trying new ideas (Shen et al., 2019; Hirsh & Dolderman, 2007). They undertake new actions, very often involving uncertainty (Busic-Sontic et al., 2017).

Sadness - “an emotional state of unhappiness, ranging in intensity from mild to extreme and usually aroused by the loss of something that is highly valued” (American Psychological Association, 2018).

Origin cue of circular product – informational cue about the origin of the material that was used for the production of the circular product. This material is a significant part of a new circular product.

Acquisition centrality – a factor of the materialism construct, reflecting “how much possessions and acquisitions are placed in the center of one’s life” (Richins & Dawson, 1992).

INTRODUCTION¹

The relevance of the research. Prior literature provides evidence that consumers' responsible consumption – consumption that considers environmental, economic, social, and health dimensions – is complex and can be affected by multiple psychological factors (Gifford, 2014; Van Vugt, 2009; Zaval et al., 2015). Many studies have demonstrated that different types of responsible consumption are driven by environmental concerns. For example, environmental concern was found to predict ecologically conscious consumer behavior (e.g., Yarimoglu & Binboga, 2019; Kinnear & Taylor, 1973; Roberts & Bacon, 1997; Roberts, 1996; Straughan & Roberts, 1999) and green purchases (e.g., Albayrak et al., 2013; Bamberg, 2003; Park & Lin, 2020). Also, environmental concern was positively linked to socially responsible consumption behavior (e.g., Antil, 1984; Hosta & Zabkar, 2021). Yet, some more recent studies failed to find a link between environmental concerns and responsible behavior, indicating that more psychological mechanisms are responsible for consumer judgment and decision-making. For example, green awareness does not always predict the purchase intention of remanufactured products (Singhal et al., 2019), and the environmental benefits of refurbished products do not play a primary role in purchase decisions (van Weelden et al., 2016). In addition, some research shows that environmental concerns do not solely drive responsible behavior but can be guided by personally and socially driven motivations. For instance, one study found that it is not environmental concerns but a direct benefit to the consumer that drives the willingness to pay for products with socially responsible labels (Tully & Winer, 2014). Other studies confirmed that consumers tend to select sustainable options to convey social status conspicuously or to impress others (Green & Peloza, 2014; Griskevicius et al., 2010). Self-interest motives and self-benefits frequently drive pro-environmental behaviors (Griskevicius et al., 2012; White et al., 2019).

¹ This chapter is based on:

Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

These findings suggest that the category of responsible consumption may be too broad to meaningfully and univocally be associated with diverse drivers. Following the logic of domain specificity, different types of responsible consumption may be influenced by various traits. To date, only a few studies have simultaneously addressed the preferences for different types of responsible products and their underlying drivers (e.g., Hosta & Zabkar, 2021; Tully & Winer, 2014). Yet, there are multiple reasons to expect that different types of responsible consumption are associated with different and even divergent motivators. I use sustainable and circular brands as a case in point. I acknowledge that sustainable consumption and circular consumption show considerable overlap. Yet, I argue that sustainable consumption is a psychologically different type of consumption than circular consumption, thus, the underlying traits and judgment and decision-making may also differ. Specifically, sustainable consumption brings many social benefits by providing access to basic services, green and decent jobs, and a better quality of life for everyone, contributing to the reduction of economic, environmental, and social costs in the future, strengthening economic competitiveness, and alleviating poverty (Ritchie & Mispy, 2018). Meanwhile, circular consumption has a narrower resource conservation aim and involves “sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible,” so the life cycle of products would be extended (EP, 2022; see also Geissdoerfer et al., 2017). In some cases, products are considered to be sustainable, although they are produced not according to circularity principles, e.g., greater sustainability in producing red meat may be achieved by introducing sustainable practices increasing eco-efficiency (e.g., changing animals’ diet, so it would be of higher-energy, grain-based which in turn leads to lower methane emissions) or ensuring gender equality, worker safety, etc. A circular approach, on the other hand, would focus on creating a meat substitute from plants, ensuring losses of materials prevention. Furthermore, even though sometimes circular products are considered to be a form of sustainable consumption, efforts to achieve circularity do not always guarantee sustainable results. A recent study pointed out that circular products may also be unsustainable, e.g., when producing products from harmful secondary materials such as polymers that incorporate hazardous additives (Blum et al., 2020).

This dissertation aims to address the questions related to drivers fostering efficient change in the sustainable consumption domain. For this aim, this work focuses on three levels: (1) analyzes sustainable and circular consumption simultaneously, then (2) delves deeper into consumer judgment and decision-making regarding sustainable products and, lastly, (3) into consumer judgment and decision-making regarding circular products.

First, this dissertation aims to expand knowledge by highlighting the role of specific underlying traits that possibly drive sustainable and circular consumption in different ways. In this research, I argue that the differences in the scope of aim and different features of sustainable and circular products are linked to different individual orientations and, therefore, will be driven by different traits. These questions are investigated in the first study.

Moreover, the second set of questions of this dissertation is related to consumer judgment and decision-making regarding sustainable products. More particularly, this dissertation aims to explain the underlying mechanism of the negative emotion of sadness. Emotions influence what we think and how we do it – our attention, perception, memory, physiological state, mood, as well as our goals and behaviors (Cosmides & Tooby, 2000). As such, emotions facilitate adaptation to the environment and serve important psychological functions (Salerno et al., 2014). Emotions help us understand goals, solve problems, protect our health, strengthen resilience, create an attachment to other people, and guide the behavior of groups, social systems, and nations (Pekrun et al., 2002). Research has mostly addressed the bright side of positive emotions and has shown that positive emotions expand a person's cognitive domain and thus nurture personal resources (Fredrickson, 2013). Furthermore, positive emotions can provide long-term benefits in important areas, including work, physical health, and relationships (Armenta et al., 2017). However, another stream of studies provides evidence that negative emotions can also serve a positive function and have a motivating effect (Forgas, 2013), leading to more cautious, calculated behavior (Tan & Forgas, 2010), indicating a need to take concrete action to deal with the situation in accordance with existing social norms (Tan & Forgas, 2010). For instance, a sense of guilt is a negative feeling people experience when they reflect on past behaviors and realize that their behavior does not fit their personal goals, norms, or standards (Baumeister & Leary, 1995; Tangney & Dearing, 2002). Studies show that guilt activates the desire to deal with this stressful situation by correcting past

behaviors and situations (Lazarus & Folkman, 1984; Skinner & Brewer, 2002). In this specific case, a sense of guilt activates focus on a problem – people try to improve their environment and their well-being (Antonetti & Maklan, 2014; Lazarus, 1993). Research on regret focuses primarily on reducing probable regret through conventional means (Inman & Zeelenberg, 2002). Fear motivates preventively caring for health (Consedine et al., 2004), and improves driver safety (Lewis et al., 2007). Interestingly, prior research suggests that in some cases, negative rather than positive emotions can be more effective (e.g., changing target behavior when emotions and moods are not only destructive but also constructive; Shuman et al., 2018). If sadness can offer new ways to acquire meaning in the consumption domain, such meaning can be obtained by making more sustainable choices. Recent research, indeed, shows that sadness evoked by reminders of social norms can lead to more sustainable behaviors, such as using an energy footprint calculator or donating larger sums for specific environment-related projects (Schwartz Perloff & Loewenstein, 2017). I argue that meaning threats will increase sadness, which, in turn, will act as a mechanism for restoring the desired state by experiencing a greater desire to purchase sustainable products. To test this notion, I employ the second set of four experimental studies (Study 2, Study 3, Study 4, and Study 5).

Lastly, the third set of questions aims to investigate consumer judgment and decision-making regarding circular products. Prior research on circular decision-making has primarily focused on the seller's side, for example, how consumers give away or sell used goods to other consumers (e.g., Brough & Isaac, 2012; Donnelly et al., 2017); how they part with identity-linked products (e.g., Trudel et al., 2016); how different traits, norms or convenience drive recycling intentions (e.g., Ebreo & Vining, 2001; Goldstein et al., 2008; McCarty & Shrum, 2001). While understanding why people recycle is important, it provides only part of the whole picture explaining circular choices. This dissertation argues that it is equally important to gain a deeper understanding of why and when already recycled (used or remodeled) goods are acquired and how to increase the *demand* for these goods. If, in general, demand is driven by the value of a good, how is this value of used or remodeled goods perceived? First intuition suggests that, because of previous usage by others, used or remodeled goods should be seen as having a lower intrinsic value in comparison to regular goods. Yet, the contrary is also possible – under certain conditions, the intrinsic subjective

value of used or remodeled goods may be increased because of unique properties that are only present for such goods. In contrast to new goods, used or remodeled goods may possess characteristics that can be reflected in informational stimuli signaling *the origin* of the good connected to a certain place. In this dissertation it is proposed that such origin cues represent a neglected yet powerful driver of consumer behavior – simply knowing the origin may change the subjective intrinsic value of used or remodeled goods. The current project seeks to advance theoretical knowledge and understanding by identifying the novel psychological mechanisms that determine how and under what conditions origin cues help the appeal of used or remodeled goods and so may drive the success of circular consumption. Therefore, the last set of experimental studies (Study 6, Study 7, and Study 8) addresses these questions.

The gaps in the research area. While previous research shows the importance of understanding traits towards responsible consumption in general, currently available insights are limited, as previous studies do not examine whether traits differ for different types of responsible consumption at once. Previous work has suggested that underlying traits are the same for circular and sustainable choices. Only recently it was pointed out that specific characteristics of circular products distinguish them from sustainable ones and that these two types of responsible consumption should be considered distinct categories; therefore, drivers also can vary (Pretner et al., 2021). However, to date, no research has tested whether certain traits predict sustainable and circular consumption similarly in one dataset. Moreover, previous research focused on measuring intentions, and research has documented that on the surface, consumers may feel positive and intend to buy sustainable brands but do not follow up when it comes to actually buying such brands (e.g., White et al., 2019). In this dissertation, I aim to grasp actual consumption by measuring ownership of sustainable and circular brands.

Next, previous research has investigated such constructs as meaning in life, openness to experience, and dispositional greed, however, the research was performed not in the sustainability-related domain, or the findings are mixed. Further, prior research has dedicated a lot of attention to how various positive and negative emotions affect behavior. However, the role of negative emotion of sadness remains poorly understood as previous findings are mixed, and the relationship between meaning threats and sustainable consumption has not been studied at all.

Further, to date, a mere handful of studies have examined perceptions of single, particular exemplars of circular products: recycled and upcycled products (Kamleitner et al., 2019), re-used products (Hazen et al., 2017); remanufactured products (Guide Jr. & Li, 2010; Michaud & Llerena, 2010), refurbished products (Harms & Linton, 2016; van Weelden et al., 2016). Moreover, the research so far has been overwhelmingly descriptive: merely documenting mostly negative outcome variables such as consumer avoidance. For instance, several studies suggest that people avoid buying reused products (Hazen et al., 2017) and tend to pay less for products that are remanufactured or refurbished (Abbey et al., 2015; Harms & Linton, 2016; Michaud & Llerena, 2011). Previous findings explaining underlying reasons and boundary conditions for circular consumption show that consumers are concerned about the quality and reliability of reused goods (Bundgaard & Huulgaard, 2019; Harms & Linton, 2016). Environmentally sustainable and remanufactured products are often rejected because of an association with perceived higher risks (van Weelden et al., 2016) or disgust caused by physical contact with a previous owner (Abbey et al., 2015). Yet, a clear understanding of what antecedents predict and proactively drive circular consumption is missing from the scientific literature.

Research problem: (a) a lack of understanding of how different traits are related to different forms of responsible consumption, i.e., consumer judgment and decision-making regarding sustainable and circular brands; (b) a lack of knowledge of how the negative emotion of sadness elicited from experienced meaning threat affects consumers' decisions in the sustainability domain; and (c) a lack of knowledge of why and under what conditions consumers make positive decisions regarding circular products when origin cues of such products are present (vs. absent).

This research aims (1) to test how the same traits are related to ownership of sustainable and circular products; (2) to analyze whether meaning threat causes the emotion of sadness and how sadness affects willingness to consume sustainably; and (3) to investigate the role of origin cues in steering consumer decision making regarding circular products. More precisely, to research what spill-over effect the presence of origin cues (versus absence) has, how it affects the desirability of circular products, and what boundary conditions are.

Research objectives:

- To analyze the academic literature on sustainable decision-making.

- To analyze the academic literature on different orientations such as collective benefitting, self-benefitting, and cognitive flexibility, how they correspond to such motivational traits as meaning in life, dispositional greed, and openness to experience, and what relationships they might have with sustainable and circular consumption.
- To analyze the relationships between meaning threats, sadness, and sustainable consumption.
- To analyze the relationships between origin cues and perceived monetary value, connection with the sense of self, desirability for circular products, and acquisition centrality.
- To develop the methodology for testing the proposed hypotheses.
- To perform the empirical research and analyze the obtained data.
- To compare the findings of conducted empirical research to the ones of existing research in the field.
- To provide managerial implications, indicate research limitations and implications for future research.

Scientific contribution. This dissertation contributes to the existing scientific literature as it provides a refined conceptualization of sustainable and circular consumption by exploring their overlapping and distinct aspects. This work also shows that sustainable and circular consumption may be influenced by different traits in diverging ways. Drawing on the Trait Activation Theoretical framework, I suggest that sustainable and circular consumption types signal different features that correspond to distinct traits. Next, this dissertation deepens the understanding of the complexity of different traits in predicting sustainable and circular consumption, highlighting their nuanced effects on different consumption types. Further, previous research has documented the intentions-behavior gap – that is, consumers may report positive intentions toward responsible consumption but do not follow up when it comes to actually buying responsible brands (e.g., White et al., 2019). Therefore, in this research, I focus on studying ownership of brands, defined as “the state or fact of owning something” (Cambridge University Press, n.d.a), and thus contribute to prior work providing a thorough picture of responsible consumption².

² Note that ownership is a prerequisite of consumption that is a broader term encompassing all behavioral outcomes linked to “the process of buying and using goods, or the amount that is bought and used” (Cambridge University Press, n.d.b).

This dissertation also expands knowledge about the negative emotion of sadness and shows its previously not studied motivational role towards responsible behavior, i.e., sustainable consumption. Although one stream of the literature highlights the directing role of sadness towards compensatory consumption, which brings negative consequences (e.g., Allard & White, 2015), this work shows that such frequently felt emotion, in some cases, can actively direct people to positive behavior, i.e., sustainable consumption. Further, prior studies researching how people cope with meaning threats have indicated many ways to reinstate the sense of life being full of meaning. However, to my best knowledge, this research is the first one showing the link between meaning threats and sustainable consumption.

Moreover, this dissertation advances theoretical knowledge by identifying the psychological mechanisms that determine how and under what conditions origin cues help the appeal of used or remodeled goods and so may drive the success of circular consumption. This is one of the first works to explore how to increase the demand for remodeled or used goods by exploring their intrinsic characteristics as a resource, increasing the value of the good (for an exception, see Kamleitner et al., 2019). Contrary to the large stream of previous studies, this research shows that consumers can desire more used or remodeled goods when certain aspects inherent in such goods are highlighted (i.e., origin). Next, this current research provides evidence that used or remodeled goods have the potential to have higher subjective intrinsic value compared to new goods. Moreover, research findings add to the literature on circular consumption by showing that origin cues drive the subjective intrinsic value of used or remodeled goods via the underlying mechanism of connection with the self – a mediator that has not been researched in the context of circular choices. As well, provides evidence on the novel boundary condition as the documented effects are particularly present for consumers who are centered on the relationships and the surrounding context but not on acquisitions themselves – people scoring lower on the acquisition centrality. Overall, the results of this dissertation contribute to a better understanding of how to boost circular consumption and increase the demand for used or remodeled goods by highlighting certain aspects inherent in such goods.

Relevance to practice. The findings of this dissertation may help to address actual social and economic problems that sustainable and circular consumption address (e.g., improving quality of life, strengthening health, safety, diversity, human

rights, equitable labor practices, reducing waste, and benefiting the environment in other ways, etc.). Indeed, consumers are considered to play a central role in sustainable development as they determine the demand for sustainable production (OECD, 2008); thus, understanding how to encourage people to consume sustainably and circularly is of utmost importance. The findings of the current work provide insights on how to boost the demand for sustainable and circular products, a deeper understanding of how to target consumers, how to develop effective communication and education programs, give general guidelines on how to encourage people to make better choices. Most importantly, the results show that not always the same tactics can be effective when encouraging sustainable and circular consumption, and an individual approach to these consumption forms is needed. Such insights are relevant for policy-makers, as well as public and private organizations aiming to shift consumption towards more sustainable and circular.

Research methodology. To test the hypothesis raised in this dissertation, two different quantitative research methods were employed. For the first set of questions, which aimed to research both sustainable and circular consumption in one dataset, a survey was conducted, and structural equation modeling as the main statistical analysis method for the data of this study was applied. Such analysis was chosen as it allows the examination of complex relationships by simultaneously rigorous assessment of measurement validity (Beran & Violato, 2010). Further, for testing hypotheses addressed to explain underlying mechanisms for sustainable and circular consumption separately, researching the causality was a necessity; thus, experiments were conducted. This research method is the major one for making causal inferences (Cook et al., 2002). In sum, eight studies were carried out in order to address research questions: one survey and seven between-subjects design experiments. All studies were conducted online using the professional research platform Prolific Academic, where 2254 British citizens were recruited in return for a small monetary reward. Studies addressed both ownership of sustainable and circular brands and intentions to consume sustainable and circular products. Also, various product categories were tested.

Limitations of the dissertation and directions for future research. While the data of the first survey offers highly externally valid findings for indicating diverging effects of distinct traits on ownership of sustainable and circular brands, future research might consider isolating and testing underlying effects using experimental

design in more controlled lab settings and also investigate boundary conditions. Further, future studies could also estimate the generalizability of the findings and test other forms of sustainable and circular consumption (e.g., collaborative consumption) or highlight other benefits of the products. Also, to test propositions in other contexts, e.g., with vulnerable, resilient, and hesitant regarding the transition to more sustainable consumption consumers. Moreover, future studies could also provide more insights into the underlying mechanism of effects, adding parallel mediators and expanding knowledge about other boundary conditions for proposed models. As well, field studies could observe actual consumer behavior in real-life settings.

The structure of the dissertation. This dissertation consists of seven main chapters. In the first chapter, an overview of sustainable decision-making literature is provided. In this chapter, sustainable and circular consumption are conceptualized, and then the drivers of these two consumption forms are analyzed. Further, the second chapter aims to review the literature and develop research hypotheses related to the diverging effects of distinct traits on sustainable and circular decision-making. As the second chapter discusses the role of traits in sustainable and circular consumption and provides the theoretical framework for the activation of different traits in encounters with different products, the third and fourth chapters are dedicated to separate research of these two responsible consumption forms. More precisely, the third chapter is dedicated to reviewing the literature and developing research hypotheses for meaning threats, the mediating role of sadness, and sustainable decision-making, and the fourth to the importance of origin cues in the circular consumption domain. Further, the fifth part of this dissertation describes the research methodology applied. Also, this chapter presents the findings of empirical research conducted, including hypothesis testing. The sixth chapter represents the general discussion of the dissertation and provides a representation of the findings, scientific contribution, theoretical and managerial implications, limitations, and future research directions. Lastly, the seventh chapter presents the main conclusions of this dissertation.

PUBLICATION OF DISSERTATION RESULTS AND CONFERENCE PRESENTATIONS

Peer-reviewed publications:

1. Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.
2. Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.
3. Uzdavinyte, E., Barsyte, J., & Kaminskiene, Z. (2023). It's the smallness that counts: Consumer preferences for small versus large companies' products. *Psychology & Marketing*, 40(12), 2576-2587.
4. Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.
5. Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., Fennis, B. & Dewitte, S (2021). Fixing our Reflected Failure: In-group Underachieving Promotes Healthy Consumer Decision-Making. Proceedings of the European Marketing Academy, 50th, (93917).

Conference and scientific events presentations:

1. Kaminskiene, Z., Baršytė, J. (2022). Intrinsic vs. Extrinsic Motivational Traits Driving Responsible Consumer Behavior. *EMAC Regional Conference*.
2. Kaminskiene, Z.; Baršytė, J. (2021). Meaning Threats, Mediating Role of Sadness and Sustainable Decision Making. *EMAC online Doctoral Colloquium*.
3. Barsyte, J.; Kaminskiene, Z., Dewitte, S. (2024). Boosting Circular Consumption: Origin Cues Drive the Subjective Intrinsic Value of Used or Remodeled Goods. *2024 AMA Winter Academic Conference*.

1. OVERVIEW OF SUSTAINABLE DECISION-MAKING LITERATURE

1.1. Conceptualization of sustainable and circular consumption³

Prior research still lacks a comprehensive and unified conceptualization of sustainable consumption (Giulio et al., 2014; see also Haider et al., 2022 for the review of different definitions of sustainable consumption). A significant number of studies defines sustainable consumption exclusively from the environmental perspective; however, the majority of research uses an integrated perspective, framing sustainable consumption with environmental and socio-economic impacts (Fischer et al., 2021) using the seminal definition of Brundtland Commission (1987) that considers three interconnected pillars of sustainability: environment, economy, and society. Accordingly, sustainable consumption is defined as consumption with the aim of preserving our planet, people, and economic resources (World Commission on Environment and Development, 1987). When it comes to conceptually linking sustainable consumption definitions with actual products consumed, prior research has provided suggestions that sustainable products incorporate a range of features focused on reducing resource consumption, enhancing product longevity, and promoting ethical practices. For instance, consumption might entail choosing products produced using environmentally friendly materials (e.g., recycled, upcycles, biodegradable, renewable, organic, etc.) and resources efficiently (e.g., efficient use of water, energy, materials, using renewable energy sources and energy-efficient technologies, minimizing greenhouse gas emissions, offsetting carbon, etc.), sourced ethically and responsibly (e.g., fair-trade, local, ensuring fair labor, animal welfare), non-toxic and safe, oriented to biodiversity and ecosystem health, designed with a focus on quality, durability, and longevity (e.g., possibility to repair, easily replace or upgrade separate parts of the good), reducing waste (e.g., zero or minimal, eco-friendly packaging, compostability, recyclability, take-back programs, etc.), be socially responsible (e.g., support for communities, community engagement and education, ensuring transparency, etc.), etc. Innovative approaches are very important for

³ This chapter is based on: Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*) The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

sustainable product design and creating cutting-edge, lower environmental impact-making materials (e.g., plant-based plastics, lab-grown materials), etc.

Similarly, prior work has not reached a unified conceptualization of circular consumption. Circular consumption is considered to be a form of sustainable consumption as it supports the broader goals of sustainability by focusing on reducing resource use, extending the lifecycle of products, and reducing waste (Geissdoerfer et al., 2017). Circular consumption is defined as the acquisition and consumption of products transformed by repairing, reconditioning, refurbishing, remanufacturing, or recycling (Ellen MacArthur Foundation, 2013; European Parliament, 2022). When it comes to conceptually linking circular consumption definitions with actual products consumed, prior research has provided suggestions that circular products are produced to maintain the materials in the closed-loop system for as long as possible rather than being disposed of after use (Kirchherr et al., 2017). Such an approach contributes to minimizing waste and extraction of new resources, thus reducing consumption's environmental footprint.

At first sight, sustainable consumption and circular consumption definitions might show considerable conceptual overlap. They both focus on minimizing environmental impact, emphasizing efficient use of resources, avoiding waste, and preserving resources for future generations. However, I argue that despite sharing several common goals, sustainable consumption and circular consumption differ in their (1) scope, (2) focus, and (3) orientation. First, sustainable consumption and circular consumption differ in scope. Sustainable consumption is focused on a broader scope as it brings many social benefits by providing access to basic services, green and decent jobs, and a better quality of life for everyone, contributing to the reduction of economic, environmental, and social costs in the future, strengthening economic competitiveness, and alleviating poverty (Ritchie & Mispy, 2018). Thus, sustainable consumption is frequently motivated by a wide range of factors, including the social and economic impacts of their purchases, in addition to environmental concerns (Carrington et al., 2010; Tanner & Wölfing Kast, 2003; Shaw & Shiu, 2002; White et al., 2019). In contrast, circular consumption is narrowly focused as the primary nature of circular consumption is resource-centric, meaning it aims to keep resources in circulation for as long as possible (Ghisellini et al., 2016; Stahel, 2016). Although resource centrality sometimes results in broader ethical and social implications, the main goal of circular consumption still is centered around resource conservation and

consuming less. Second, sustainable consumption and circular consumption differ in focus. Sustainable consumption is a more abstract, intangible consumer behavior that results from broader lifestyle changes (e.g., buying less but of higher quality or supporting sustainable brands; Lorek & Fuchs, 2013; Jackson, 2005). Meanwhile, circular consumption is tangible benefits and cost-efficiency oriented, such as buying second-hand, engaging in product take-back schemes, etc. (Stahel, 2016). Third, sustainable consumption and circular consumption differ in promotion vs. prevention orientation. Sustainable consumption is seeking better ways to improve our planet's well-being by switching to superior production methods (Adams et al., 2016; Kuzma et al., 2020; Michelino et al., 2019). In contrast, circular consumption is linked to the prevention of losses of materials (Blomsma & Tennant, 2020; Desing et al.; 2021; Do et al., 2021).

Furthermore, an important conceptual distinction between sustainable and circular consumption is that sometimes sustainable consumption can contradict circular consumption as scope, focus, or promotion vs. prevention orientation can be at odds with each other. For instance, the promotion focus on sustainable consumption would suggest that greater sustainability can be achieved by innovating through different ways of resource use (in producing meat sustainable practices may promote eco-efficiency, e.g., changing animals' diets, so it would be of higher energy, grain-based which in turn leads to greater healthiness of meat). A circular approach, on the other hand, would always prioritize resource reduction over other sustainability goals (e.g., it would seek to create a meat substitute from plants, ensuring the prevention of losses of materials instead of focusing on changing animals' diet to improve healthiness).

Next, even though circular consumption can be linked and overlap with sustainable consumption, efforts to achieve circularity do not always guarantee sustainable results. A recent study pointed out that circular products may also be unsustainable, e.g., when producing products from harmful secondary materials such as polymers that incorporate hazardous additives (Blum et al., 2020). If the production of circular products consumes a lot of energy resources and they are taken from non-renewable sources, their production leaves a bigger environmental footprint than the benefits of reusing existing materials.

Building on the discussion above, sustainable and circular consumption is conceptualized by highlighting the above-mentioned differences. Sustainable consumption is defined as the consumption of products that seek to provide a broader scope of environmental, social, and economic benefits and are linked with a more abstract, intangible focus and promotion orientation to improve the well-being of our planet. Circular consumption is defined as the consumption of products that seek to ensure a narrow scope of resource conservation and are linked with more tangible benefits and cost-efficiency focus and prevention orientation to improve the well-being of our planet.

1.2. Drivers of sustainable consumption

Sustainable consumption has received a fair amount of attention in prior work. Studies show that sustainable consumption can be increased by external factors related to conditions for sustainable consumption. For instance, previous research has shown that waiting time for sustainable vs. unsustainable choices (Lange et al., 2018) positively affects sustainable consumption. How sustainable choices are promoted also has an impact on consumer decision-making, e.g., showing the amount of CO₂ emissions to be emitted because of unsustainable vs. sustainable choices directs towards more responsible decisions (Lange et al., 2018).

Further, prior research has investigated how various psychological needs affect sustainable decision-making. A bunch of studies have shown that willingness to comply with social norms drives sustainable behavior (e.g., Bollinger & Gillingham, 2012; Dowd & Burke, 2013; Goldstein et al., 2008; Harland et al., 1999; Minton et al., 2022). Social needs such as social identity, belongingness, or social desirability have also been evaluated in the sustainability domain. For instance, prior research shows that sustainable consumption might be driven by status (Griskevicius et al., 2010; Zabkar et al., 2013) or conspicuous (Dastrup et al., 2012) motives. A strong sense of belonging also is positively linked with positive evaluations of sustainable products and willingness to pay a higher price for them and negatively linked if there is a lack of sense of belonging (Schultz et al., 2022). Interestingly, previous findings show that women engage in sustainable consumption more because of personal identity, and men are more motivated when social identity is salient (Costa Pinto et al., 2014). The consumption context also matters: individuals are more motivated to engage in other

beneficial sustainable consumption in public vs. private settings (Green & Peloza, 2014).

Further, multiple studies show that personal values such as collectivism (Sreen et al., 2018; Leonidou et al., 2010), altruism (Straughan & Roberts, 1999; Lobo & Greenland, 2017; Akehurst et al., 2012; Reimers et al., 2017), biospheric values (Nguyen et al., 2016; Ojea & Loureiro, 2007; Van der Werff & Steg, 2016) lead to sustainable consumption. Certain individual traits also play an important role in the sustainable consumption domain. For instance, prior research has documented innovativeness (e.g., Li et al., 2021), conscientiousness (e.g., Yarimoglu & Binboga, 2019), mindfulness (e.g., Barbaro & Pickett, 2016), emotional intelligence (e.g., Kadic-Maglajlic et al., 2019), narcissism (e.g., Bowen et al., 2022), environmental concerns (e.g., Fraj & Martinez, 2006), etc. as drivers of sustainable consumption. However, materialism (e.g., Suárez et al., 2020) proved to be negatively related to sustainable consumption.

Many studies explore agency as one of the drivers of sustainable consumption and demonstrate that perceived consumer effectiveness (e.g., Kovacs & Keresztes, 2022), perceived behavioral control (e.g., Wang et al., 2014), and self-efficacy (Lauren et al., 2016) positively influence individuals' intentions to consume sustainably.

Multiple studies found that moral competencies, e.g., self-regulation and kindness (Song & Kim, 2018; Valor et al., 2020), are linked to sustainable consumption. Some research also studies how moral emotions such as pride, gratitude, guilt, and condemnation of others affect sustainable purchases (Antonetti & Maklan, 2014; Liang et al., 2019).

As many drivers of sustainable consumption have been researched for many years, scholars have also paid attention to systematic and integrative literature reviews (e.g., Steg & Vlek, 2009; Testa et al., 2021; White et al., 2019).

1.3. Drivers of circular consumption

In contrast, only a handful of studies investigated the drivers of circular consumption. These studies show that certain characteristics of circular products drive circular consumption. For instance, prior research showed that the positive image and perceived safety of circular products drive purchase intentions of such products

(Calvo-Porrall & Lévy-Mangin, 2020). Emotional value also proved to have a positive effect on consumers' attitudes regarding circular products, meaning that consumers expect to feel pleasure and other good feelings while using circular products (Kim et al., 2021a). Moreover, providing more information about circular products' history positively affects consumers' trust regarding such products also increases perceived hedonic benefits, and consequently positively affects purchase intentions (Kim et al., 2021b), as well as making the product's past identity salient (Kamleitner et al., 2019).

Interestingly, consumers engage in circular consumption because of the expectation of positive feelings too. For instance, pride is an important emotion motivating to purchase repurposed products (Adıgüzel & Donato, 2021). Anticipated conscience, i.e., expectations to feel better in an ethical sense, also is an important predictor of purchase and intention and willingness to pay for products made of recycled ocean plastic (Magnier et al., 2019). Moreover, "warm glow" feelings have a significant positive effect on enjoyment using circular products (Tezer & Bodur, 2020).

Certain personal norms also have a positive impact regarding intentions to consume circularly. For instance, perceived consumer effectiveness predicted the purchase intention of recycled and upcycled products (Park & Lin, 2020). Self-congruity with green products and green self-identity also lead to positive evaluations and behavioral intention regarding circular bio-plastic products (Confente et al., 2020). Pure altruism also proved to be a motivator to engage in circular consumption (de Morais et al., 2021).

Prior research has paid attention to studying the role of personality in circular consumption. However, research at the moment is rather limited. Individualism plays a role in forming positive attitude toward circular fashion (Kim et al., 2021a), and tolerance for ambiguity is also linked to circular consumption (Hazen et al., 2012).

This overview shows that there is remarkably little overlap between the set of drivers for sustainable versus circular products. Also, prior studies have dedicated significantly different amounts of attention to researching drivers of sustainable and circular consumption, as literature on studying the drivers of circular consumption is only in its infancy.

2. DIVERGING EFFECTS OF DISTINCT TRAITS ON SUSTAINABLE AND CIRCULAR DECISION-MAKING⁴

2.1. Role of traits in sustainable and circular consumption

Prior research documented several findings explaining how certain traits are related to sustainable and circular consumption. Studies linked to sustainable consumption have shown that such traits as agreeableness, openness, conscientiousness, honesty–humility are positively related to sustainable consumption (Brick & Lewis, 2016; Gibbon & Douglas, 2021; Hopwood et al., 2022; Kutaula et al., 2022; Panno et al., 2021; Puech et al., 2020; Soutter et al., 2020), while neuroticism has a negative effect on sustainable consumption or no significant associations (Hopwood et al., 2022; Kutaula et al., 2022; Soutter et al., 2020; Soutter & Möttus, 2021). Interestingly, conscientiousness also has a positive impact on consumers' engagement in sustainable consumption (Kutaula et al., 2022). However, prior findings also show that individuals high in conscientiousness have a lower willingness to pay for such products (Gustavsen & Hegnes, 2020). Results regarding extraversion as a trait are mixed, as previous findings show both – positive and negative impacts on sustainable consumption (Brick & Lewis, 2016; Gustavsen & Hegnes, 2020; Soutter et al., 2020; Soutter & Möttus, 2021). Next, previous studies showed the link between environmental concern, green consumption values (Alwitt & Pitts, 1996; Dikici et al., 2022; Paul et al. 2016; Thøgersen, 2011), awareness of consequences (Wiidegren, 1998), innovativeness (Li et al., 2021) and sustainable consumption. Connection with nature (Nisbet et al. 2009), high levels of aesthetic appreciation, creativity, and inquisitiveness (Markowitz et al., 2012), appreciation of beauty and excellence, kindness, love of learning, modesty, and humility, perspective, self-regulation are also associated with sustainable consumption (Valor et al., 2020). Emotional intelligence plays a role in engaging in sustainable consumption too (Chowdhury, 2017). Moreover, prior research has shown that individuals with a future-oriented perspective tend to engage in sustainable consumption due to their considerations of the long-term impact their actions cause (Joireman et al., 2004). Moreover, prior research has shown

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attention to analyzing how individuals with different types of value orientations make decisions regarding sustainable consumption. For instance, de Groot and Steg (2008) argued that consumers with egoistic value orientation mostly pay attention to the costs and benefits that sustainable consumption brings. Individuals with a social-altruistic value orientation ground their decision-making with evaluations of costs and benefits for other people. Lastly, individuals with a biospheric value orientation base their decisions regarding sustainable consumption on perceived costs and benefits for the ecosystem and biosphere as a whole. In line with these findings, several studies showed the link between altruism and sustainable consumption (e.g., Straughan & Roberts, 1999; Xu et al., 2021). Mindfulness also, through various mechanisms, promotes sustainable consumption (Fischer et al., 2017; Kaur & Luchs, 2022; Sheth et al., 2011). A commitment to values related to equity and social justice has a positive effect on consumers' engagement in sustainable consumption, whereas values corresponding to power and social status have a negative impact (Ladhari & Tchetgna, 2015). This is also in line with the research that applied Schwartz's (1992) categorization of values and showed that such values as universalism, benevolence, self-direction, honesty, idealisms, equality, freedom, and responsibility but not power, hedonism, tradition, security, conformity, and ambition are linked to sustainable consumption (Karp, 1996; Vermeir & Verbeke, 2006). Further, individuals who prioritize self-transcendence values (vs. self-enhancement) are more inclined to consume sustainably (Nordlund & Garvill, 2003).

Although prior research has paid noticeably less attention to analyzing individual differences in the circular consumption domain, during the last few years, it has been growing. Findings show that individuals who are distinguished by environmental concern or are of high levels of environmental consciousness are prone to engage in circular consumption (Bae & Yan, 2018; Bigliardi et al., 2022; Evans et al., 2022; Ferraro et al., 2016; Magnier & Gil-Pérez, 2023; Testa et al., 2020; Yan et al., 2015; Zaman et al., 2019; Zhang & Luo, 2021). Consumers who have knowledge about the environmental impacts of one's behavior or recognize more environmental benefits and have a higher awareness of refurbishing are more prone to engage in circular consumption too (De Guimarães et al., 2023; Mugge et al., 2017; Wang et al., 2018). Prior research has also shown that higher levels of frugality (Evans et al., 2022; Zaman et al., 2019; Cervellon et al., 2012), ambiguity tolerance, and perceived behavioral control (Wang et al., 2018; Zhang & Luo, 2021) are positively related to engagement

in circular consumption. However, findings regarding materialism are somehow mixed. Cervellon et al. (2012) and Zaman et al. (2019) found that less materialistic individuals prefer secondhand goods to new material goods. However, Evans et al. (2022) findings did not support the role of materialism in circular consumption. Next, narcissism has a negative effect on product reuse, however, faith in humanity (Bowen et al., 2022), proneness to nostalgia (Evans et al., 2022; Cervellon et al., 2012; Machado et al., 2019; Medalla et al., 2020; Zaman et al., 2019) positively affects circular consumption. Interestingly, consumer innovativeness was found to negatively affect circular consumption (Mugge et al., 2017), and newness-conscious consumers are prone to engage in circular consumption under certain circumstances (Chun et al., 2023). Scholars have also investigated how individual differences are related to circular consumption in specific domains. For instance, style consciousness and fashion consciousness play a role in the secondhand fashion industry (Evans et al., 2022; Ferraro et al., 2016; Gupta et al., 2019; Harris et al., 2016; Machado et al., 2019). In the circular food domain, risk-taking individuals are willing to pay more for circular products compared to those who are risk-averse (Hellali et al., 2023). Risk aversion, however, did not show any significant relationship with intention towards circular food products (Hellali & Korai, 2023). Finally, prior research also explains how different value orientations shape the positions regarding circular products. Individuals who are characterized as environmental-centric are especially attentive to information on the product and value benefits circular consumption provides. Societal-centric individuals engage in circular consumption, attributing value to a social process (e.g., repairing, reusing, exchanging, etc.), while resources-centric individuals pursue minimizing resource consumption (Testa et al., 2024).

To summarize the findings, it could be pointed out that although some separate studies show that similar individual differences drive both sustainable and circular consumption (mainly related to pro-environmentalism), interestingly, some traits have distinct effects. For instance, innovativeness was found to be positively related to sustainable consumption (Li et al., 2021), and negatively with circular one (Mugge et al., 2017). The attention to researching both forms of responsible consumption is unequal, leaving circular consumption much less studied than sustainable consumption. Noticeably, the majority of prior studies have not assessed the effects of traits on sustainable and circular consumption using the same datasets – thus

making the comparisons of those two types of consumption difficult, if not impossible. To sum up, this means that there are still grey zones in understanding how behaviors linked with sustainable and circular consumption converge and diverge.

2.2. Activation of different traits in encounters with different products

Research in the sustainable and circular consumption domain has focused on using theories explaining how attitudes, values, intentions, and norms drive different behaviors (see Camacho-Otero et al., 2018; Haider et al., 2022, Peattie, 2010; Steg & Nordlund, 2018 for review). When it comes to applying theories related to personality, research usually is limited to the application of major trait theories such as the Big Five Theory and HEXACO, focusing on the core traits that interact to form human personality (see Soutter et al., 2020 for review). Another stream of the literature applies the Self-Determination Theory (Deci & Ryan, 2012) as a framework to explore how traits related to intrinsic and extrinsic motivations affect consumption intentions of sustainable or circular products (e.g., Gagné, 2003; Nguyen et al., 2022; Osbaldiston & Sheldon, 2003; Pelletier et al., 1998). Yet these theories do not explicitly allow for the possibility that the effects of traits might depend on situational contexts.

The conceptual framework applied in the first research of this dissertation was inspired by the Trait Activation Theory (Tett & Burnett, 2003). This theory examines how traits interact with situations and highlights that the same situation can impact individuals differently based on their distinct trait levels. Depending on the situation stimuli, the effect of the trait might be amplified or suppressed (Tett & Burnett, 2003). The trait-relevant situation can be evaluated by identifying the cues that influence the expression of behaviors related to that trait (Tett & Burnett, 2003; Manteli & Galanakis, 2022). For instance, prior research has tested how brand country of origin increases and decreases the effect of the trait of buying impulsiveness on purchase intentions (Liu et al., 2021). More precisely, findings showed that consumers with higher buying impulsiveness have higher purchase intentions for local (vs. foreign) brands, and vice versa, consumers with lower buying impulsiveness have higher purchase intentions for foreign (vs. local) brands.

Although the Trait Activation Theory was mainly applied in the organizational behavior context (e.g., Hirst et al., 2011; Van Hoye & Turban; 2015; Tett et al., 2021;

Wu et al. 2022), a few recent studies have already used it in the consumption domain (e.g., Ahn & Kwon, 2020; Flight et al., 2012; Hatipoglu & Koc, 2023; Liu et al., 2021).

Drawing on the rationale of the Trait Activation Theory, in this work, the situations are linked to *encounters with different products*, and it is expected that trait-relevant forms of consumption have an effect on behavior. More precisely, I propose that specific traits might be triggered by certain features of sustainable and circular consumption, which lead to engagement or withdrawal in both or one of these consumption forms. For instance, in line with the conceptualization of sustainable and circular consumption, I expect that if a sustainable product signals social benefits (e.g., producers' obligations regarding animal welfare or hiring employees from vulnerable and underserved communities), individuals distinguished by traits valuing attempts (e.g., altruism, empathy), might positively react to these signals. The same applies to circular consumption: if a circular product highlights a lower price, it might become a positive stimulus for individuals who may be described as frugal and negative for those who score high as status-seeking.

The current research aims to expand knowledge by highlighting the role of three specific underlying traits that possibly drive sustainable and circular consumption in different ways: meaning in life (both striving towards it and its presence), dispositional greed, and openness to experience. Linking traits with the conceptual definition of sustainable and circular products (see above), I aim to explore traits that fundamentally differ in their promotion vs. prevention orientation. Specifically, meaning in life, as well as openness to experience, represent promotion-focused motivation (see Higgins, 1997; Miao & Gan, 2020; Vaughn et al., 2008). On the contrary, dispositional greed exemplifies prevention orientation (see Higgins, 1997; Holt & Laury, 2002; Krekels & Pandelaere, 2015). As these traits are conceptually linked with either promotion or prevention focus, I expect them to sensitively grasp the non-overlapping differences between sustainable and circular consumption.

2.3. Collective benefiting orientation, meaning in life, and responsible consumption

When engaging in sustainable or circular consumption, people need to put in additional efforts for the greater good, which could be considered as a collective

benefiting orientation. For instance, people need to invest time in making more informed decisions, refuse unnecessary consumption, and even pay more for sustainable products than for their regular counterparts (Griskevicius et al., 2010). I propose that in the consumption domain, such collective benefiting orientation aligns with searching for or acquiring meaning in life, which is defined as feeling one's life as having purpose and value (Baumeister et al., 2013).

Prior work indeed shows that people strengthen their feeling of meaning in life by engaging in some forms of responsible behavior, such as volunteering and spending money to benefit others (Baumeister et al., 2013), or pro-environmental actions (Jia et al., 2021). This notion is also in line with the Personal Goal-Striving Theory (Emmons, 2003), stating that individuals aiming to strengthen their sense that life is meaningful set and pursue personally significant goals, which should align with personal values. I argue that individuals with a collective benefiting orientation might consider sustainable and circular consumption as one of their goals. By setting and striving for goals related to sustainable and circular consumption, such individuals align their actions with their personal values, integrate these goals into their daily lives, and contribute to a coherent and purposeful life narrative.

Based on the above and because both sustainable and circular consumption entail a collective benefiting orientation, I expect that consumption of both sustainable and circular brands is positively related to meaning in life. Thus, by integrating findings from various domains of research, I hypothesize the following:

H1. Meaning in life is positively related to ownership of (a) sustainable and (b) circular brands.

2.4. Self-benefiting orientation, dispositional greed, and responsible consumption

If sustainable consumption indeed is boosted by a collective benefiting orientation, the opposite – self-benefiting orientation - should decrease sustainable consumption. Such self-benefiting orientation motivation is captured by dispositional greed defined as a desire to acquire more and more resources (Krekels & Pandelaere, 2015; Seuntjens et al., 2015a).

Building on the prior conceptualization of sustainable consumption, this form of consumption is related to long-term orientation, meaning that it often requires delayed gratification, and sometimes sacrificing personal convenience for the greater good. This is the opposite of the motivation greedy individuals are driven by. They often are motivated by self-interest, immediate gratification (such as cheaper or more convenient options), and maximizing personal gain (Seuntjens et al., 2015b).

Prior research indeed provides support that dispositional greed may harm others and cause negative outcomes for society (Seuntjens et al., 2015b; Zeelenberg and Breugelmans, 2022) and is a selfish motivation to gain an unfairly big part of a resource at the expense of others (Cardella et al., 2019). Previous studies have found that dispositional greed inhibits prosocial behaviors (e.g., Bao et al., 2020), and greedy managers are less willing to invest in corporate social responsibility (Sajko et al., 2021). Drawing on this line of research and taking into account that sustainable consumption is collective benefitting orientation, I expect that:

H2. Dispositional greed is negatively related to ownership of sustainable brands.

While sustainable consumption entails the need to sacrifice own immediate interests for collective benefits, circular consumption may be driven by different underlying traits. Circular products are related to efforts to squeeze and retain as much value as possible (Pretner et al., 2021). For consumers, this means the possibility of buying products that are more durable, easier to repair, refurbish, or remanufacture, or even resell when they are no longer needed, or using their specific components in other beneficial ways once the product can no longer serve its primary purpose (Ellen MacArthur Foundation, n.d.; Geissdoerfer et al., 2017). Moreover, as circular products are manufactured efficiently, optimizing resources, consumers expect them to cost less than their counterparts from virgin materials (Pretner et al., 2021). Hence, greedy individuals might evaluate circular consumption through a utilitarian lens and find circular products corresponding to value-related motivation. As dispositional greed represents a strong acquisitiveness drive with maximum value orientation (see Zeelenberg & Breugelmans, 2022), and circular products provide the possibility to satisfy such drive, I expect that:

H3. Dispositional greed is positively related to ownership of circular brands.

2.5. Cognitive flexibility, openness to experience, and responsible consumption

Switching from regular to sustainable consumption requires a certain amount of psychological flexibility. Getting used to bringing your own reusable mug to purchase coffee, or driving an electric vehicle - these are only a few examples of underlying lifestyle changes needed to consume responsibly. Adapting to such changes is easier for open-minded consumers, who have the cognitive flexibility to break behavioral patterns and shift to new ideas or solutions (Guilford, 1967). Prior research suggested that people may engage in responsible consumption more actively because they desire to challenge conventional ways of consuming goods (Feygina et al., 2010), or because their interest in environmentalism is sparked by intellectual curiosity (Hirsh & Dolderman, 2007). This notion is also in line with the Diffusion of Innovations Theory (Rogers, 1962), suggesting that individuals with strongly expressed openness to experience are more likely to be early adopters of innovations, as they are typically more curious, open to new ideas, and willing to try novel practices. Previous work consistently showed that openness to experience is positively linked to sustainable behavior (e.g., Lange & Dewitte, 2019). Next, at the product level circular manufacturing also represents a lot of innovation, for instance, the novel procedures to refurbish, the fact that old elements are used creatively to make something new, etc. Therefore, I hypothesize that:

H4. Openness to experience is positively related to ownership of (a) sustainable brands and (b) circular brands.

In addition, to test the robustness of the effects, I simultaneously investigate the role of meaning in life, dispositional greed, and openness to experience in light of another well-established predictor in making purchasing-related decisions – income. Prior work indicates that, in general, individuals with high income engage in greater consumption and buy more products and services that require significant resources (Moser & Kleinhüchelkotten, 2018). Thus, it is expected that income level would be positively related to purchases of all types of brands (regular, sustainable, and circular choices).

Moreover, I will test a logical implication of my reasoning. If for collective benefit, cognitive flexibility, and self-benefiting reasons meaning in life, openness to

experience, and dispositional greed are positively related to ownership of sustainable or circular brands, I expect these effects to be more present for sustainable and circular brands than for regular ones.

3. MEANING THREATS, MEDIATING ROLE OF SADNESS, AND SUSTAINABLE DECISION-MAKING⁵

3.1. Meaning threats, sadness, and sustainable consumption

People have a fundamental need for their lives to be meaningful (Fiorito et al., 2021). However, during a lifespan, individuals unavoidably face various threats to a sense of meaning in life. People can experience meaning threats when a sense of belonging is reduced, e.g., due to social ostracism, social exclusion, or rejection (e.g., Lee & Shrum, 2012; Twenge et al., 2003; Stillman et al., 2009; Zadro et al., 2004; Zhang et al., 2019). Prior studies have also shown that the reminders of death (Abeyta et al., 2015; Baumeister, 1991; Heine et al., 2006), personal uncertainty (Randles et al., 2018), traumatic events (Steger & Park, 2012), lack of coherence in the environment (Heine et al., 2006; Heintzleman et al., 2013) have a negative impact on the sense of meaningfulness.

Exposure to meaning threats means experiencing self-discrepancy, which can produce negative emotions (Higgins, 1987; Packard & Wooten, 2013). Indeed, meaning threats are followed by cognitive and emotional processing (see Park, 2010). Cognitive processing refers to the adaptation of beliefs or assumptions (Creamer et al., 1992; Hollon & Kriss, 1984), emotional processing, on the other hand, focuses on experiencing and exploring emotions (Foa & Kozak, 1986). Both cognitive and emotional processing overlap (Hayes et al., 2007) and are important in reinstating the sense of meaning in life (Hunt et al., 2007; Ullrich & Lutgendorf, 2002).

Previous research has shown the link between various meaning threats and negative emotions. For instance, ostracism elicits anger (e.g., Chow et al., 2008), mortality salience induces fear and anxiety (e.g., Huang et al., 2021), and perceiving self as unworthy is related to shame (e.g., Lynd, 1958). If the sense of meaning in life is threatened, individuals lose a sense of purpose, agency, and value in life (Heintzleman & King, 2014). Respectively, when a person learns about the loss (e.g., a goal or valued aspect of the self), this is a moment when the emotion of sadness arises, and this is one of the features that makes sadness different from other

⁵ This chapter is based on: Kaminskiene, Z., Barsyte, J., Uzdevinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

overlapping emotions such as anger, anxiety, or yearning (Dalgleish & Power, 2000; Freed & Mann, 2007). Therefore, I hypothesize that:

H5. Meaning threat (vs. control) increases sadness.

Prior research has investigated how people deal with meaning threats. For instance, the Pragmatic Meaning Regulation Theory (van Tilburg & Igou, 2011) proposes that people striving to regain or strengthen their sense of meaning are more attuned to potential behavioral strategies that can regulate their meaning. Next, according to the Meaning Making Model (Park & Folkman, 1997), meaning threats are understood as discrepancies in perception between specific instances and general orienting systems. These discrepancies lead to distress and motivate to reduce those discrepancies (Park, 2013). Moreover, the Meaning Maintenance Model states that when people face a meaning threat in one domain, they may seek to restore their sense of meaningfulness by engaging in activities even in unrelated areas (MMM; Heine et al., 2006). The MMM has focused on specific meaning frameworks such as self-esteem, certainty, affiliation, and symbolic immortality and argued if one is threatened, another one can provide meaning interchangeably (Heine et al., 2006). Moreover, Zhang et al. (2019) pointed out that it is too painful to admit meaninglessness; thus, people start actively searching for confirmations that life has meaning after facing meaning threats. Such mechanism might be explained by the Cognitive Dissonance Theory (Festinger, 1962), revealing individuals' flexibility regarding various sources of meaning: if one domain does not provide meaning in life anymore, alternatives start becoming more important (Zhang et al., 2019). In sum, all these models and theories refer to the motivational function of meaninglessness.

One of the ways how people strengthen their sense of meaning in life is by engaging in some forms of responsible behavior, such as volunteering, spending money to benefit others (Klein, 2017), and pro-environmental actions (Jia et al., 2021). Daily prosocial acts are associated with increases in meaning (Dakin et al., 2022). Further, recent research suggests that searching for meaning directs people toward the types of cognitions and behaviors for building and sustaining healthy communities and societies (Routledge & FioRito, 2021). Meaning-searchers are prone to engage in specific activities dedicated to communities (FioRito et al., 2021), and that helps them to elevate feelings of belongingness, which significantly increases perceptions of meaning in life (Lambert et al., 2013).

Most importantly, research on the relationship between searching for meaning in the sustainable consumption domain is only in its infancy. To the best of my knowledge, there was only one study showing a positive correlation between the construct of meaning in life and sustainable consumption in the food domain (Hunecke & Richter, 2019), however, the correlational design of this study limits causal conclusions. Grounding on previous findings spillover effect is expected, meaning that:

H6. Meaning threat (vs. control) increases the purchase intention of sustainable products.

3.2. Emotions, sadness, and sustainable consumption

Emotions are important drivers of human behavior. In the sustainability domain research has found that such emotions as personal, societal and collective guilt (Dahl et al., 2003; Ferguson & Branscombe, 2010; Mallett et al., 2013; Rees et al., 2015), anger (Van Zomeren et al., 2011; Wang & Wu, 2016) and indignation (Corral-Verdugo et al., 2009), distress (Lee & Holden, 1999), fear (Van Zomeren et al., 2010), shame (Rees et al., 2015), sadness (Schwartz Perloff & Loewenstein, 2017), hope (Peter & Honea, 2012) and pride (Antonetti & Maklan, 2014; Harth et al., 2013) can positively impact sustainable consumption.

Consumers engage in sustainable behavior not only because they want to regulate their negative emotional state or to maintain a positive one, but also with the aim to proactively avoid negative emotions (e.g., anticipated guilt or regret; Carrus et al., 2008; Onwezen et al., 2014; Pelozo et al., 2013; Steenhaut et al., 2006) and because the expectations that their behavior will result in a positive emotional experience, so-called “warm glow” (Hartmann et al., 2017; Onwezen et al., 2013; Rezvani et al., 2017).

However, the influence of emotions varies greatly and can even backfire. For instance, research in the sustainability domain shows that when people are given the opportunity to recycle, they start experiencing positive emotions, which results in using more resources (Sun & Trudel, 2017). Negative emotions can also lead to opposite directions. Previous research showed that messages aiming to induce fear of climate change not only encouraged but also discouraged and inhibited sustainable behavior (O'Neill & Nicholson-Cole, 2009) or even led to denying environmental threats (Oskamp, 2000). When elicited guilt is too intense, consumers can rationalize it (Bray

et al., 2011), and it can lead to anger and irritability (Hibbert et al., 2007) but not to problem-solving by regulating behavior (Peloza et al., 2013). Moreover, when shame occurs together with inferiority, it can lead to feeling disempowered and result in withdrawal or denial of the issue (Tangney et al., 1996).

Meanwhile, the adaptive functions of sadness remain poorly understood (Forgas, 2017). Research, indeed, shows that sadness may lead to such positive outcomes as the goal of reward replacement (Smith & Lazarus, 1993); closer connection with the self (Cryder et al., 2008), or greater self-focus (Wood et al., 1990). In the consumption domain, it has been shown that one of the functions of sadness is to make a person more vigilant and thus prevent future losses (Lazarus, 1991; Lench et al., 2011). When the hedonic purpose of eating is active, the experience of sadness should increase a person's sensitivity to the potentially harmful consequences of pleasurable consumption and, as a result, reduce the desire to indulge (Andrade & Cohen, 2007; Salerno et al., 2014; Tice et al., 2004).

Sadness has specific properties that offer the potential for positive outcomes. Sadness is associated with the feeling of losing an irretrievable thing (e.g., the loss of a loved one). It is the combination of loss and helplessness that determines compensatory tendencies (Garg & Lerner, 2013). Conceptual approaches to sadness show that this emotion occurs after the collapse of a very large and important plan or the loss of an active goal and that it forces us to do nothing and/or create a new plan (Oatley & Johnson-Laird, 1987). Thus, it makes it reasonable to assume that when surrounding ecosystems are being threatened to be lost, one way of dealing with it would be by experiencing the emotion of sadness. That is, sadness may serve an adaptive function when people experience meaning threats. Specifically, if the meaning is threatened, individuals lose a sense of purpose, agency, and value in life (Heintzelman & King, 2014). Thus, the meaning threat is a state related to future losses that potentially can be alleviated by experiencing sadness. This proposition is in line with the discrete emotion theory, which states that each discrete emotion causes changes in cognitive, judgmental, experiential, behavioral, and physiological contexts (see Lench et al., 2011 for review).

Previous research has shown a more general link between the search for meaning and sadness. For instance, by facilitating dissociation from threatening sources of meaning, sadness can indirectly lead to the search for new meaning sources,

sometimes expanding the cognition that occurs alongside sadness (Gable & Harmon-Jones, 2010). Furthermore, via sadness, individuals acquire new sources of meaning or appreciate existing sources of meaning more favorably (Tang et al., 2013).

If sadness can offer new ways to acquire meaning in the consumption domain, such meaning can be obtained by making more sustainable choices. Recent research, indeed, shows that sadness evoked by reminders of social norms can lead to more sustainable behaviors (Schwartz Perloff & Loewenstein, 2017). I argue that meaning threats will increase sadness, which, in turn, will act as a mechanism for restoring the desired state by experiencing a greater desire to purchase sustainable products. If these products can offer restoration of meaning, the effect should be particular to sustainable but not regular products.

H7. Meaning threat (vs. control) will increase the extent of sadness felt and, in turn, will lead to a greater purchase intention of sustainable products.

4. IMPORTANCE OF ORIGIN CUES IN THE CIRCULAR CONSUMPTION DOMAIN⁶

4.1. Knowing origin cues and perceived monetary value

People have a fundamental need for knowing and understanding the surrounding world (e.g., Festinger 1954; Fiske & Taylor, 2013) and consumers prefer choices that are clear and easy to comprehend (Aaker & Keller, 1990; Becker-Olsen & Hill, 2006). This is exactly what origin cues can provide consumers as they constitute an additional source of information about where a good is coming from. Furthermore, being informational type of cues, origin cues also make goods easier to understand. Thus, *knowing an origin* provides an additional piece of information and an elevated sense of knowledge. As a result, I expect that people would value more goods with origin cues (vs. no origin cues). Thus, I hypothesize that:

H8: Origin cues (vs. no origin cues) will increase the perceived monetary value of circular goods.

4.2. Connection with the sense of self as a mechanism driving choices

Individuals seek to expand one's self by acquiring additional resources and different perspectives (Aron et al., 1998). Such expansion may also be done by incorporating goods in the self (e.g., Batra et al., 2012; Trump & Brucks, 2012; Escalas & Bettman, 2003; Reimann & Aron, 2009). Drawing on these findings, I argue that goods with origin will possess greater potential of providing self-expansion because they facilitate the perception of having access to additional resources (e.g., Reimann et al., 2012). Previous research also suggests that objects may become part of the self through knowing that an object *originates* from particular places or settings (Belk, 1988). If origin cues are knowledge-based informational cues that connect us to valuable and important places, it stands to reason that remodeled and used goods

⁶ This chapter is based on: Barsyte, J., Kaminskiene, Z, Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. *In* Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

with origin (vs. without origin) might constitute bigger parts of our sense of self. In turn, connection to the sense of self will mediate the effects of origin on desirability because people prefer goods with which they can identify (e.g., Perkins & Forehand, 2012; Reed et al., 2012). Thus, it is expected that a greater sense of connection to the self would increase the desirability of goods with origin cues as compared to goods without an origin cue. Thus, I hypothesize that:

H9: Origin cues (vs. no origin cues) will increase the closeness to the sense of self and, in turn, will lead to greater desirability of circular good.

4.3. The effects of origin on desirability: the role of acquisition centrality

Furthermore, I argue that the effects of origin on desirability will not be equally pronounced for different consumers. Rather, origin cues will lead to greater desirability for consumers who focus on goods as a resource for obtaining a sense of connection. Thus, individual differences in the extent to which people place possessions and their acquisition at the center of their lives will moderate the effects of origin on desirability. Such differences are captured by the acquisition centrality factor of the materialism construct (Richins & Dawson, 1992). People who put their acquisitions of material goods at a central place in their lives believe that those goods are the greatest sources of satisfaction (Belk, 1984), helping them to achieve desired states (Fournier & Richins, 1991). Meanwhile, people who score low on materialism value their life goals and relationships more than their possessions (Belk, 1984). If knowing an origin can provide a greater sense of context, then it is reasonable to expect that people who score low on acquisition centrality would desire such goods more than people who are centered on acquisitions but not on the context. Thus, I expect that:

H10: Lower-acquisition centrality consumers (but not higher-acquisition centrality consumers) will have greater desirability for circular goods with origin cues (vs. no origin cues).

5. RESEARCH METHODOLOGY⁷

5.1. Methodological approach

To test the hypothesis raised in this dissertation, seven online studies were carried out for which two different quantitative research methods were applied: (1) survey (Study 1) and (2) experiments (Studies 2-8).

For the survey questionnaire of Study 1, unobtrusive research was used for compiling a list of sustainable, circular, and regular brands. For defining relevant product categories and product brands, I used existing data confirming brands' sustainability or regularity and also researched what equivalent circular brands are available in the UK market at various sales points. Further, I implemented simpler statistical tests such as initial statistical analysis, correlation, and factorial analysis using IBM SPSS software; and employed structural equation modeling (SEM) as the main statistical analysis method for data of this study. SEM is a powerful multivariate analysis technique frequently used in the social sciences (González et al., 2008). It was chosen as it allows the examination of complex relationships by simultaneously rigorous assessment of measurement validity (Beran & Violato, 2010). Confirmatory factor analysis and SEM were implemented using the statistical analysis software LISREL 8.8.

For testing the hypothesis of Studies 2-8, the experimental method was applied. Usage of the experimental method is prevalent in the social psychology domain (Aronson et al., 1998). I quested for causality between pertinent variables, and experiments were used to establish causal relationships (Kirk, 2009). All experiments in this dissertation were conducted online using a between-subjects design. First, participants had to implement manipulation tasks, and only then they answered the questions. For the manipulation procedure, various tasks were given across all

⁷ This chapter is based on:

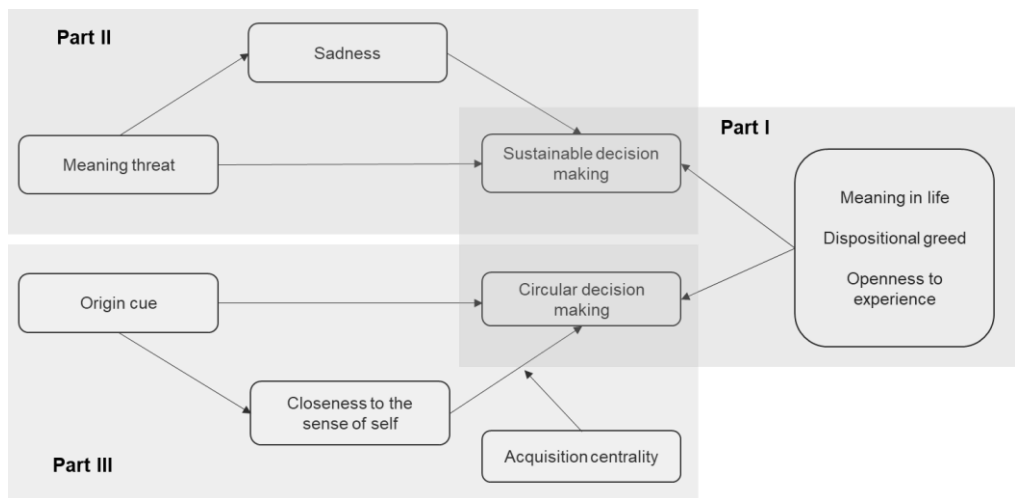
Kaminskiene, Z., Baryte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

Kaminskiene, Z., Baryte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

Baryte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. *In* Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

experiments. To finish the manipulation procedure, which aimed to manipulate meaning threat, participants had to read sentences about life meaninglessness (or various facts irrelevant to meaning in life for control condition) and rewrite them in their own words (Study 2, Study 3, Study 4, and Study 5). In Study 6, Study 7, and Study 8, participants were provided with a picture and description of the product where the origin was manipulated (three conditions: (1) origin cue present; (2) origin cue absent; (3) control). For analyzing data, IBM SPSS software was used. The conceptual model of empirical research is represented in Figure 1.

Figure 1. The conceptual model of empirical research



Data was collected in the United Kingdom. In total, across all eight studies, 2254 respondents were recruited from the Prolific Academic platform to participate in the studies in return for a small monetary compensation. Different sustainable and circular products were tested across all experiments; also, in Study 1, I evaluated ownership of 41 sustainable, circular, and regular brands of 13 categories. The summary of the studies' sample composition is provided in Table 1.

Table 1. Summary of studies' sample composition

Study	Sample	N	Age	Gender	Product	Country of data collection
1	Professional research platform Prolific Academic	500	$M_{age} = 40.2$	49.4% female, 48.6% male, 0.8% other, 1.2% not indicated	6 circular, 23 sustainable, and 36 regular brands of 12 categories	The United Kingdom
2	Professional research platform Prolific Academic	299	$M_{age} = 32.3$	67.9% females	NA	The United Kingdom
3	Professional research platform Prolific Academic	199	$M_{age} = 36.0$	70.4% female	Sustainable drinking straws	The United Kingdom
4	Professional research platform Prolific Academic	199	$M_{age} = 35.4$	70.4% female	Sustainable drinking straws	The United Kingdom
5	Professional research platform Prolific Academic	199	$M_{age} = 37.2$	70.4% female	Power bank	The United Kingdom
6	Professional research platform Prolific Academic	300	$M_{age} = 39.7$	71% female	Circular keychain	The United Kingdom
7	Professional research platform Prolific Academic	300	$M_{age} = 32.9$	71% female	Circular scented candle	The United Kingdom
8	Professional research platform Prolific Academic	258	$M_{age} = 35.2$	66,7% female	Circular scented candle	The United Kingdom

I aimed to collect as many responses as possible for all the studies, given the limited budget and time resources. To determine the minimum required sample size for SEM, performed in Study 1, I performed calculations using the Structural Equation Model Sample Size Calculator (Soper, 2024). This analysis indicated the minimum required sample size of $N = 177$ (indicating 8 latent variables, 34 observed variables, an expected medium effect size, power to 80%, and an α -error probability of .05). To determine the minimum required sample size for all experiments, I performed a power analysis using G*Power (Faul et al., 2009). This analysis determined a minimum sample size of $N = 102$ for Study 2, Study 3 (using the difference between two independent means, setting power to 80% and an α -error probability of .05), a minimum sample size of $N = 55$ for Study 4 and Study 5 (using Linear multiple regression: Fixed model, single regression coefficient, setting two-tails, medium effect size, power to 80% and an α -error probability of .05), a minimum sample size of $N = 269$ for Study 6 and Study 7 (using ANOVA: Fixed effects, special, main effects,

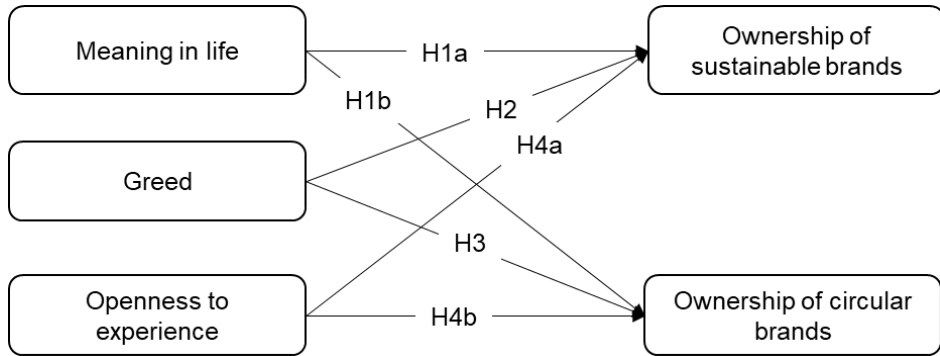
and interactions, setting power to 80% and an α -error probability of .05), and a minimum sample size of $N = 55$ for Study 8 (using Linear multiple regression: Fixed model, R^2 increase, setting medium effect size, power to 80% and an α -error probability of .05). All studies of this dissertation exceeded the minimal requirements for the sample size.

5.2. Overview of empirical research

One survey and seven experiments were carried out to test the proposed hypotheses. The empirical research of this dissertation is grouped according to the objectives set. The first part of this dissertation simultaneously addressed preferences for different types of responsible products, i.e., sustainable and circular products (Study 1). Furthermore, the second part of this dissertation observed the underlying mechanism of sustainable consumption (Study 2, Study 3, Study 4, and Study 5). Lastly, the third part of this dissertation explored how to boost circular consumption (Study 6, Study 7, and Study 8). The questionnaire and experimental scenarios of all studies are provided in Appendix 1-8.

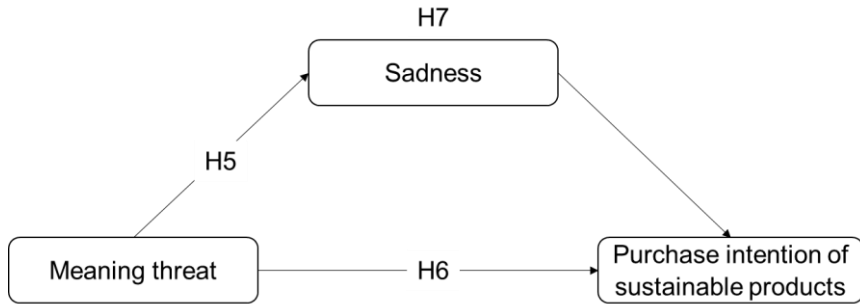
From the theoretical point of view, the first part of the dissertation (Study 1) aimed to simultaneously observe how different traits, such as meaning in life (both striving towards it and its presence), dispositional greed, and openness to experience, are linked to ownership of sustainable and circular brands and tested Hypothesis 1, Hypothesis 2, Hypothesis 3, and Hypothesis 4 (Figure 2).

Figure 2. The conceptual model of empirical research (Study 1)



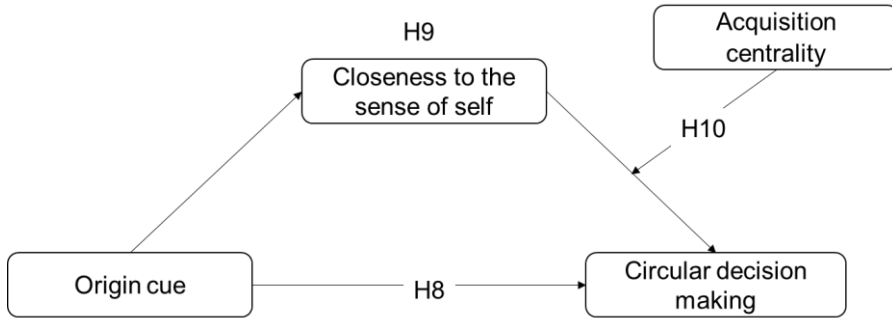
The second part of the dissertation has a set of four experiments (Study 2, Study 3, Study 4, and Study 5) which are grounded on the Meaning Maintenance Model (Heine et al., 2006) and the Discrete Emotion Theory. These experiments explored the mediating role of the emotion of sadness in the relationship between meaning threat and sustainable consumption and tested research Hypothesis 5, Hypothesis 6, and Hypothesis 7. Study 2 aimed to show that when people face a threat to their feeling of life being full of meaning (vs. control), the emotion of sadness increases. Further, Study 3 aimed to test the main effect of the direct path and reveal whether people exposed to meaning threat (vs. control) are willing to buy sustainable products more. Moreover, Study 4 aimed to explore the mediating role of the emotion of sadness in the relationship between meaning threat (vs. control) and intention to purchase sustainable products. Study 5 aimed to replicate the findings of Study 4 and show their generalizability by testing the underlying process with a different sustainable product. In the second part, Hypothesis 5, Hypothesis 6, and Hypothesis 7 were tested.

Figure 3. The conceptual model of empirical research (Study 2 – Study 5)



Lastly, the third part of the dissertation explored how adding origin cues when presenting circular products affects consumers' decision-making. Three experiments were conducted (Study 6, Study 7, and Study 8). Study 6 provides initial evidence that origin cues (vs. no origin cues) increase the perceived monetary value of a good. Using a different product category, Study 7 corroborates the findings of Study 6 and showed the downstream consequences on desirability. Furthermore, it demonstrated the robustness of the propositions by conveying that origin cues (vs. no origin cues) elicit a greater connection with the self and, in turn, lead to more desirability compared to products with no origin cues. Finally, Study 8 provides insights into how the effects of origin cues are pronounced among different groups of consumers. Specifically, this study demonstrates that origin effects on desirability are moderated by acquisition centrality - people who score lower on acquisition centrality experience elevated levels of desirability compared to people who score higher on acquisition centrality. These experiments tested Hypothesis 8, Hypothesis 9, and Hypothesis 10 across different product categories (keychain, candles; Figure 4).

Figure 4. The conceptual model of empirical research (Study 6 – Study 8)



The summary of the research hypotheses is provided in Table 2.

Table 2. Summary of research hypotheses

No.	Hypotheses	Empirical testing
H1	Meaning in life is positively related to ownership of (a) sustainable and (b) circular brands.	Study 1
H2	Dispositional greed is negatively related to ownership of sustainable brands.	Study 1
H3	Dispositional greed is positively related to ownership of circular brands.	Study 1
H4	Openness to experience is positively related to ownership of (a) sustainable brands and (b) circular brands.	Study 1
H5	Meaning threat (vs. control) increases sadness.	Study 2
H6	Meaning threat (vs. control) increases the purchase intention of sustainable products.	Study 3
H7	Meaning threat (vs. control) will increase the extent of sadness felt and, in turn, will lead to a greater purchase intention of sustainable products.	Study 4, Study 5
H8	Origin cues (vs. no origin cues) will increase the perceived monetary value of circular goods.	Study 6
H9	Origin cues (vs. no origin cues) will increase the closeness to the sense of self and, in turn, will lead to greater desirability of circular good.	Study 7
H10	Lower-acquisition centrality consumers (but not higher-acquisition centrality consumers) will have greater desirability for circular goods with origin cues (vs. no origin cues).	Study 8

5.3. Empirical Research on diverging traits of sustainable and circular consumption⁸

5.3.1. Study 1

Study 1 aimed to test how such traits as the presence of meaning in life, searching for meaning in life, dispositional greed, and openness to experience are related to ownership of sustainable and circular brands.

5.3.1.1. Method and measures and data collection on Study 1

British nationality participants from the Prolific Academic platform were recruited to participate in the survey in return for a small monetary compensation. The sample consisted of a total of 500 respondents ($M_{age} = 40.2$, $SD = 13.7$, 49.4% female, 48.6% male, 0.8% other, 1.2% not indicated). This study was a part of a larger study.

I used well-established scales for testing the hypotheses. *Meaning in life* was measured using a nine-item 7-point Likert scale (adapted from Steger et al., 2006; see also Grouden & Jose, 2015; Newman et al., 2018; Ward & Kim, 2023). The scale consisted of two conceptually different factors: 1) presence of meaning which refers to how meaningful an individual feels his or her life is (sample item: “I understand my life's meaning”; $M = 4.51$, $SD = 1.44$, Cronbach's $\alpha = .93$) and 2) search for meaning that represents the extent to which individuals desire and strive to construct or improve a sense of comprehensibility and one's life making sense, also, making their lives more purposeful (sample item: “I am looking for something that makes my life feel meaningful”; $M = 4.59$, $SD = 1.27$, Cronbach's $\alpha = .90$; adapted from Steger et al., 2006; Martela & Steger, 2016). I measured those two factors with a scale ranging from 1 = “absolutely untrue” to 7 = “absolutely true”, with higher scores reflecting higher levels of presence of meaning in life and searching for it. It is important to note that the presence of meaning and search for meaning factors were negatively correlated ($r(498) = -.14$, $p < .01$), thus empirically confirming the distinct nature of these facets (see Steger et al., 2006).

⁸ This section is based on: Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

To measure *dispositional greed*, a six-item 7-point Likert scale ranging from 1 = “totally disagree” to 7 = “totally agree” was used (adapted from Seuntjens et al., 2015b; see also Bao et al., 2020; Seuntjens et al., 2019; a sample item: “I always want more”; $M = 3.23$, $SD = 1.27$, Cronbach's $\alpha = .87$), with higher scores representing a higher level of dispositional greed.

Openness to experience was operationalized using a seven-item 7-point scale ranging from 1 = “definitely false” to 7 = “definitely true” (adapted from Jackson et al., 2000; a factor from Six Factor Personality Questionnaire used and validated in many studies, see Sigma Assessment Systems, n.d. for a list of studies; a sample item: “I am open to change”; $M = 5.19$, $SD = 1.01$, Cronbach's $\alpha = .83$). The higher score indicated higher levels of openness.

I also asked respondents to indicate their average disposable income per household (after taxes, per year) for measuring income level. The interval scale ranged from 1 = “< £5000” to 9 = “> £40,001”, a higher score indicated a higher level of income ($M = 5.31$, $SD = 2.70$).

To measure the actual purchasing of brands, respondents were provided with a list of sustainable, circular, and regular brands and asked to indicate which brands they bought over the last year. I compiled the list of sustainable and regular brands based on brand rankings of the UK's leading alternative consumer organization *Ethical Consumer* (<https://www.ethicalconsumer.org/>). Moreover, the list of circular brands was prepared after researching what circular brands are available in the UK market and what brands are positioned as produced in line with circular economy principles. I singled out 13 product categories, representing fast-moving consumer goods: coffee, ice cream, tea, chocolate, laundry detergents, toilet paper, cleaning products, shampoo, skincare products, toothpaste, high street clothes, shoes, and other things. Three or four sustainable and the same amount of regular brands in each category were used, and in the non-food categories, I added circular brands, making 108 brands in total. The sequence of presenting the brands in each category was randomized. After data collection for further analysis, I excluded 42 brands that only five or fewer respondents chose. Altogether, there were 23 sustainable (e.g., Coffee Cafédirect, Green People Shampoo, HandM clothing), six circular (e.g., Patagonia, Clean Living, Vinted), and 37 regular brands (e.g., Primark, Domestos). The brand list used to compile the brand ownership measures is provided in Appendix 9.

To assess ownership, I calculated the sum of all sustainable, circular, and regular brands bought during the past year for each respondent (Barauskaite et al., 2018; Gineikiene & Diamantopoulos, 2017). The final score for ownership of sustainable brands ranged from 1 to 23 ($M = 2.03$, $SD = 2.29$), for circular brands - from 1 to 6 ($M = .34$, $SD = .68$), and for regular brands - from 1 to 37 ($M = 12.81$, $SD = 6.33$). Appendix 10 summarizes the measurement properties of the multi-item scales and the correlation among constructs.

5.3.1.2. Results of Study 1

Measurement Model. The dimensionality, reliability, and validity of the construct measures were investigated via a confirmatory factor analysis. Overall measurement model fit was acceptable ($\chi^2 = 947.70$, $df = 221$, $RMSEA = 0.081$, $CFI = 0.930$). Based on the results of the confirmatory factor analysis, items that loaded less than 0.4 on respective scales were removed (Hair et al., 2019). Composite reliabilities of the construct measures ranged from 0.83 to 0.93, while average variance extracted (AVE) values ranged from 0.43 to 0.73. All AVEs exceeded the squared correlation between each construct with all other constructs, thus establishing discriminant validity (Fornell & Larcker, 1981).

I followed both *ex ante* (procedural) and *ex post* (statistical) procedures to address common method variance (CMV; Chang et al., 2010). Regarding *ex ante* procedures, I assured respondents of the anonymity and confidentiality of their responses and emphasized that there were no right or wrong answers. I also counter-balanced question order and adopted different response formats. Finally, respondents were asked about their ownership before asking them about dispositional greed, meaning in life, and openness to experience to avoid social desirability and priming effects (Podsakoff et al., 2003).

I also statistically tested for CMV *ex post*. First, the marker variable approach proposed by Lindell and Whitney (2001) was employed. The item "I have friends with whom I can share my joys and sorrows" (measured on a seven-point scale, 1 = "totally disagree" and 7 = "totally agree") was used as a marker variable which, from a conceptual point of view, was unrelated to the constructs analyzed in the model. I performed a partial correlation analysis of the items measuring the constructs and assessed whether the significance of their zero-order correlations changed when the

marker variable was partialled out. The significance of the resulting coefficients did not change, suggesting that CMV was not a problem. Second, I further assessed CMV by including a common latent method factor in the measurement model and compared the resulting CFA model with that of the CFA model without the method factor. In light of the minor differences in fit (see Appendix 11), CMV does not seem to pose a problem for the sample.

Structural Model. A structural equation model was estimated with LISREL 8.8 (Jöreskog & Sörbom, 2006), which produced an acceptable fit ($\chi^2 = 1057.02$, $df = 275$, $RMSEA = 0.076$, $CFI = 0.927$, see more details on the measurement model and common method variance in Appendix 10).

In line with H1a, searching for meaning in life had a positive relationship with ownership of sustainable brands ($\beta = 0.11$, $t = 2.26$, $p < .05$, see Figure 1), however, a relationship between the presence of meaning in life and ownership of sustainable brands was not found ($\beta = 0.04$, $t = 0.87$, $p = .39$). Searching for meaning was not significantly related with ownership of circular brands ($\beta = 0.08$, $t = 1.54$, $p = .12$). The presence of meaning in life was positively related to ownership of circular brands ($\beta = 0.11$, $t = 2.31$, $p < .05$). Thus, H1a and H1b are partially supported. Finally, the ownership of regular brands had no reliable relationship neither with the presence of meaning in life ($\beta = 0.08$, $t = 1.61$, $p = .11$) nor with the search for it ($\beta = 0.09$, $t = 1.79$, $p = .07$).

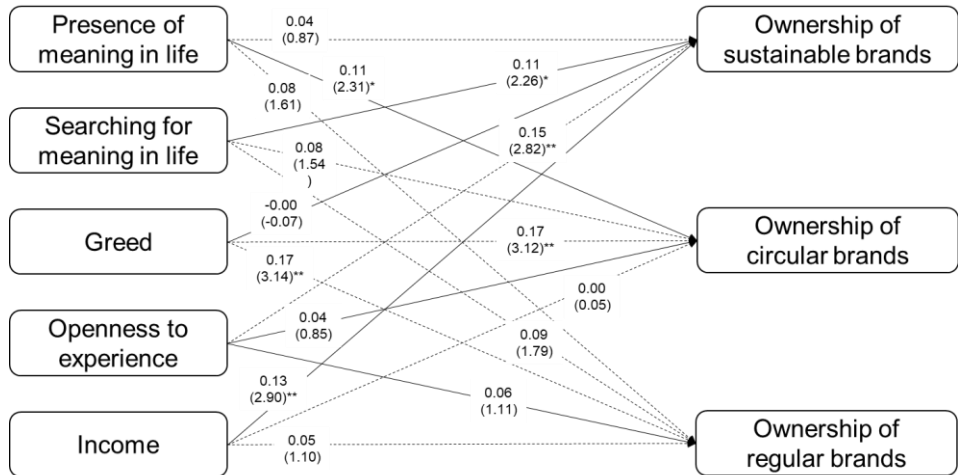
Next, H2 was not supported, as there was no significant relationship between dispositional greed and ownership of sustainable brands ($\beta = -0.00$, $t = -0.07$, $p = .94$). However, dispositional greed was positively related to ownership of circular brands ($\beta = 0.17$, $t = 3.12$, $p < .01$), thus, H3 was confirmed. In addition, dispositional greed was positively related to the ownership of regular brands ($\beta = 0.17$, $t = 3.14$, $p < .01$).

In line with H4a, openness to experience was positively related to the ownership of sustainable brands ($\beta = 0.15$, $t = 2.82$, $p < .01$). H4b was not supported, as openness to experience was not related to ownership of circular brands ($\beta = 0.04$, $t = 0.85$, $p = .40$). In addition, openness to experience was not related to the ownership of regular brands either ($\beta = 0.06$, $t = 1.11$, $p = .27$).

Furthermore, the relation of income level to ownership of sustainable brands was significant and positive ($\beta = 0.13$, $t = 2.90$, $p < .01$). However, income level was not

related to ownership of circular ($\beta = 0.00$, $t = 0.05$, $p = .96$) and regular ($\beta = 0.05$, $t = 1.10$, $p = .27$) brands.

Figure 5. Model testing results



Note: standardized estimates shown, t values in brackets, nonsignificant paths are dashed; ** if $p < .01$, * if $p < .05$.

5.4. Empirical research on meaning threat, sadness, and sustainable consumption⁹

5.4.1. Study 2

Study 2 aimed to test whether exposure to meaning threat (vs. control) increases greater feeling emotion of sadness.

5.4.1.1. Method and measures, and data collection of Study 2

Design and Participants. 299 British participants ($M_{age} = 32.3$, $SD_{age} = 11.4$, 67.9% female) were recruited from the Prolific Academic online platform to participate in the

⁹ This section is based on: Kaminskiene, Z., Barysytė, J., Uzdavinyte, E. (under review). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

experiment in return for a small monetary compensation. This study was a part of a larger study. The extent of sadness felt was the dependent variable.

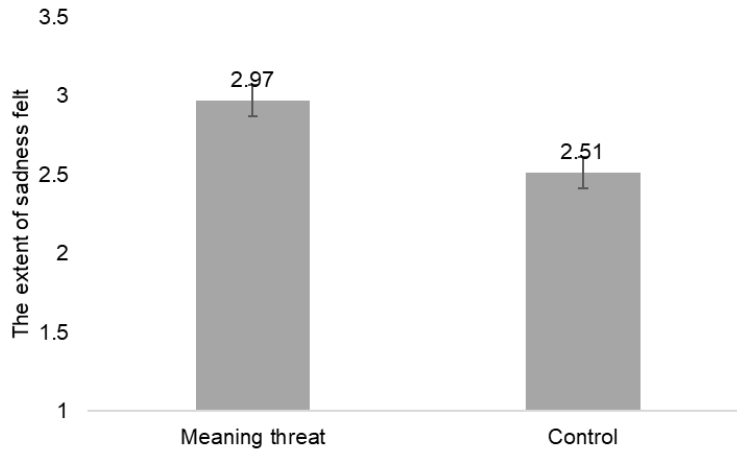
Procedure and measures. Participants were informed that they were going to be presented with 10 different sentences, one at a time. They were instructed to think about the meaning of each sentence and then rewrite it in their own words on the next page. Participants were randomly assigned to one of the two conditions. To manipulate meaning threat, participants were assigned to read and rewrite sentences about life meaninglessness (e.g., “Human life seems like a useless, meaningless treadmill”). In the control condition, sentences were about various facts that are not relevant to meaning in life (e.g., “The Nile River in Africa is the world's longest river”). This manipulation was adapted from Park and Baumeister (2017), Routledge et al. (2011), and Vohs and Schooler (2008). After the reading and writing task, participants completed a four-item Discrete Emotions Questionnaire sadness subscale (Harmon-Jones et al., 2016) with items such as “sad”, “grief”, “empty”, and “lonely”, using a seven-point scale, where 1 = “don’t harbor this feeling”, 7 = “extremely” ($M = 2.74$, $SD = 1.41$, Cronbach’s $\alpha = .80$). Finally, participants completed a manipulation check (“How much did the sentences cast doubt on the belief that life is full of meaning?”; 1 = “not at all”, 7 = “very much”; $M = 3.41$, $SD = 1.92$; Park & Baumeister, 2017; Routledge et al., 2011).

5.4.1.2. Results of Study 2

Manipulation check. Manipulation was successful, the meaning threat condition elicited greater doubt on the belief that life is full of meaning for those participants who were exposed to the meaning threat (vs. control) condition ($M_{threat} = 3.81$, $SD_{threat} = 2.09$ vs. $M_{control} = 3.01$, $SD_{control} = 1.65$; $F(1, 297) = 13.46$, $p < .001$, $\eta^2 = .043$).

The effect of meaning threat on sadness. A univariate test showed that the extent of sadness felt differed across the conditions. Participants in the meaning threat condition reported feeling more sadness than participants in the control condition ($M_{threat} = 2.97$, $SD_{threat} = 1.58$ vs. $M_{control} = 2.51$, $SD_{control} = 1.18$; $F(1, 297) = 8.13$, $p = .005$, $\eta^2 = .027$; see Figure 6).

Figure 6. The effect of meaning threat on sadness



Thus, Study 2 provides initial evidence that meaning threats do increase sadness and supports Hypothesis 5.

5.4.2. Study 3

With Study 3 I opted to test whether meaning threat (vs. control) has a direct effect on intentions to purchase sustainable products.

5.4.2.1. Method and measures, and data collection of Study 3

Design and Participants. A total of 199 British participants ($M_{age} = 36$, $SD_{age} = 13.4$, 70.4% female) were recruited from the Prolific Academic online platform to participate in the experiment in return for a small monetary compensation. This study was a part of a larger study. The design was a single factor between-subjects design. The independent variable had two levels: meaning threat (1) present and (2) absent. Purchase intention was the main dependent variable.

Procedure and measures. Participants were randomly assigned to one of the two conditions. For meaning threat and control conditions I used the same reading and writing task as in Study 2. After the manipulation procedure participants were provided with a picture and description of sustainable drinking straws: “Reduce plastic waste with reusable drinking straws! Sustainable, reusable stainless steel drinking straws.

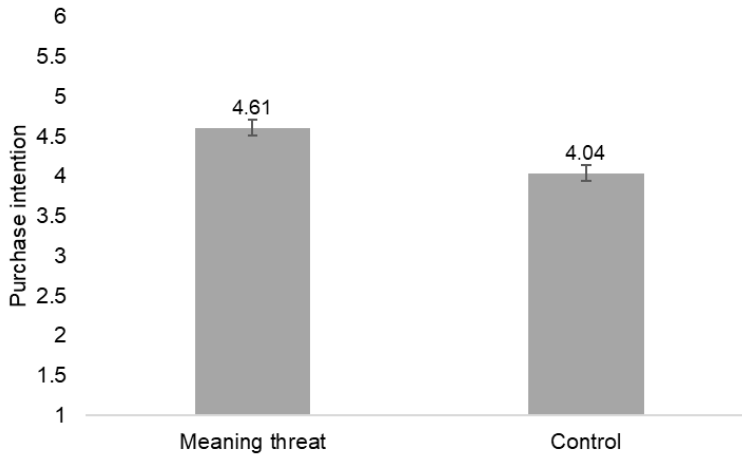
Available in a convenient pack of 8. Two different lengths and shapes for different needs” (see Appendix 3) and asked to indicate their intentions to purchase. To measure purchase intention, I used a four-item scale (adapted from Putrevu & Lord, 1994). Participants were asked to indicate the extent of agreement with each statement on a seven-point Likert scale (e.g., “If someone would offer me these drinking straws, I would probably buy it”; 1 = “totally disagree”, 7 = “totally agree”; $M = 4.33$, $SD = 1.88$, Cronbach’s $\alpha = .96$). Finally, participants completed a manipulation check, the same as in Experiment 1 ($M = 2.97$, $SD = 1.92$; Park & Baumeister, 2017; Routledge et al., 2011), were thanked and debriefed.

5.4.2.2. Results of Study 3

Manipulation check. The manipulation of meaning threat was successful, as participants exposed to the meaning threat condition reported significantly greater doubt regarding their belief that life is full of meaning compared to those participants who were exposed to the control condition ($M_{threat} = 3.78$, $SD_{threat} = 1.91$ vs. $M_{control} = 2.15$, $SD_{control} = 1.56$; $F(1, 197) = 43.3$, $p < .001$, $\eta^2 = .18$).

The effect of meaning threat on sustainable purchase intention. The results prove the direct effect of the meaning threat (vs. control) on the intention to purchase sustainable product, as a univariate test showed that the purchase intention significantly differed across the conditions. Participants in the meaning threat condition reported greater purchase intention compared to participants in the control condition ($M_{threat} = 4.61$, $SD_{threat} = 1.73$ vs. $M_{control} = 4.04$, $SD_{control} = 1.99$; $F(1, 197) = 4.68$, $p = .032$, $\eta^2 = .023$; see Figure 7).

Figure 7. The effect of meaning threat on sustainable purchase intention



Study 3 finding reveals the direct effect of meaning threat on sustainable purchase intention and supports Hypothesis 6, stating that meaning threat (vs. control) increases willingness to buy sustainable products.

5.4.3. Study 4

Study 4 tested the downstream consequences of the meaning threat on the intention to purchase sustainable products. More particularly, I aimed to assess the underlying mechanism by testing the emotion of sadness as a mediator between meaning threat and purchase intention.

5.4.3.1. Method and measures, and data collection of Study 4

Design and Participants. A total of 199 British participants ($M_{age} = 35.4$, $SD_{age} = 13.4$, 70.4% female) were recruited from the Prolific Academic online platform to participate in the experiment in return for a small monetary compensation. This study was a part of a larger study. The design was a single factor between-subjects design. The independent variable had two levels: meaning threat (1) present, and (2) absent. Purchase intention was the main dependent variable and the emotion of sadness was a mediator in the model.

Procedure and measures. Participants were randomly assigned to one of the two conditions and had a reading and writing task for the manipulation procedure, which was identical to the one used in Study 2 and Study 3. After manipulation participants were asked to complete the same four-item Discrete Emotions Questionnaire sadness subscale (Harmon-Jones et al., 2016; $M = 2.24$, $SD = 1.50$, Cronbach's $\alpha = .90$) as in Study 2. Further, participants were presented with a picture and description of sustainable drinking straws identical to the one used in Study 3 and asked to evaluate their intention to purchase these straws (adapted from Putrevu & Lord, 1994; $M = 4.43$, $SD = 2.10$, Cronbach's $\alpha = .98$). Finally, participants completed a manipulation check ($M = 3.20$, $SD = 2.02$; Park & Baumeister, 2017; Routledge et al., 2011), were thanked and debriefed.

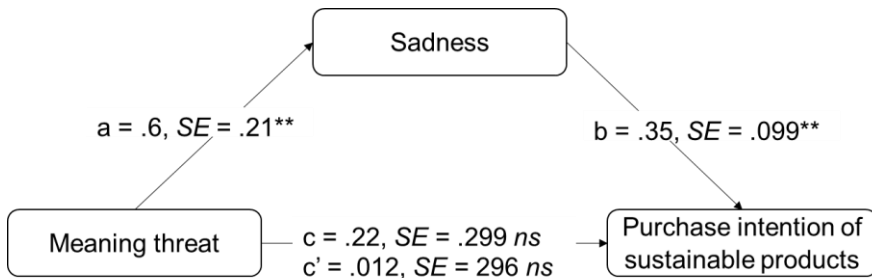
5.4.3.2. Results of Study 4

Manipulation check. The manipulation of meaning threat was successful, as participants perceived differences in the doubt on the belief that life is full of meaning between conditions. Those participants who were implementing reading and writing task with sentences about life meaninglessness reported a greater extent of doubt regarding their belief that life is full of meaning compared to those who were reading and rewriting neutral sentences ($M_{threat} = 4.17$, $SD_{threat} = 2.08$ vs. $M_{control} = 2.21$, $SD_{control} = 1.40$; $F(1, 197) = 60.7$, $p < .001$, $\eta^2 = .24$).

Mediation analysis. Using the PROCESS macro for SPSS, I performed mediation analysis (Hayes, 2022; PROCESS; Model 4, 5000 boot-strapped samples) and observed that the relationship between meaning threat presence (dummy coded, 0 = control; 1 = threat) and intention to purchase the sustainable product was mediated by the emotion of sadness. Corroborating the analysis above, the meaning threat presence (vs. control) increases the extent of sadness felt (path a : $B = .60$, $SE = .21$, $t(197) = 2.87$, $p = .005$). In turn, the emotion of sadness increases the purchase intention of sustainable product (path b : $B = .35$, $SE = .099$, $t(196) = 3.54$, $p < .001$). Next, the direct effect of meaning threat presence (vs. control) on the purchase intention of sustainable product was not significant (path c' : $B = .012$, $SE = .30$, $t(196) = .041$, $p = .97$), as well as total effect (path c : $B = .22$, $SE = .30$, $t(197) = .74$, $p = .46$). Importantly, to assess whether the impact of meaning threat

presence on the intention to purchase sustainable products is mediated by the emotion of sadness, I assessed the indirect effect. The analysis shows that the impact of meaning threat presence (vs. control) on purchase intention was indeed fully mediated by the emotion of sadness as the 95% confidence interval did not include zero ($effect = .21$, 95% $CI [.053$ to $.41]$; see Figure 8).

Figure 8. Meaning threat presence effects on intention to purchase sustainable products via the emotion of sadness



Note: * $p < .05$, ** $p < .01$, ns = non-significant

The results of Study 4 support H7 by showing that meaning threat (vs. no meaning threat) increases the extent of sadness felt and, in turn, leads to greater intention to purchase sustainable product.

5.4.4. Study 5

Study 5 aimed to replicate the findings of Study 4 by testing the processes using different sustainable product without highlighting its sustainability benefits.

5.4.4.1. Method and measures, and data collection of Study 5

Design and Participants. A total of 199 British participants ($M_{age} = 37.2$, $SD_{age} = 14.8$, 70.4% female) were recruited from the Prolific Academic online platform to participate in the experiment in return for a small monetary compensation. This study was a part of a larger study. The design was a single factor between-subjects design. The independent variable had two levels: meaning threat (1) present and (2) absent.

Purchase intention was the main dependent variable, and the emotion of sadness was a mediator.

Procedure and measures. Participants were randomly assigned to one of the two conditions and had a reading and writing task for the manipulation procedure, which was identical to the one used in Studies 2-4. After manipulation participants were asked to complete the same four-item Discrete Emotions Questionnaire sadness subscale (Harmon-Jones et al., 2016; $M = 2.33$, $SD = 1.43$, Cronbach's $\alpha = .88$) as in Study 2 and 4. Further, participants were presented with a picture of a portable power bank together with a description: "Be practical with a portable charger and external backup battery! Charger and portable power bank with high-efficiency solar panel. Battery is capable of charging your tablet or smartphone for several times. Protection for overdischarges allows you to use your electric devices even more efficiently!" (see Appendix 5). Next, participants were asked to evaluate their intention to purchase this power bank using four statements on a seven-point Likert scale (sample item: "If someone would offer me this power bank, I would probably buy it"; 1 = "totally disagree", 7 = "totally agree"; adapted from Putrevu & Lord, 1994; $M = 4.15$, $SD = 1.85$, Cronbach's $\alpha = .97$). Finally, as in the previous experiments, participants completed a manipulation check ($M = 3.12$, $SD = 2.04$; Park & Baumeister, 2017; Routledge et al., 2011), answered to the control question whether they consider the power bank presented earlier to be sustainable using a seven-point Likert scale (1 = "not at all", 7 = "very much"; $M = 4.44$, $SD = 1.78$), were thanked and debriefed.

5.4.4.2. Results of Study 5

Manipulation check. The manipulation of meaning threat was successful, as the difference of perceived doubt on the belief that life is full of meaning between two conditions was significant. Those participants who were implementing reading and writing task with sentences about life meaninglessness reported a greater extent of doubt regarding their belief that life is full of meaning compared to those who were reading and rewriting neutral sentences ($M_{threat} = 3.77$, $SD_{threat} = 2.10$ vs. $M_{control} = 2.45$, $SD_{control} = 1.75$; $F(1, 197) = 23.10$, $p < .001$, $\eta^2 = .11$). Moreover, participants in both meaning threat and control conditions perceived the power bank

to be sustainable $M_{threat} = 4.46$, $SD_{threat} = 1.82$ vs. $M_{control} = 4.42$, $SD_{control} = 1.76$; $F(1, 197) = .020$, $p = .89$, $\eta^2 < .001$).

Mediation analysis. Using the PROCESS macro for SPSS I performed mediation analysis (Hayes, 2022; PROCESS; Model 4, 5000 boot-strapped samples) and observed that the relationship between meaning threat presence (dummy coded, 0 = control; 1 = meaning threat) and intention to purchase sustainable products was mediated by the emotion of sadness. The meaning threat presence (vs. control) increases the extent of sadness felt (path *a*: $B = .78$, $SE = .20$, $t(197) = 3.98$, $p < .001$). In turn, the emotion of sadness increases the purchase intention of sustainable product (path *b*: $B = .21$, $SE = .094$, $t(196) = 2.23$, $p = .027$). Next, the direct effect of meaning threat presence (vs. absence) on the purchase intention of sustainable product was not significant (path *c'*: $B = -.041$, $SE = .27$, $t(196) = -.15$, $p = .88$), as well as total effect (path *c*: $B = .12$, $SE = .26$, $t(197) = .47$, $p = .64$). Importantly, to assess whether the impact of meaning threat presence on the intention to purchase sustainable products is mediated by the emotion of sadness, I assessed the indirect effect. The analysis shows that the impact of meaning threat presence (vs. control) on purchase intention was indeed fully mediated by emotion of sadness as the 95% confidence interval did not include zero ($effect = .16$, 95% *CI* [.019 to .35]).

The results of Study 5 support H7 by showing that meaning threat (vs. control) increases the extent of sadness felt and, in turn, leads to greater intention to purchase sustainable products.

5.5. Empirical research on origin cue and circular consumption¹⁰

5.5.1. Study 6

Study 6 aimed to test how origin cues (vs. no origin cues vs. control) change the perception of the monetary value of used and remodeled goods.

¹⁰ This section is based on: Barsyte, J., Kaminskiene, Z, Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. *In* Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

5.5.1.1. Method and measures, and data collection of Study 6

Participants and Design. 300 British participants ($M_{\text{age}} = 39.7$, $SD = 13.7$, 71% female) were recruited from the Prolific Academic platform to participate in the experiment in return for a small monetary compensation. This study was a part of a larger study. Data analysis was prepared after removing one participant who did not indicate values on the main dependent variable. The design was a single factor between-subjects design. The independent variable (IV) was origin cues presence and had three levels: (1) absent, (2) present, and (3) control. Perception of monetary value was the main dependent variable (DV).

Procedure. Participants were randomly assigned to one of three conditions and shown a picture of the keychain. The keychain was described as “made from steel and concrete originating from different construction demolition sites” (no origin condition); or “made from steel and concrete originating from a demolished old bridge in London” (origin condition), or “made from steel and concrete” (control condition; see Appendix 6). Then participants were asked to think about the presented keychain as their possession and to imagine this situation before answering the following questions. I measured the perceived monetary value of the good as the main dependent variable (adapted from Frazier et al., 2009). Participants were asked, “What do you think this keychain is worth?” and by answering this question, they had to provide an estimation in pounds ($M = 7.22$, $SD = 12.8$).

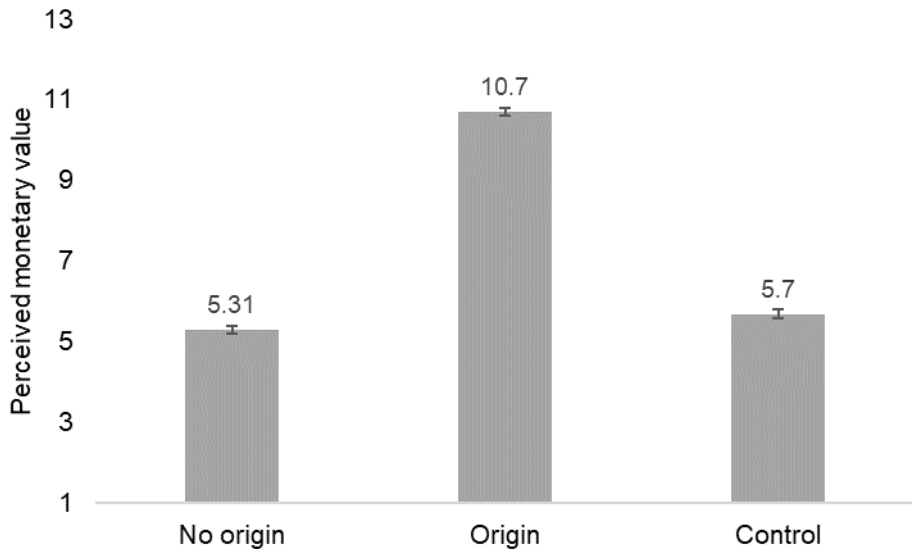
5.5.1.2. Results of Study 6

Manipulation check. The manipulation of origin cues was successful and participants perceived differences in the keychain origin across conditions (“This keychain originates from demolished old bridge in London”; 1 = “totally disagree”; 7 = “totally agree”: $M_{\text{origin}} = 6.59$, $SD_{\text{origin}} = 1.03$ vs. $M_{\text{no origin}} = 1.94$, $SD_{\text{no origin}} = 1.41$; $p < .001$; and $M_{\text{origin}} = 6.59$, $SD_{\text{origin}} = 1.03$ vs. $M_{\text{control}} = 3.26$, $SD_{\text{control}} = 1.50$; $p < .001$).

The effect of origin cues presence on the perceived monetary value of the good. A univariate test showed that the perception of monetary value differed across the conditions ($M_{\text{no origin}} = 5.31$, $SD_{\text{no origin}} = 3.49$ vs. $M_{\text{origin}} = 10.7$, $SD_{\text{origin}} = 21.1$ vs. $M_{\text{control}} = 5.70$, $SD_{\text{control}} = 4.94$, ($F(2, 295) = 5.60$, $p < .005$, $\eta^2 = .037$). People

perceived the keychain with origin cues as having twice as high monetary value compared to the keychain without origin cues ($p = .003$) and to the control condition ($p = .005$; see Figure 9).

Figure 9. Perceived monetary value of goods



The results of Study 6 support H8 and show that adding an origin cue substantially increases the perceived monetary value of the remodeled good.

5.5.2. Study 7

Study 7 involved different product category and tested the downstream consequences of origin cues on desirability. Furthermore, I aimed to assess robustness of the propositions by conveying that origin cues (vs. no origin cues) elicit a greater connection with the self and, in turn, lead to more desirability when compared to products with no origin cues.

5.5.2.1. Method and measures, and data collection of Study 7

Participants and Design. 300 British participants ($M_{age} = 32.9$, $SD = 11.8$, 71% female) were recruited from the Prolific Academic platform to participate in the

experiment in return for a small monetary compensation. This study was a part of a larger study. The design was the same as in Study 6: a single-factor between-subjects design. The independent variable was origin cues presence and had three levels: (1) absent, (2) present, and (3) control. Desirability was the main dependent variable and closeness to the sense of self was the mediator.

Procedure. Participants were shown a picture of the scented candle and were randomly assigned to one of three conditions: origin absence condition (“Scented candle made in recycled wine bottles”); or origin presence condition (“Scented candle made in recycled French wine bottles. From France”); or control condition (“Scented candle”; Appendix 7). Participants were asked to describe their feelings and thoughts about the candle using 5-7 sentences. Then, participants were asked to think about the presented keychain as their possession and to imagine this situation before answering the following questions. Next, participants completed a three-item seven-point scale of desirability with items such as “Is this candle worth keeping or would you throw it out?”, “How much would you like to own this candle?” and “How much would you want to touch this candle?” (1 = “definitely throw out” / “not at all”; 7 = “definitely keep” / “very much”; adapted from Frazier et al., 2009) ($M = 4.67$, $SD = 1.64$, Cronbach’s $\alpha = .85$). Afterwards the participants evaluated how close does the presented candle would seem to be to their sense of self, using the Overlap of Self measure (adapted from Aron et al., 1992; Schubert & Otten, 2002; Tropp & Wright, 2001), which consisted of five pictures with increasingly overlapping two circles labeled “Candle” and “Self” ($M = 3.62$, $SD = 2.40$).

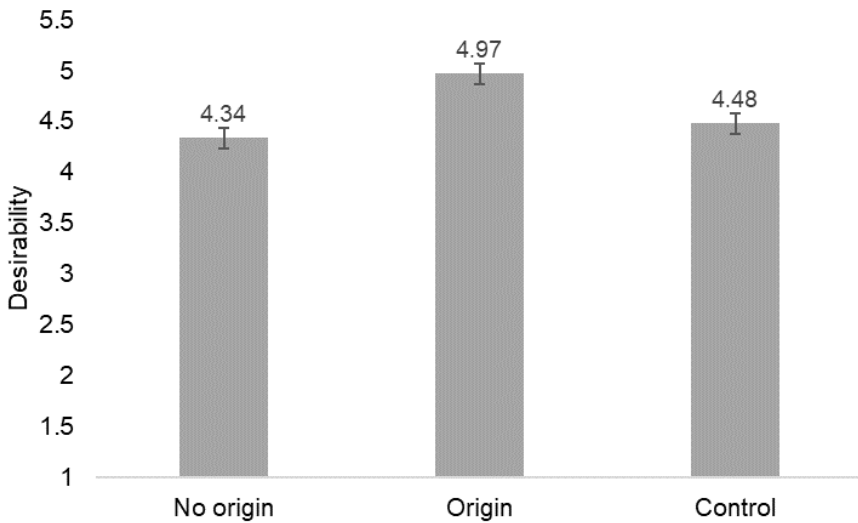
5.5.2.2. Results of Study 7

Manipulation check. The manipulation of origin cues was successful and participants perceived differences in the candle origin across conditions (“This candle is made in recycled French wine bottles from France”; 1 = “totally disagree”; 7 = “totally agree”: $M_{origin} = 6.43$, $SD_{origin} = 1.11$ vs. $M_{no\ origin} = 3.00$, $SD_{no\ origin} = 1.66$, $p < .001$; and $M_{origin} = 6.43$, $SD_{origin} = 1.11$ vs. $M_{control} = 3.42$, $SD_{control} = 1.63$; $p < .001$).

The effect of origin cues presence on desirability. Analyses of variance revealed a significant main effect of origin cues presence (origin vs. no origin vs. control) on desirability ($F(2, 298) = 4.37$, $p = .013$, $\eta^2 = .028$). A significant difference occurred

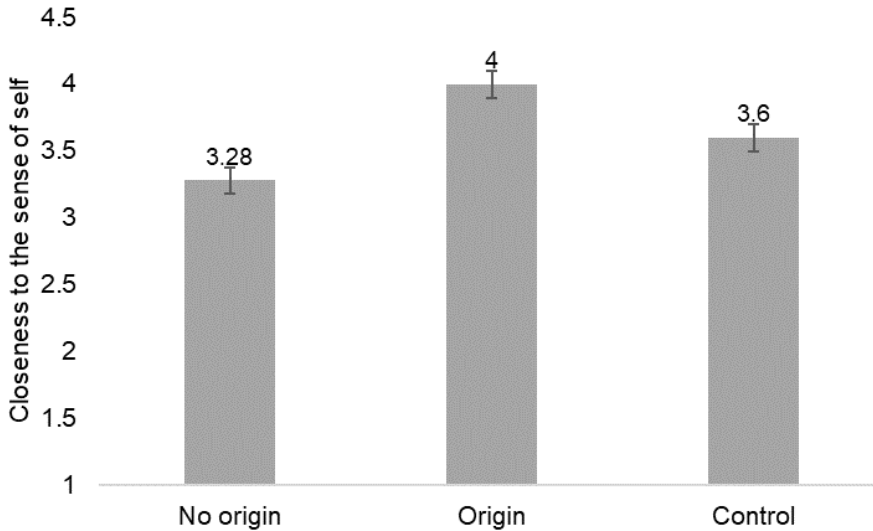
when comparing origin and no origin ($M_{origin} = 4.97$, $SD_{origin} = 1.5$ vs. $M_{no\ origin} = 4.34$, $SD_{no\ origin} = 1.73$, $p = .005$; and $M_{origin} = 4.97$, $SD_{origin} = 1.5$ vs. $M_{control} = 4.48$, $SD_{control} = 1.48$, $p = .53$). This indicates that origin cues presence increases the desirability when compared to origin cues absence, but also compared to the control condition (Figure 10).

Figure 10. The effect of origin cues presence on desirability



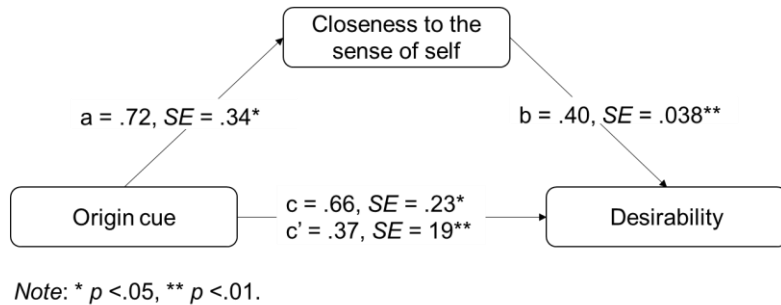
The effect of origin cues presence on closeness to the sense of self. The results of an ANOVA revealed no main effect of origin cues presence on closeness to the sense of self ($M_{origin} = 4.00$, $SD_{origin} = .25$ vs. $M_{no\ origin} = 3.28$, $SD_{no\ origin} = .24$ vs. $M_{control} = 3.60$, $SD_{control} = .24$, $F(2, 297) = 2.22$, $p = .11$, $\eta^2 = .015$). However, people perceived that a candle with origin cues is closer to the sense of self when compared to a candle without origin cues ($p = .036$). There was no significant difference between the origin and control conditions ($p = .24$; Figure 11).

Figure 11. The effect of origin cues presence on closeness to the sense of self



Mediation analysis. Using the PROCESS macro for SPSS I performed mediation analysis (Hayes, 2022; PROCESS; Model 4, 5000 boot-strapped samples) and observed that the relationship between origin cues presence (dummy coded, 0 = no origin; 1 = origin) and desirability was mediated by the overlap of self. Corroborating the analysis above, the origin cues presence increase closeness to the sense of self (path *a*: $B = .72$, $SE = .34$, $t(196) = 2.12$, $p = .035$). In turn, closeness to the sense of self increases desirability (path *b*: $B = .40$, $SE = .038$, $t(195) = 10.5$, $p < .001$). Next, the direct effect of origin cue presence (vs. absence) on desirability was significant (path *c'*: $B = .37$, $SE = .19$, $t(195) = 10.5$, $p < .001$), as well as total effect (path *c*: $B = .66$, $SE = .23$, $t(196) = 2.91$, $p < .005$). Importantly, to assess whether the impact of origin cues presence on desirability is mediated by closeness to the sense of self, I assessed the indirect effects. The analysis shows that the impact of origin cues presence on desirability was indeed mediated by closeness to the sense of self as the 95% confidence interval did not include zero ($effect = .29$, 95% *CI* [.024 to .57]; Figure 12).

Figure 12. Origin cues presence effects on desirability via closeness to the sense of self



The results of Study 7 support H9 by showing that remodeled goods with origin cues (vs. no origin cues) increase the closeness to the sense of self and, in turn, lead to greater desirability.

5.5.3. Study 8

Study 8 aims to provide insights into how the effects of origin on desirability are moderated by acquisition centrality.

5.5.3.1. Method and measures, and data collection of Study 8

Participants and Design. 258 British participants ($M_{age} = 35.2$, $SD = 13.4$, 66.7% female) were recruited from the Prolific Academic platform to participate in the experiment in return for a small monetary compensation. This study was a part of a larger study. I did not analyze the responses of two outlying observations (removed $> 2.50 SDs$ from the group mean (cf. Miller, 1991) and the responses of participants who did not comply with the instruction to write down their thoughts and wrote less than three words in the writing task (42 participants). The design was the same as in Studies 6 and 7: a single factor between-subjects design. The independent variable was origin cues presence and had three levels: (1) absent, (2) present, and (3) control. Desirability was the main dependent variable and acquisition centrality was the moderator.

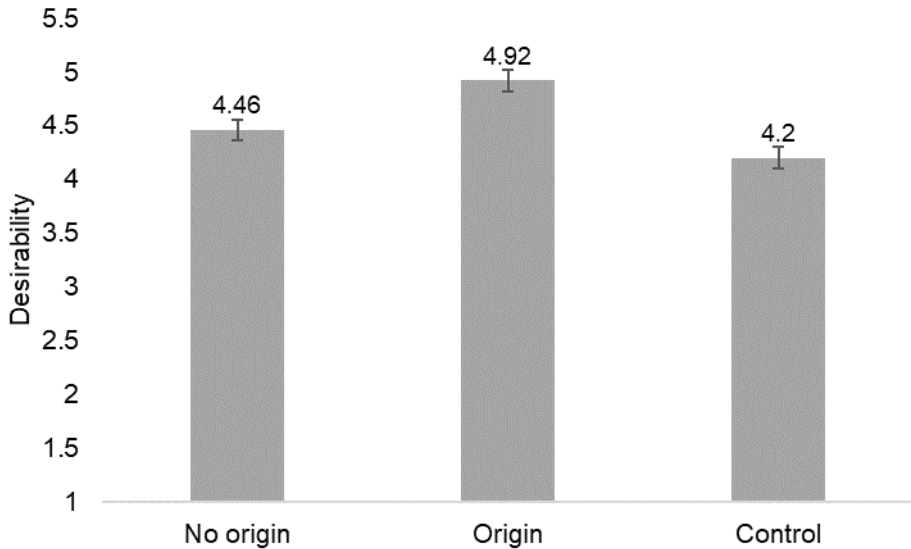
Procedure. I followed the same procedure as in the Study 6 (see Appendix 8). After manipulation participants were asked to describe their feelings and thoughts about the candle using 5-7 sentences. Then, participants were asked to think about the presented keychain as their possession and to imagine this situation before answering the following questions. Next, they completed the same desirability scale as in Study 7 (adapted from Frazier et al., 2009; $M = 4.52$, $SD = 1.51$, Cronbach's $\alpha = .81$). Finally, participants completed a seven-item acquisition centrality scale which is one of the factors of the material values scale (Richins & Dawson, 1992). They evaluated such statements as "The things I own aren't all that important to me", "I put less emphasis on material things than most people I know", etc. using a seven-point scale ranging from 1 = "totally disagree" to 7 = "totally agree" ($M = 3.88$, $SD = 1.14$, Cronbach's $\alpha = .81$).

5.5.3.2. Results of Study 8

Manipulation check. The manipulation of origin cues was successful and participants perceived differences in the candle origin across conditions ("This candle is made in recycled French wine bottles from France" (1 = "totally disagree"; 7 = "totally agree")): ($M_{origin} = 6.10$, $SD_{origin} = 1.44$ vs. $M_{no\ origin} = 3.43$, $SD_{no\ origin} = 1.86$, $p < .001$; and $M_{origin} = 6.10$, $SD_{origin} = 1.44$ vs. $M_{control} = 4.35$, $SD_{control} = 1.52$; $p < .001$).

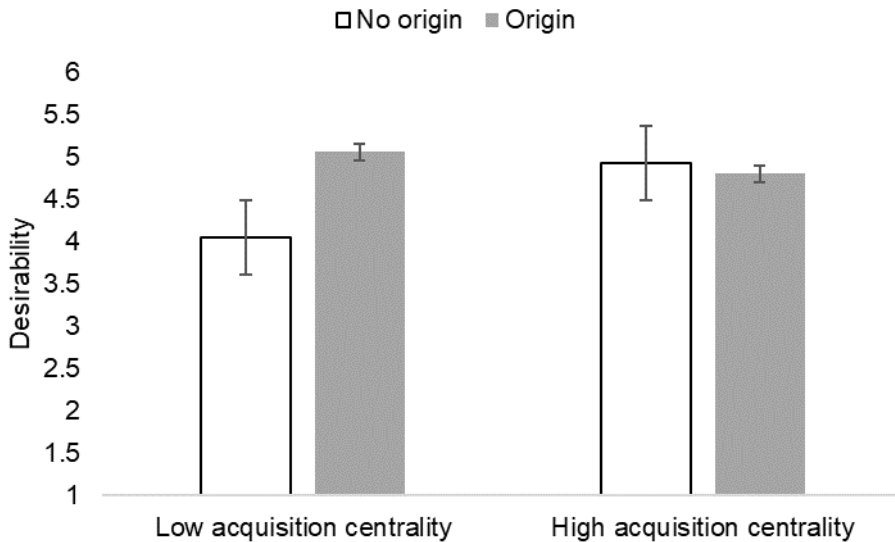
The effect of origin cues presence on desirability. Analyses of variance revealed a significant main effect of origin cues presence (origin vs. no origin vs. control) on desirability ($F(2, 255) = 5.17$, $p = .006$, $\eta^2 = .039$). A significant difference occurred when comparing origin and no origin, as well as origin and control conditions ($M_{origin} = 4.92$, $SD_{origin} = 1.38$ vs. $M_{no\ origin} = 4.46$, $SD_{no\ origin} = 1.52$, $p = .046$; and $M_{origin} = 4.92$, $SD_{origin} = 1.38$ vs. $M_{control} = 4.20$, $SD_{control} = 1.54$, $p = .002$). This replicates the finding of Study 6 and shows that origin cues increase the desirability: the candle with origin is more desirable compared to the candle with no origin (Figure 13).

Figure 13. The effect of origin cues presence on desirability



Moderation analysis. Using the PROCESS macro for SPSS (Hayes, 2017) I performed moderation analysis (Model 1; 5000 boot-strapped samples) and observed that origin cues presence led to increased feeling of desirability (path a : $B = 2.45$, $SE = .78$, $t(165) = -2.68$, $p < .005$), as it did acquisition centrality ($B = .41$, $SE = .13$, $t(165) = 3.13$, $p < .005$). Importantly, the interaction of origin cues presence and acquisition centrality on desirability proved to be significant ($B = - .53$, $SE = .20$, $t(165) = -2.68$, $p = .008$). Additional simple slopes (spotlight) analyses (Figure 11) showed that people who score low on acquisition centrality experience elevated levels of desirability ($B = 1.02$, $SE = .31$, $t(165) = 3.29$, $p < .005$). There was no significant effect for people who scored high on acquisition centrality ($B = - .12$, $SE = .30$, $t(165) = - .39$, $p = .70$; Figure 14).

Figure 14. The interaction of origin cues presence and acquisition centrality on desirability



The results of Study 8 support the H10 by showing that origin effects on desirability are moderated by acquisition centrality – people who score lower on acquisition centrality experience elevated levels of desirability compared to people who score higher on acquisition centrality.

5.6. The summary of empirical results

Meaning in life and ownership of sustainable and circular brands. Research Hypothesis 1 aimed to show that meaning in life is positively related to ownership of (a) sustainable and (b) circular brands. The results of Study 1 show that searching for meaning in life is positively related to ownership of sustainable brands, but there is no relationship between the presence of meaning in life and ownership of such brands. Moreover, the presence of meaning in life is positively related to the ownership of circular brands, however, there is no relationship between searching for meaning in life and ownership of such brands. Thus, H1a and H1b are partially supported.

Dispositional greed and ownership of sustainable and circular brands. Research Hypothesis 2 aimed to provide evidence that dispositional greed is negatively related to ownership of sustainable brands. The results of Study 1 show

that, indeed, there is no significant relationship between dispositional greed and ownership of sustainable brands and are in line with Hypothesis 2. Further, research Hypothesis 3 aimed to test whether dispositional greed is positively related to ownership of circular brands, and research findings support this hypothesis.

Openness to experience and ownership of sustainable and circular brands.

Research Hypothesis 4 investigated the relationship between openness to experience and ownership of sustainable and circular brands. It was proposed that openness to experience is positively related to ownership of (a) sustainable brands and (b) circular brands. The results of Study 1 support Hypothesis 4a as they reveal the positive relationship between openness to experience and ownership of sustainable brands. However, Hypothesis 4b was not confirmed as openness to experience was not related to ownership of circular brands.

Meaning threat and negative emotion of sadness. In this dissertation, I hypothesized that meaning threat (vs. control) increases the emotion of sadness. The results of Study 2 show that when people are exposed to meaning threat condition (compared to a control condition), they feel a greater extent of sadness, and the difference between conditions is statistically significant. Thus, these results are in line with Hypothesis 5.

Meaning threat and sustainable consumption. Research Hypothesis 6 aimed to provide evidence that meaning threat (vs. control) increases intention to purchase sustainable products. The findings of Study 3 show that this direct link exists. Specifically, when people are exposed to a meaning threat condition (compared to a control condition) they have greater intentions to purchase sustainable product. The difference between these two conditions is statistically significant. Thus, these results support research Hypothesis 6.

The mediating effect of the emotion of sadness of the relationship between meaning threat and sustainable consumption. The current dissertation aimed to provide empirical evidence on the mediating role of the emotion of sadness. Research Hypothesis 7 suggested that meaning threat (vs. control) will increase the extent of sadness felt and, in turn, will lead to a greater intention to purchase sustainable products. The findings of Study 4 indeed revealed an underlying mechanism between meaning threat (vs. control) and purchase intention of a sustainable product. These results supported research Hypothesis 7 by showing that meaning threat (vs. control) increases the extent of sadness felt and, in turn, leads to a greater intention to

purchase sustainable products. These results were replicated in Study 6 with a different sustainable product.

Origin cues and perception of the monetary value of circular goods.

Research Hypothesis 8 aimed to provide empirical evidence that knowing the origin (vs. no origin vs. control) of the circular product changes the perception of the monetary value of such products. The results of Study 7 demonstrate that perceptions of monetary value differ across conditions. Specifically, people consider the monetary value to be higher when the circular good is provided with an origin cue and lower when such cues are not provided for both circular and regular products. In other words, highlighting the origin makes positive changes in the perception of the monetary value of used and remodeled goods. These findings are in line with research Hypothesis 8.

The downstream effect of the closeness to the sense of self between origin cues and the desirability of circular goods. The current research seeks to test if the closeness to the sense of self will mediate the relationship between origin cues and the desirability of circular good. More particularly, research Hypothesis 9 aimed to show that origin cues (vs. no origin cues) will increase the closeness to the sense of self and, in turn, will lead to greater desirability of circular good. The results of Study 7 reveal the effect of origin cues' presence (vs. no origin vs. control) on desirability, showing that people have a greater desire for a circular good when the origin cue is present (compared to origin cues absent, also compared to the control condition). Further, the findings of Study 7 provide evidence of the effect of origin cues' presence on closeness to the sense of self. People perceive circular products to be closer to their sense of self when the origin cue is present (vs. absent). Finally, the results of Study 7 support research Hypothesis 9, revealing the partial mediation: circular goods with origin cues (vs. no origin cues) increase the closeness to the sense of self and, in turn, lead to greater desirability of such products.

The role of acquisition centrality in the desirability of circular goods. The current dissertation aimed to set the boundary conditions of the relationship between circular goods with origin cues present (vs. absent vs. control) and desirability. Study 8 aimed to provide insights into how the effects of origin on desirability are moderated by the acquisition centrality and test research Hypothesis 10 proposing that lower-acquisition centrality consumers (but not higher acquisition centrality consumers) will have greater desirability for circular goods with origin cues (vs. no origin cues). The

results of Study 8 replicate the findings of Study 7 by showing the existing main effect of origin cue on desirability, i.e., the circular product with origin present is more desirable compared to the product without origin cue or the product of the control group. Further, the findings of Study 8 support the H10 by showing that origin effects on desirability are moderated by acquisition centrality. More particularly, people who score lower on acquisition centrality experience elevated levels of desirability compared to people who score higher on acquisition centrality (for a summary of supported hypotheses, please see Table 3 below).

Table 3. List of supported hypotheses

No.	Hypotheses	Status
H1	Meaning in life is positively related to ownership of (a) sustainable and (b) circular brands.	Partially supported
H2	Dispositional greed is negatively related to ownership of sustainable brands.	Supported
H3	Dispositional greed is positively related to ownership of circular brands.	Supported
H4	Openness to experience is positively related to ownership of (a) sustainable brands and (b) circular brands.	Partially supported
H5	Meaning threat (vs. control) increases sadness.	Supported
H6	Meaning threat (vs. control) increases the purchase intention of sustainable products.	Supported
H7	Meaning threat (vs. control) will increase the extent of sadness felt and, in turn, will lead to a greater purchase intention of sustainable products.	Supported
H8	Origin cues (vs. no origin cues) will increase the perceived monetary value of circular goods.	Supported
H9	Origin cues (vs. no origin cues) will increase the closeness to the sense of self and, in turn, will lead to greater desirability of circular good.	Supported
H10	Lower-acquisition centrality consumers (but not higher-acquisition centrality consumers) will have greater desirability for circular goods with origin cues (vs. no origin cues).	Supported

6. DISCUSSION¹¹

The research problem of this dissertation aimed to address (a) a lack of understanding of how different traits are related to different forms of responsible consumption, i.e., consumer judgment and decision-making regarding sustainable and circular brands; (b) a lack of knowledge of how the negative emotion of sadness elicited from experienced meaning threat affects consumers' decisions in the sustainability domain; and (c) a lack of knowledge of why and under what conditions consumers make positive decisions regarding circular products when origin cues of such products are present (vs. absent).

First, the results of current research indicate that the presence of meaning in life is positively related to the ownership of circular but not sustainable brands. In contrast, searching for meaning in life has a positive relationship with the ownership of sustainable but not circular brands. In line with previous work (Steger et al., 2006), the data of this research provides empirical support that meaning in life consists of two facets and shows the diversity between them. I suggest that one of the explanations for such diverging findings for two types of meaning may lay in the pragmatic meaning regulation theory – if people seek to enhance their meaning efforts, they are more adaptive to possible behavioral strategies that can regulate meaning (van Tilburg & Igou, 2011). Thus, when searching for meaning mode is active, consumers are motivated to own sustainable brands. In addition, sustainable consumption requires more economic resources compared to a circular one and the findings are in line with recent research reporting that meaning-seekers are more determined to engage in more costly responsible behavior compared to less expensive (Dakin et al., 2021). In contrast, when meaning in life is already acquired, people seek fewer regulating strategies via acquiring material goods. Therefore, they opt for old (reused, remodeled, refurbished, etc.) circular goods instead of buying new sustainable goods. Previous

¹¹ This chapter is based on:

Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

research suggests that the presence of meaning in life promotes self-control, which helps avoid momentary urges (MacKenzie & Baumeister, 2014) and, thus, facilitates responsible consumption. This may explain why consumers with a stronger sense of the presence of meaning in life are more prone to purchase circular brands that are more value-oriented. Further research is needed to replicate and further specify this potentially impactful differentiation.

Second, the findings provided evidence that the trait of dispositional greed is positively related to ownership of both circular and regular brands, however, the support for the link to ownership of sustainable ones has not been found. Such findings can be explained by the fact that circular products are related to efforts to squeeze out and retain as much value as possible and frequently circular products do not have a premium price as sustainable ones (Pretner et al., 2021). These might be the reasons why circular products better correspond to the needs of greedy individuals. Further research should additionally confirm this remarkable finding, and if robust, it will open up new avenues to promote the use of circular products.

Third, I show that openness to experience is positively related to the ownership of sustainable brands, and there is no relationship to the ownership of circular and regular brands. As circular products are produced with very little or no virgin resources, it may signal ordinariness, despite the fact that innovative approaches, procedures, etc. might be employed to produce them. For individuals with high openness to experience, circular products could seem less relevant because they do not fulfill their desire to try new things. If some circular products introduce new ways of consumption (as services of the sharing economy), it could be a dealbreaker, however, further research is needed to sort that out.

Fourth, income level is not significantly related to the ownership of regular and circular brands, however, it has a positive relation to the consumption of sustainable ones. In the sustainable consumption domain, previous findings state that sustainable goods often cost more than their regular equivalents, and this can be one of the explanations for why people with higher incomes have an increased desire to acquire sustainable goods (Zhao et al., 2014).

Fifth, in line with previous research, the findings show that meaning threat increases sadness (Garg & Lerner, 2013; Heintzelman & King, 2014). The current work extends these findings by showing that the effects of meaning threats spill over and can lead to positive outcomes such as more sustainable choices – when

threatened, people have increased their willingness to buy sustainable products. Thus, the findings support research showing that people can re-find meaning by locating their affirmations in unrelated, not threatened areas (Heine et al., 2006).

Sixth, contrary to the large stream of previous studies, the findings of this dissertation show that consumers can desire more used or remodeled goods when certain aspects inherent in such goods are highlighted (i.e., origin). Moreover, the current research provides evidence that used or remodeled goods have the potential to have higher subjective intrinsic value compared to new goods, as consumers may perceive used or remodeled goods twice as valuable as regular new products. The findings add to the literature on circular consumption by showing that origin cues provide an important resource for consumers by increasing the connection with the self and, in turn, driving desirability. Finally, this research provides evidence that the documented effects are particularly present for people scoring lower on the acquisition centrality because such consumers are more sensitive to contextual cues in the environment.

Scientific contribution. This dissertation contributes to scientific literature in several ways.

First, this dissertation contributes to the conceptualization of sustainable and circular consumption by discussing how these two forms are related, overlapping, and diverging. In some contexts, circular consumption is presented as sustainable consumption (e.g., Park & Lin, 2020), and indeed, there are cases where it is possible to use these terms interchangeably, as circular consumption is considered to be a form of sustainable consumption (Geissdoerfer et al., 2017). However, prior research has pointed out that a lack of common understanding of the circular economy itself can lead to the “concept eventually collapsing or ending up in conceptual deadlock” (Kirchherr et al., 2017). This work suggests concrete definitions and novel approaches on how to conceptually address sustainable and circular consumption by focusing on the differences in (1) scope, (2) focus, and (3) orientation.

Second, while previous research shows the importance of understanding the role of traits in responsible consumption, currently available insights are limited, as previous studies do not examine whether the effects of traits differ for different types of responsible consumption. Only recently, it was pointed out that specific characteristics of circular products distinguish them from sustainable ones and that

these two types of responsible consumption should be considered distinct categories; therefore, drivers also can vary (Pretner et al., 2021). However, to date, no research has tested whether certain traits predict sustainable and circular consumption similarly using the same datasets. Drawing from the Trait Activation Theory (Tett & Burnett, 2003), this research expands the current knowledge, arguing that sustainable and circular products might signal different features corresponding to distinct traits. Research in the sustainable and circular consumption domain has focused on using theories explaining how attitudes, values, intentions, and norms drive different behaviors (see Camacho-Otero et al., 2018; Haider et al., 2022; Peattie, 2010; Steg & Nordlund, 2018 for review), resulting in a still unclear picture of how sustainable and circular products might be linked to various traits. This research draws attention to the potential for a deeper understanding of traits as potential drivers and encourages further research in this domain.

Third, this work expands existing knowledge by shedding more light on the complexity of the constructs of meaning in life, openness to experience, and dispositional greed in the domain of responsible consumption. By investigating separate dimensions of meaning in life (the presence of meaning in life and searching for it) this research shows that these dimensions have different effects on different forms of responsible consumption. Furthermore, previous research has repeatedly found a link between openness to experience and pro-environmental choices. However, I show that this trait does not necessarily drive the actual consumption of circular products, which also provides environmental benefits. Lastly, this dissertation demonstrates that dispositional greed is a positive driver of circular but not sustainable consumption.

Fourth, previous research focused on measuring intentions, and research has documented that on the surface consumers may feel positive and intend to buy sustainable brands but do not follow up when it comes to actually buying such brands (e.g., White et al., 2019). I meanwhile measure the ownership of different types of brands, and by doing so, this work contributes to the literature and provides practical implications regarding actual consumer choices.

Fifth, this dissertation also expands knowledge about the motivational role of negative emotions, specifically the emotion of sadness. Although prior research has highlighted motivational features of negative emotions toward positive changes, findings are mixed and rather limited when it comes to the consumption domain. In

contrast with the literature highlighting the directing role of sadness towards compensatory consumption, which brings negative consequences (e.g., Allard & White, 2015), this research shows that such frequently felt emotion, in some cases, can actively direct people to positive behavior. Specifically, the current research shows that sadness elicited by meaning threat leads to sustainable consumption.

Sixth, I expand the knowledge about the ways to reinstate a threatened sense of meaning in life. Prior research has studied how facing meaning threats in life stimulates engagement even in activities that can be unrelated to the threats' origin, hoping to strengthen their sense of life being meaningful (Heine et al., 2006; Zhang et al., 2019). Moreover, this dissertation contributes to the generalizability of previous findings by showing that sustainable consumption might also serve as a source to reinstate threatened meaning in life. To the best of my knowledge, this research is the first to show the link between meaning threats and sustainable consumption.

Seventh, the current work advances theoretical knowledge by identifying the psychological mechanisms that determine how and under what conditions origin cues help the appeal of used or remodeled goods and so may drive the success of circular consumption. Thus, it contributes to understanding how to boost the demand side for circular products – a research area previously poorly addressed. Contrary to the large stream of previous studies, the findings show that consumers can desire more used or remodeled goods when certain aspects inherent in such goods are highlighted (i.e., origin). Moreover, this research provides evidence that used or remodeled goods have the potential to have higher subjective intrinsic value compared to new goods, as consumers may perceive used or remodeled goods twice as valuable as regular new products.

Eight, I add to the literature on circular consumption by showing that origin cues provide an important resource for consumers by increasing the connection with the self and, in turn, driving desirability.

Finally, this research provides evidence that the documented effects are particularly present for people scoring lower on the acquisition centrality because such consumers are more sensitive to contextual cues in the environment. Overall, the results contribute to a better understanding of how to boost circular consumption and increase the demand for used or remodeled goods by highlighting certain aspects inherent in such goods.

Relevance to practice. The findings of this research may help to address actual social and economic problems. First, for managers, I highlight the potential of promotion, long-term focused vs. prevention, and short-term focused branding. This work suggests that the former is more suitable for positioning sustainable brands, while the latter can be used for circular brands. Second, the findings of this research show that when promoting sustainable vs. circular products, companies might consider a wider range of consumer characteristics. Specifically, managers might consider incorporating relevant elements for diverse consumers in the consumption process, product designs, or framing of messages. For instance, presenting new creative ways of using a product, employing showing-off innovative designs, new materials, or cutting-edge technology, etc. – such unique and forward-thinking solutions could draw attention and raise the curiosity of open to experience individuals who have a desire for personal growth and self-expression. In contrast, circular brands may consider highlighting the lower cost of such products and explain how the usage of such products helps save money and other resources at the later stages as well (e.g., inform about resale, reuse, etc. opportunities). Such communication would correspond to the needs of individuals high on dispositional greed. Third, the findings of the present research might be relevant for policymakers responsible for different educational initiatives. The opportunity to strengthen the sense of meaning in life by engaging in sustainable consumption could be promoted in the educational field. For instance, self-improving programs or apps that help people improve their well-being can introduce sustainable consumption in recommendations, together with explanations of why it might strengthen the sense of meaning in life. Fourth, policymakers and managers can design campaigns emphasizing the personal, emotional, and psychological value of sustainable consumption. Sustainable consumption is related to long-term benefits, mostly oriented not to personal but to gains for future generations (World Commission on Environment and Development, 1987). It also requires more effort, as sustainable consumption is related to higher costs (Zhao et al., 2014). Creating messaging that highlights how sacrifices related to engagement in sustainable consumption might support well-being not only for others but for oneself as well, can make sustainable options more appealing. More particularly, communication messages might highlight the positive role of sustainable consumption when a person experiences meaning threats and an elevated level of sadness. Fifth, brands might exploit the topic when building their social responsibility initiatives with the purpose of strengthening their

reputation. Such initiatives might encourage consumers to reflect on life's challenges, experiences of sadness, and various ways of coping with these challenges by pointing to the positive impact they can make through engagement in sustainable consumption. Sixth, managers can employ data analytics and identify consumer segments that are more likely to be exposed to meaning threats (e.g., who sensitively experience the futility of war, who are interested in existential wellness or social justice, etc.). Such identification would allow targeting consumers with messages and special offers, empowering them to make a difference by engaging in sustainable consumption. Finally, to place this research in a broader perspective – its findings may contribute to understanding how to reduce the actual consumption of resources on our planet. By 2050, the use of naturally occurring resources (water, land, air, forests, and minerals) will double (UNEP, 2017). To tackle these problems, governments have engaged in and adopted several initiatives, such as the EU Circular Economy Action Plan. Though policy changes have contributed greatly to raising and solving resource use problems, they may not be enough to change the way consumers think and act – and consumers are primarily responsible for the amount of waste generated. The current research takes another step to understand what makes such attitudes shift and how to boost circular consumption by increasing demand for used or remodeled goods – in doing so, to actually close the loop and move from a linear “take-make-dispose” to a circular “reduce-reuse-recycle” consumption model. Thus, this research provides novel insights into how to tackle resource use problems and encourage people to make better and more sustainable choices.

Limitations and implications for future research. Despite important contributions, the first study has several limitations that future research might address. First, while the data offers highly externally valid findings as the aim is to study actual consumption of sustainable and circular brands, future research might consider isolating and testing underlying effects using experimental design and in more controlled lab settings. The experimental design could also approach limitations regarding the methodology of compiling sustainable, circular, regular brand lists. For instance, the research does not assess whether the relationship between particular traits and consumption of sustainable and circular brands are different among different product categories, as the list of brands did not aim to correspond representatively to the actual market shares of different products. However, it would be interesting to delve

deeper into researching whether the consumption of brands of different categories would have different effects and investigate the reasons for distinctions or similarities. This could be tested in the future.

Second, future studies could provide insights into the reasons for the shown effects in present research by investigating boundary conditions and possibilities to reverse, strengthen, or attenuate the effect. For instance, according to the findings of this study, dispositional greed is positively related to the consumption of circular brands; however, the relationship between dispositional greed and sustainable consumption was non-significant. Future studies might explore whether this distinction is affected by the non-overlapping features of sustainable and circular products and what exactly these features signal that they correspond to the needs of greedy individuals.

Third, I aimed to show that distinct traits can motivate individuals to engage in different forms of responsible consumption and ground this notion that sustainable and circular products, in some cases, might signal different benefits. Yet, I acknowledge that in some cases, the signaling of sustainable and circular products can overlap. For instance, sustainable products that are not circular might as well signal value preservation, or circular brands can have a broader, promotion orientation. I might speculate that the motivations underlying consumer preferences for overlapping products that are characterized by value preservation might be materialism, frugality, environmental concern, strong future orientation or moral obligation, etc. Yet, I do not have empirical evidence on these relationships at this point, and future research might address this question.

Finally, with this work, I purposefully estimated only ownership of sustainable, circular, and regular brands, however, responsible consumption encompasses more consumption forms, such as de-ownership, transferring from a traditional “owning” to a “pay-per-use” ownership, or collaborative consumption. Future research may consider measuring this wider variety of responsible consumption forms and estimating the generalizability of the findings of the current Dissertation among them.

The second part of this dissertation also has its limitations. First, regarding negative emotions, further research is needed to explain why the emotion of sadness increases willingness to engage in sustainable consumption. Testing various boundary conditions could shed more light on this question. Second, sustainable consumption might provide various benefits - environmental, social, or economic - and future studies

might explore whether sadness produces different effects when highlighting one or another benefit. Third, future research could explore the generalizability of current findings by testing consumers' decisions in a field setting where the purchase choices are made in the presence of product variety, including both sustainable, regular, or even indulging choices. Fourth, in this research, I manipulated the sense of meaning in life by threatening the life purpose account. It is worth testing whether other meaning threats (e.g., sense of belongingness) would produce the same effects. Fifth, it would be insightful to investigate whether other negative emotions elicited by experienced meaning threat would work as competing mediators in pair with sadness. Finally, I show the causal relationships among the constructs under investigation; however, another research method such as qualitative interviews would be a valuable tool to delve more thoroughly into why sadness leads to increased sustainable behavior.

Future research might also address the limitations of the third part of this dissertation. First, as prior studies have drawn attention to consumers' negative attitudes regarding circular products (e.g., van Weelden et al., 2016), it is worth researching what kind of origin cues and in which contexts might backfire and decrease the desirability of circular products. Second, future research might investigate other paths and find other underlying mechanisms that might work in parallel with closeness to the sense of self or explore serial mediation by adding emotions. Third, further research is needed to understand the driving motivation for individuals who score low in acquisition centrality. For instance, acquisition centrality could be manipulated using priming techniques, additionally exploring other boundary conditions. Finally, field experiments could be employed for replication of the results; e.g., collaboration with makers of circular goods could provide evidence for real-life settings.

Future studies could also estimate the generalizability of the findings of this Dissertation and test the propositions in other contexts, e.g., with vulnerable, resilient, and hesitant regarding the transition to more sustainable consumption consumers. Data for this research was collected in the United Kingdom. Thus, future research could test the findings in less economically developed countries, where sustainability as a topic is less relevant.

7. CONCLUSIONS¹²

The goal of this current work is threefold. First, this dissertation aimed to investigate how the same motivational traits are related to two different forms of responsible consumption – sustainable and circular consumption. I acknowledge that sustainable consumption and circular consumption show considerable overlap. Yet, I argue that sustainable consumption is a psychologically different type of consumption than circular consumption, thus, the underlying traits and judgment and decision-making may also differ. Further, after revealing distinctions between these two consumption forms, the current work raised a goal to expand the knowledge of what underlying mechanisms drive sustainable and circular consumption. More specifically, for sustainable consumption, I aimed to analyze whether the meaning threat causes the emotion of sadness and how sadness affects the willingness to consume sustainably. The goal was to show the motivational role of the negative emotion of sadness toward positive change in the sustainability domain. Lastly, for circular consumption, I applied a different approach and aimed to investigate how providing more specific information about the circular product affects the demand, i.e., the current dissertation aimed to research the role of origin cues in steering consumer decision-making regarding circular products. Even more precisely, to research what spill-over effect the presence of origin cues (versus absence) has, how it affects the desirability of circular products, and what boundary conditions are.

The first part of the dissertation was built on the findings in the sustainable and circular decision-making domain. Drawing on the Trait Activation Theory (Tett & Burnett, 2003) as a theoretical framework, the current study demonstrates how traits affect different types of sustainable and circular consumption. Simultaneously evaluating a range of traits, representing promotion and prevention orientations, the findings show their diverging effects on the consumption of sustainable and circular

¹² This chapter is based on:

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brands. Specifically, the results demonstrate that sustainable consumption may be boosted by the sense of meaning in life and openness to experience. Interestingly, despite the shared aim of sustainable consumption regarding environmental conservation, circular consumption has no relationship with the mentioned traits and is driven only by the presence of meaning in life and dispositional greed. This research also contributes to the conceptualization of sustainable and circular consumption and directs practitioners to apply a specialized approach when initiating societal changes linked to sustainability and circularity. The second part of the dissertation focused on the meaning maintenance model (Heine et al., 2006) and the discrete emotion theory, and the third one on the fundamental need for knowing and understanding the surrounding world (e.g., Festinger, 1954; Fiske & Taylor, 2013). Empirical research was conducted with eight studies (one survey and seven experiments) exploring different sustainable and circular product categories in the United Kingdom. The main conclusions of this dissertation are the following:

1. The findings of the current dissertation provided evidence that the presence of meaning in life is positively related to the ownership of circular but not sustainable brands. In contrast, searching for meaning in life has a positive relationship to ownership of sustainable but not circular brands. These findings are in line with previous work, showing that meaning in life consists of two conceptually different facets (Steger et al., 2006), and the behavioral strategies might vary depending on the need to regulate the sense of life being full of meaning (the Pragmatic Meaning Regulation Theory; van Tilburg & Igou, 2011).
2. The current work shows that the trait of dispositional greed is positively related to the ownership of circular brands. However, there is no link to ownership of sustainable ones. These results are in line with previous findings showing that dispositional greed represents a strong acquisitiveness drive with maximum value orientation (see Zeelenberg & Breugelmans, 2022) and corresponds to certain features of circular products referring to consumers' value-related motivation.
3. The current dissertation also explored how the trait of openness to experience is related to the ownership of sustainable and circular brands. The findings are in line with previous ones showing that openness to experience is positively related to sustainable consumption (e.g., Lange & Dewitte, 2019). Interestingly, there is no relationship between openness to experience and ownership of circular

brands. I presumed that such a result was produced because of specific features of circular products (they are produced from secondary materials), however, further research is needed to sort that out.

4. In this work, I proposed that people exposed to meaning threats might be prone to engage in sustainable consumption. The empirical evidence of this research indeed shows that when people face threats to their sense of life being full of meaning, they are willing to engage in sustainable consumption. This finding is in line with the meaning maintenance model (Heine et al., 2006), as well as with the cognitive dissonance theory (Festinger, 1962), the pragmatic meaning regulation theory (van Tilburg & Igou, 2011), and the meaning-making model (Park & Folkman, 1997). All these models and theories refer to the motivational function of threats to the sense of meaningful life: people experiencing meaning threats are motivated to reinstate the sense of life being full of meaning even using other sources than those that were threatened.
5. The current dissertation proposed a novel underlying mechanism for why consumers are motivated to engage in sustainable consumption. The results of conducted experiments show that the negative emotion of sadness performs a mediating role in a relationship between experiencing meaning threats and sustainable consumption. When people's sense of life being meaningful is threatened, they feel a greater extent of sadness, which, in turn, leads to an increased willingness to consume sustainably. I argued that such an underlying mechanism is based on the discrete emotion theory stating that discrete emotions make changes in cognitive, judgmental, experiential, behavioral, and physiological processes (see Lench et al., 2011 for review). More precisely, results show that people experiencing elevated sadness, which occurs after facing a meaning threat, aim to cope with it, and engagement in sustainable consumption is perceived as one of the sources of that.
6. This dissertation also investigated how providing origin cues about circular products impacts the demand for such products. Indeed, this work shows that such origin cues increase the perceived monetary value and desirability of circular goods. Such findings are based on the evidence that people have a fundamental need to know and understand the surrounding world (e.g., Festinger, 1954; Fiske & Taylor, 2013), and consumers prefer choices that are clear and easy to comprehend (Aaker & Keller, 1990; Becker-Olsen & Hill, 2006).

7. The current work also aimed to explain why providing origin cues drives the demand for circular products and tested the mediating role of closeness to the sense of self. The proposition was formulated building on the prior knowledge that individuals seek to expand one's self by acquiring additional resources and different perspectives (Aron et al., 1998). Specifically, I proposed, and the results of the experiment showed that origin cues increase the closeness to the sense of self and, in turn, this closeness leads to greater desirability of circular good.
8. This dissertation investigated whether the effect of origin cues on desirability depends on the acquisition centrality. Based on the evidence that people, who score low on materialism, value their life goals and relationships more than possessions themselves (Belk, 1984) and that knowing an origin can provide a greater sense of context, this dissertation proposed that people who score low on acquisition centrality would desire such goods more than people who are centered on acquisitions but not on the context. Indeed, results show that lower-acquisition centrality consumers (but not higher-acquisition centrality consumers) have a greater desirability for circular goods with origin cues (vs. no origin cues).

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ISM VADYBOS IR EKONOMIKOS UNIVERSITETAS

Živilė Kaminskienė

VARTOTOJŲ VERTINIMAS IR SPRENDIMŲ PRIĖMIMAS TVARUMO SRITYJE:
VEIKSNIAI SKATINANTYS EFEKTYVIUS POKYČIUS

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Socialiniai mokslai, vadyba, S 003

Vilnius, 2025

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Disertacija ginama ISM Vadybos ir ekonomikos universitete, Vadybos mokslo krypties taryboje:

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Daktaro disertacija bus ginama viešame Vadybos mokslo krypties tarybos posėdyje 2025 m. vasario 20 d., 11:00 val. 209 a., ISM Vadybos ir ekonomikos universitete, Gedimino pr. 7, Vilniuje, Lietuvoje.

Daktaro disertacijos santrauka išsiųsta 2025 m. sausio 20 d. Disertaciją galima peržiūrėti Lietuvos nacionalinėje Martyno Mažvydo ir ISM Vadybos ir ekonomikos universiteto bibliotekose.

IVADAS¹³

Tyrimo aktualumas. Ankstesnių tyrimų rezultatai rodo, kad atsakingas vartotojų vartojimas, kuris atliepia aplinkosauginius, ekonominius, socialinius ir sveikatos aspektus – yra sudėtingas ir gali būti veikiamas daugelio psichologinių veiksnių (Gifford, 2014; Van Vugt, 2009; Zaval et al., 2015). Nemažai mokslinių tyrimų pademonstravo, kad būtent rūpinimasis aplinkosauga turi įtakos vartotojų įsitraukimui į įvairias atsakingo vartojimo formas. Pavyzdžiui, buvo nustatytas priežastinis ryšys tarp rūpinimosi aplinkosauga ir ekologiškai sąmoningos vartotojų elgsenos (pvz., Yarimoglu ir Binboga, 2019; Kinneer ir Taylor, 1973; Roberts ir Bacon, 1997; Roberts, 1996; Straughan ir Roberts, 1999) ir žaliųjų pirkimų (pvz., Albayrak et al., 2013; Bamberg, 2003; Park ir Lin, 2020). Rūpinimasis aplinkosauga taip pat sietas su socialiai atsakinga vartotojų elgsena (pvz., Antil, 1984; Hosta ir Zabkar, 2021). Vis dėlto kai kuriuose naujesniuose tyrimuose ryšio tarp rūpinimosi aplinkosauga ir atsakingo elgesio rasti nepavyko, o tai rodo, kad vartotojų vertinimo ir sprendimų priėmimo procese dalyvauja daugiau psichologinių mechanizmų. Pavyzdžiui, tai, kad vartotojai pasižymi žaliuoju sąmoningumu, ne visada reiškia, kad jie pirks pergamintus žiedinius produktus (Singhal et al., 2019), o atnaujintų produktų aplinkosauginiai privalumai net nėra lemiami, priimant sprendimus dėl pirkimo (van Weelden et al., 2016). Be to, kai kurie tyrimai rodo, kad ne vien rūpinimasis aplinkosauga skatina vartotojus elgtis atsakingai, jų elgsena gali būti nulemta ir asmeninių bei socialinių motyvų. Pavyzdžiui, vienas tyrimas nustatė, kad ne rūpinimasis aplinkosauga, o tiesioginė nauda vartotojams lemia norą mokėti už produktus, turinčius socialiai atsakingas etiketes (Tully ir Winer, 2014). Kiti tyrimai patvirtino, kad vartotojai siekia rinktis tvarius produktus, siekdami pademonstruoti savo socialinį statusą ar padaryti įspūdį kitiems (Green ir Peloza, 2014; Griskevicius et al., 2010). Savų interesų vedami

¹³ Santrauka parengta remiantis:

Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

motyvai ir nauda sau dažnai įkvepia aplinkai draugišką elgseną (Griskevicius et al., 2012; White et al., 2019).

Šios išvados leidžia daryti prielaidą, kad atsakingo vartojimo kategorija gali būti per plati, kad galėtume ją visą prasmingai ir vienareikšmiškai susieti su įvairiais veiksniais – skirtingi vartotojų bruožai gali turėti įtakos jų įsitraukimui į skirtingus atsakingo vartojimo tipus. Iki šiol tik keletas tyrimų nagrinėjo, ar skirtingus atsakingo vartojimo tipus skatina tie patys veiksniai (pvz., Hosta ir Zabkar, 2021; Tully ir Winer, 2014). Vis dėlto yra keletas priežasčių, dėl kurių galėtumėme tikėtis, jog skirtingi atsakingo vartojimo tipai turėtų būti siejami su skirtingais ir net priešingais motyvatoriais. Šioje disertacijoje kaip pavyzdį pasitelkiu tvarius ir žiedinius prekių ženklus. Pripažindama, kad tvarus ir žiedinis vartojimas nemaža dalimi persidengia, darau prielaidą, jog tvarus vartojimas yra psichologiškai skirtingas vartojimo tipas nei kad žiedinis vartojimas, tad ir vartojimą lemiantys asmenybės bruožai bei sprendimų priėmimas taip pat skiriasi. Kalbant konkrečiau, tvarus vartojimas teikia daug socialinės naudos, nes sudaro galimybes naudotis pagrindinėmis paslaugomis, suteikia aplinkai draugiškas ir orias darbo vietas bei geresnę gyvenimo kokybę visiems, prisideda prie ekonominių, aplinkosauginių ir socialinių išlaidų mažinimo ateityje, stiprina ekonomikos konkurencingumą bei mažina skurdą (Ritchie ir Mispy, 2018). Tuo tarpu žiedinis vartojimas turi siauresnę tikslą – taupyti išteklius, jis apima „dalijimąsi, nuomą, pakartotinį medžiagų ir produktų naudojimą, taisymą, atnaujinimą bei perdirbimą kiek įmanoma ilgesniam laikotarpiui“, siekiant pratęsti produktų gyvavimo ciklą (EP, 2022; taip pat žr. Geissdoerfer et al., 2017). Kai kuriais atvejais produktai laikomi tvariais, nors jie yra gaminami nesiremiant žiediškumo principais. Pavyzdžiui, didesnis tvarumas gaminant raudoną mėsą gali būti pasiektas įvedant tvarumo praktikas, kurios didina ekologinį efektyvumą (pvz., koreguojant gyvulių dietą, kad ji būtų aukštesnės energijos ir paremta grūdinėmis kultūromis, kas savo ruožtu lemia mažesnes metano dujų emisijas) arba užtikrinant lyčių lygybę tarp darbuotojų, didinant darbuotojų saugumą ir t. t. Tuo tarpu, žiedinis požiūris telktų dėmesį į mėsos pakaitalo sukūrimą iš augalų, užtikrinant medžiagų nuostolių prevenciją. Be to, nors kai kada žiediniai produktai yra laikomi tvaraus vartojimo forma, pastangos pasiekti žiediškumą ne visada užtikrina tvarius rezultatus. Neseniai atliktame tyrime atkreiptas dėmesys į tai, jog žiediniai produktai gali būti netgi netvarūs, t. y. produktai gali būti pagaminti iš kenksmingų antrinių medžiagų kaip polimerai, kurių sudėtyje yra kenksmingų pridėtinių medžiagų (Blum et al., 2020).

Šioje disertacijoje siekiama atsakyti į klausimus, susijusius su veiksniais, skatinančiais efektyvius pokyčius tvaraus vartojimo srityje. Siekiant šio tikslo, šioje disertacijoje: (1) vienu metu analizuojamas tvarus ir žiedinis vartojimas; tuomet (2) gilinamasi į tai, kaip vartotojai priima sprendimus vartoti tvarius produktus; ir, galiausiai, (3) vartoti žiedinius produktus.

Visų pirma, šia disertacija siekiama praplėsti žinias, išryškinant konkrečių asmenybės bruožų nevienodą vaidmenį tvaraus ir žiedinio vartojimo srityse. Konkrečiau, šiame tyrime teigiama, kad skirtinga tvaraus ir žiedinio vartojimo tikslo apimtis bei skirtingos tvarių ir žiedinių produktų savybės yra susijusios su skirtingomis individų orientacijomis, todėl konkretūs asmenybės bruožai gali skirtingai veikti norą įsitraukti į tvarių ir žiedinį vartojimą. Šie klausimai nagrinėjami pirmame tyrime.

Antrasis šios disertacijos klausimų rinkinys susijęs su vartotojų vertinimu ir sprendimų priėmimu tvarių produktų atžvilgiu. Konkrečiau, šioje disertacijoje siekiama paaiškinti kokį vaidmenį sprendimo priėmimo procese atlieka neigiama emocija – liūdesys. Tyrimai rodo, kad emocijos turi įtakos, apie ką ir kaip mes galvojame; lemia mūsų dėmesį, suvokimą, atmintį, fiziologinę būseną, taipogi mūsų tikslus bei elgseną (Cosmides ir Tooby, 2000). Taigi, emocijos padeda prisitaikyti prie aplinkos ir atlieka svarbias psichologines funkcijas (Salerno et al., 2014). Emocijos padeda mums suprasti savo tikslus, spręsti problemas, saugoti savo sveikatą, stiprinti atsparumą, kurti prisirišimą prie kitų žmonių, ir turėti įtakos grupių, socialinių sistemų ir tautų elgesiui (Pekrun et al., 2002). Ankstesni tyrimai daugiausia dėmesio skyrė teigiamų emocijų privalumų nagrinėjimui ir pademonstravo, kad teigiamos emocijos išplečia asmens kognityvinę sritį ir taip puoselėja asmeninius resursus (Fredrickson, 2013). Dar daugiau, teigiamos emocijos gali suteikti ilgalaikių naudų svarbiose srityse, įskaitant darbą, fizinę sveikatą bei santykius (Armenta et al., 2017). Tiesa, kita tyrimų kryptis pateikia įrodymų, kad neigiamos emocijos irgi gali atlikti teigiamą funkciją ir daryti motyvuojantį poveikį (Forgas, 2013), skatinantį atsargesnį, apskaičiuotą elgesį (Tan ir Forgas, 2010), rodantį poreikį imtis konkrečių veiksmų, kad situacija būtų sprendžiama pagal esamas socialines normas (Tan ir Forgas, 2010). Pavyzdžiui, kaltės jausmas yra neigiama emocija, kurią žmonės patiria, kai apmąstydami savo elgesį praeityje supranta, kad jų elgesys neatitiko jų asmeninių tikslų, normų ar standartų (Baumeister ir Leary, 1995; Tangney ir Dearing, 2002). Tyrimai rodo, kad kaltė aktyvuoja norą susidoroti su stresine situacija koreguojant ankstesnį elgesį ir

situacijas (Lazarus ir Folkman, 1984; Skinner ir Brewer, 2002). Šiuo konkrečiu atveju kaltė skatina sutelkti dėmesį į problemą ir dėl šios priežasties žmonės stengiasi pagerinti savo aplinką bei gerovę (Antonetti ir Maklan, 2014; Lazarus, 1993). Tyrimuose, kuriuose nagrinėjamas gailėjimasis, daugiausia dėmesio skiriama, kaip įprastomis priemonėmis būtų galima jį sumažinti (Inman ir Zeelenberg, 2002). Tiriant baimę, atskleista, jog ši emocija motyvuoja preventyviai rūpintis sveikata (Consedine et al., 2004), didina vairavimo saugumą (Lewis et al., 2007). Įdomu tai, jog ankstesni tyrimai rodo, jog kai kuriais atvejais neigiamos emocijos gali būti net efektyvesnės už teigiamas (pvz., siekiant pakeisti elgesį į norimą, kai emocijos ir nuotaikos yra ne tik destruktivos, bet ir konstruktyvios; Shuman et al., 2018). Jei liūdesys gali atverti naujų kelių atrandant gyvenimo prasmę per vartojimą, tai gali būti pasiekta darant tvaresnius pasirinkimus. Naujausi tyrimai iš tiesų rodo, jog liūdesys, sukeltas primenant apie socialines normas, gali pastūmėti tvaresnės elgsenos link, pvz., naudojant energetinio pėdsako skaičiuokles ar aukojant didesnes sumas projektams, susijusiems su aplinkosauga (Schwartz Perloth ir Loewenstein, 2017). Šioje disertacijoje siekiu pateikti empirinių įrodymų, kad grėsmės gyvenimo prasmei sukelia liūdesį, kuris, savo ruožtu, didins norą įsigyti tvarių produktų, nes suveiks kaip mechanizmas, padedantis atkurti norimą būseną. Siekiant patikrinti šią idėją, buvo įgyvendinti keturi eksperimentiniai tyrimai (antrasis, trečiasis, ketvirtasis ir penktasis tyrimas).

Galiausiai, trečiuoju klausimų rinkiniu siekiama išsiaiškinti, kaip vartotojai vertina ir priima sprendimus dėl žiedinių produktų. Ankstesni tyrimai žiedinio vartojimo srityje, daugiausia dėmesio skyrė pardavėjo pusei, pvz., kaip vartotojai atiduoda arba parduoda prekes kitiems vartotojams (pvz., Brough ir Isaac, 2012; Donnelly et al., 2017); kaip jie išsiskiria su produktais, turinčiais sąsajų su tapatybe (pvz., Trudel et al., 2016); kaip skirtingos individų savybės, normos ar patogumas lemia ketinimus perdirbti (pvz., Ebreo ir Vining, 2001; Goldstein et al., 2008; McCarty ir Shrum, 2001). Nors suprasti, kodėl žmonės perdirba, labai svarbu, tačiau tai atskleidžia tik dalį paveikslo, paaiškinančio žiedinius pasirinkimus. Šioje disertacijoje teigiama, kad taip pat svarbu įgyti gilesnį supratimą, kodėl ir kada įsigyjamos jau perdirbtos (naudotos ar perdarytos) prekės ir kaip padidinti šių prekių *paklausą*. Jei, apskritai, paklausą lemia prekės vertė, tai kaip yra suvokiama naudotų ar perdarytų prekių vertė? Intuityvi nuovoka sako, kad dėl to, jog naudotos ar perdarytos prekės anksčiau buvo naudojamos kitų asmenų, jos turėtų būti vertinamos kaip turinčios mažesnę vertę, lyginant su įprastomis prekėmis. Tačiau atvirkštinė situacija taip pat galima – esant

tam tikroms sąlygoms, vidinė subjektyvi naudoto ar perdaryto daikto vertė gali išaugti dėl unikalių savybių, kurios būdingos tik tai prekei. Priešingai nei naujos prekės, naudotos ar perdarytos prekės gali turėti savybių, kurios gali atsispindėti informaciniuose stimuluose, kurie signalizuoja prekės *kilmę*, susijusią su tam tikra vieta. Šioje disertacijoje teikiama idėja, jog užuomina apie kilmę reprezentuoja užmirštą, bet galingą vartotojų elgsenos motyvatorių – kilmės žinojimas gali pakeisti subjektyvią naudotos ar perdarytos prekės vertę. Šis tyrimas siekia praplėsti teorines žinias ir supratimą, identifikuojant psichologinius mechanizmus, kurie nusako, kaip ir kokioms sąlygoms esant užuominos apie kilmę suteikia naudotoms ar perdarytomis prekėms daugiau patrauklumo ir prisideda prie žiedinio vartojimo sėkmės. Paskutinis eksperimentinių tyrimų rinkinys (šeštasis, septintasis ir aštuntasis tyrimas) ir nagrinėja šiuos klausimus.

Problemos ištyrimas. Nors ankstesni tyrimai ir rodo, kaip svarbu yra suprasti asmenybės bruožus, skatinančius vartoti atsakingai, turimos įžvalgos vis dar yra gana ribotos, kadangi iki šiol nebuvo vienu ypu vertinta, ar tie patys bruožai vienodai veikia skirtingus atsakingo vartojimo tipus. Ankstesni darbai kaip tik suponavo, kad vartojimą skatinantys asmenybės bruožai vienodai aktualūs tiek tvariams, tiek žiediniams vartojimo pasirinkimams. Tik neseniai buvo nustatyta, kad specifinės žiedinių produktų charakteristikos skiria juos nuo tvarių, ir kad šie du atsakingo vartojimo tipai turi būti laikomi atskiromis kategorijomis; dėl to juos skatinantys veiksniai taip pat gali skirtis (Pretner et al., 2021). Nepaisant to, iki šiol joks tyrimas dar netikrino vienu duomenų rinkiniu, ar tam tikri asmenybės bruožai gali vienodai numatyti tvarų ir žiedinį vartojimą. Taip pat svarbu atkreipti dėmesį, jog ankstesniuose tyrimuose daugiausia dėmesio buvo skiriama ketinimų vartoti vertinimui, tuo tarpu tyrimais nustatyta, kad iš pažiūros vartotojai gali jaustis pozityviai tvarių prekės ženklų atžvilgiu ir ketinti tokius produktus pirkti, tačiau atėjus laikui pirkti jokių tolimesnių veiksmų nesiimama (pvz., White et al., 2019). Šioje disertacijoje siekiu užčiuopti tikrąjį vartojimą, matuodama tvarių ir žiedinių prekių ženklų produktų nuosavybę.

Ankstesni tyrimai analizavo tokius konstruktus kaip gyvenimo prasmė, atvirumas patirtims ir dispozicinis godumas, tačiau šie tyrimai buvo atlikti ne su tvarumu susijusioje srityje arba jų rezultatai buvo nevienareikšmiai. Daug dėmesio yra skirta ir nagrinėjimui, kaip įvairios teigiamos ir neigiamos emocijos veikia elgesį. Vis dėlto, neigiamos emocijos – liūdesio – vaidmuo iki šiol nėra aiškus, kadangi ankstesnės

išvados nevienareikšmės, o ryšys tarp grėsmių gyvenimo prasmei ir tvaraus vartojimo iš viso nebuvo studijuotas.

Tęsiant toliau, iki šiol vos keliuose tyrimuose buvo nagrinėjamas pavienių, specifinių žiedinių produktų pavyzdžių suvokimas: perdirbtų ar prikeltų naujam gyvenimui (ang. upcycled) produktų (Kamleitner et al., 2019), pakartotinai panaudojamų (angl. re-used) produktų (Hazen et al., 2017); pergamintų (angl. remanufactured) produktų (Guide Jr. ir Li, 2010; Michaud ir Llerena, 2010), atnaujintų (angl. refurbished) produktų (Harms ir Linton, 2016; van Weelden et al., 2016). Taip pat tyrimai iki šiol buvo pernelyg aprašomojo pobūdžio: tiesiog dokumentuojantys daugiausia neigiamus priklausomus kintamuosius, pvz., vartojimo vengimą. Pavyzdžiui, keli tyrimai teigia, kad žmonės vengia pirkti pakartotinai panaudotus produktus (Hazen et al., 2017) ir siekia mokėti mažiau už produktus, kurie yra pergaminti ar atnaujinti (Abbey et al., 2015; Harms ir Linton, 2016; Michaud ir Llerena, 2011). Ankstesnės išvados, aiškinančios žiedinio vartojimo priežastis ir jį ribojančias sąlygas, rodo, jog vartotojams kelia susirūpinimą pakartotinai panaudotų produktų kokybė ir patikimumas (Bundgaard ir Huulgaard, 2019; Harms ir Linton, 2016). Vartotojai dažnai nenori aplinkosaugos požiūriu tvarių ir pakartotinai perdirbtų produktų, nes mano juos esant labiau rizikingais (van Weelden et al., 2016); arba bjaurisi jais dėl fizinio kontakto su ankstesniais savininkais (Abbey et al., 2015). Vis dėlto aiškaus supratimo apie tai, kokie išankstiniai veiksniai prognozuoja ir aktyviai skatina žiedinį vartojimą, mokslinėje literatūroje dar trūksta.

Tyrimo problema: (a) trūksta supratimo, kaip skirtingi asmenybės bruožai susiję su skirtingomis atsakingo vartojimo formomis, t. y. vartotojų vertinimu ir sprendimų priėmimu dėl tvarių ir žiedinių prekių ženklų; (b) trūksta žinių apie tai, kaip neigiama liūdesio emocija, kylanti susidūrus su grėsme gyvenimo prasmei, veikia vartotojų sprendimus tvarumo srityje; ir (c) trūksta žinių apie tai, kodėl ir kokiomis sąlygomis vartotojai priima teigiamus sprendimus dėl žiedinių produktų, kai pateikiamos (arba ne) užuominos apie tokių produktų kilmę.

Tyrimo tikslai: (1) patikrinti, kaip tie patys asmenybės bruožai siejasi su tvarių ir žiedinių produktų turėjimu; (2) išanalizuoti, ar grėsmė gyvenimo prasmei sukelia liūdesio emociją ir kaip liūdesys veikia norą vartoti tvarius produktus; ir (3) iširti užuominų apie kilmę svarbą vartotojų apsisprendimui dėl žiedinių produktų. Tiksliau, iširti, kokį netiesioginį poveikį turi užuomina apie kilmę (lyginant su tokios užuominos

nebuvimu), kaip tai veikia siekį įsigyti žiedinių produktų ir kokios yra ribojančios šį ryšį sąlygos.

Tyrimo uždaviniai:

- Išanalizuoti akademinę literatūrą apie tvarių sprendimų priėmimą.
- Išanalizuoti akademinę literatūrą apie skirtingas orientacijas, tokias kaip: kolektyvinė nauda, nauda sau ir kognityvinis lankstumas, kaip jos atitinka tokius asmenybės bruožus kaip gyvenimo prasmė, dispozicinis godumas ir atvirumas patirtims, bei kokius ryšius jie gali turėti su tvariumi bei žiediniu vartojimu.
- Išanalizuoti ryšius tarp grėsmių gyvenimo prasmei, liūdesio ir tvaraus vartojimo.
- Išanalizuoti ryšius tarp užuominų apie kilmę ir suvokiamos piniginės vertės, artumo savasties jausmui, siekiu įsigyti žiedinių produktų ir įsigijimo centriškumu.
- Išvystyti metodologiją iškeltų hipotezių tikrinimui.
- Atlikti empirinį tyrimą ir išanalizuoti gautus duomenis.
- Palyginti atlikto empirinio tyrimo išvadas su tomis, kurios jau egzistuoja tyrimų srityje.
- Pateikti praktines rekomendacijas, nurodyti tyrimo apribojimus ir kryptis būsimiems tyrimams.

Mokslinio darbo naujumas ir teorinis reikšmingumas. Ši disertacija prisideda prie egzistuojančios mokslinės literatūros pateikdama patikslintą tvaraus ir žiedinio vartojimo konceptualizavimą, tirdama jų persidengiančius ir išsiskiriančius aspektus. Šis darbas taip pat parodo, kad skirtingi asmenybės bruožai gali turėti skirtingą įtaką tvariam ir žiediniam vartojimui. Remiantis Bruožų aktyvacijos teorija, teigiu, kad tvaraus ir žiedinio vartojimo tipai signalizuoja skirtingas savybes, atliepančias skirtingus bruožus. Ši disertacija taip pat gilina supratimą apie skirtingų bruožų kompleksiskumą prognozuojant įsitraukimą į tvarų ir žiedinį vartojimą, pabrėžiant jų diferencijuotą poveikį skirtingiems vartojimo tipams. Kadangi ankstesni tyrimai dokumentavo atotrūkį tarp vartotojų ketinimų ir realaus elgesio, kai jie deklaruoja savo teigiamus ketinimus vartoti atsakingai, tačiau tolesnių veiksmų, kai reikia iš tikrųjų pirkti atsakingus prekių ženklus, nesiima (pvz., White et al., 2019), todėl šiame tyrime daugiausia dėmesio skiriu prekių ženklų nuosavybės, kuri apibrėžiama kaip „būsena arba faktas, kad kažką turi“ (Cambridge University Press, n.d.a), tyrimui ir taip

prisidedu prie ankstesnių darbų, kuriančio išsamų paveikslą apie atsakingą vartojimą¹⁴.

Ši disertacija taip pat praplečia žinias apie neigiamą liūdesio emociją ir parodo, koks yra jos motyvacinis vaidmuo atsakingo elgesio, t. y. tvaraus vartojimo, srityje. Nors vienoje iš literatūros kryptų pabrėžiama, kad liūdesys nukreipia į kompensacinį vartojimą, kuris sukelia neigiamų pasekmių (pvz., Allard ir White, 2015), šiame darbe parodoma, kad ši dažnai jaučiama emocija kai kuriais atvejais gali žmones vesti link teigiamos elgsenos, t. y. tvaraus vartojimo. Nors ankstesnės studijos, analizuojančios, kaip žmonės susidoroja su grėsmėmis gyvenimo prasmei, nurodė daugelį būdų, kaip atstatyti gyvenimo, pilno prasmės, jausmą, mano žiniomis, šis tyrimas yra pirmasis, rodantis sąsają tarp grėsmės prasmei ir tvaraus vartojimo. Šiame moksliniame darbe plėtojamos teorinės žinios, identifikuojant psichologinius mechanizmus, kurie lemia, kaip ir kokiomis sąlygomis užuominos apie kilmę padeda didinti naudotų ar perdarytų prekių patrauklumą ir tokiu būdu prisidėti prie žiedinio vartojimo sėkmės. Tai yra vienas pirmųjų darbų, kuriuose nagrinėjama, kaip padidinti perdarytų ar naudotų prekių paklausą, tiriant jų vidines savybes kaip išteklius, didinančius prekės vertę (išimtis žr. Kamleitner et al., 2019). Priešingai nei daugelyje ankstesnių tyrimų, šis tyrimas rodo, kad vartotojai gali stipriau siekti įsigyti naudotų ar perdarytų prekių, kai pabrėžiami tam tikri tokioms prekėms būdingi aspektai (t. y. kilmė). Be to, šis tyrimas pateikia įrodymų, kad naudotos ar perdarytos prekės gali turėti didesnę subjektyvią vidinę vertę, lyginant su naujomis prekėmis. Dar daugiau, tyrimo išvados prisideda prie literatūros apie žiedinį vartojimą, parodant, kad užuominos apie kilmę lemia naudotos ar perdarytos prekės subjektyvią vidinę vertę per artumą savasties jausmui – mediatorių, kuris nebuvo tyrinėtas žiedinio vartojimo kontekste. Taip pat atskleidžiama nauja ribojanti sąlyga, apibrėžianti, kad dokumentuoti efektai yra ypač išreikšti tarp vartotojų, kurie vertina santykius bei aplinkinį kontekstą, bet ne pirkimus, t. y. žmonėms, kurių įsigijimo centriškumas yra žemesnis. Apskritai, šios disertacijos rezultatai prisideda prie geresnio supratimo, kaip paskatinti žiedinį vartojimą ir padidinti paklausą naudotoms ar perdirbtoms prekėms, pabrėžiant tam tikras šioms prekėms būdingas savybes.

Mokslinio darbo praktinis reikšmingumas. Šios disertacijos išvados gali padėti spręsti realias socialines ir ekonomines problemas, kurias siekia spręsti tvarus ir

¹⁴ Atkreiptinas dėmesys, kad nuosavybė yra vartojimo prielaida – tai platesnė sąvoka, apimanti visus elgsenos rezultatus, susijusius su „prekių pirkimo ir naudojimo procesu arba įsigyto ir sunaudoto kiekio“ (Cambridge University Press, n.d.b).

žiedinis vartojimas (pvz., gyvenimo kokybės gerinimas, sveikatos, saugumo, įvairovės, žmogaus teisių stiprinimas, sąžiningos darbo praktikos skatinimas, atliekų mažinimas ir kiti aplinkai naudingi veiksniai). Vartotojai laikomi pagrindiniais tvarios plėtos dalyviais, nes būtent jie lemia tvarios gamybos paklausą (OECD, 2008). Todėl itin svarbu suprasti, kaip paskatinti žmones vartoti tvariai ir laikantis žiedinės ekonomikos principų. Šio tyrimo rezultatai suteikia įžvalgų apie tai, kaip padidinti tvarių ir žiedinių produktų paklausą, gilesnį supratimą, kaip pasiekti vartotojus, kaip vystyti efektyvią komunikaciją ir edukacines programas, pateikia bendras rekomendacijas, kaip paskatinti žmones rinktis atsakingiau. Svarbiausia, šie rezultatai rodo, jog skatinant tvarų ir žiedinį vartojimą ne visada gali būti veiksmingos tos pačios priemonės – šioms vartojimo formoms būtinas individualus požiūris. Tokios įžvalgos yra reikšmingos politikos formuotojams bei viešojo ir privataus sektoriaus organizacijoms, siekiančioms perorientuoti vartojimą link tvaresnių ir žiedinių sprendimų.

Disertacijos apribojimai ir ateities tyrimų kryptys. Nors pirmosios apklausos duomenys suteikia išoriniam validumui tinkamas išvadas apie skirtingų asmenybės bruožų poveikį tvarių ir žiedinių prekės ženklų nuosavybei, ateities tyrimai galėtų izoliuoti ir patikrinti pagrindinius efektus eksperimentiniuose tyrimuose labiau kontroliuojamoje laboratorinėje aplinkoje bei ištirti ribojančias sąlygas. Be to, būsimieji tyrimai galėtų įvertinti šių išvadų bendrą pritaikomumą ir ištirti kitas tvaraus ir žiedinio vartojimo formas (pvz., bendradarbiavimo pagrindu paremtą vartojimą) arba atskleisti kitus produktų privalumus. Taip pat reikėtų išbandyti siūlomas prielaidas kitokiuose kontekstuose, pvz., tarp pažeidžiamų, skeptiškai ar su dvejomis į tvaresnį vartojimą žiūrinčių vartotojų. Be to, ateities tyrimai galėtų suteikti daugiau įžvalgų apie glūdinčius poveikio mechanizmus, pridėdami lygiagrečius mediatorius ir plėsdami žinias apie kitas ribojančias sąlygas siūlomiems modeliams. Lauko tyrimai taip pat galėtų suteikti papildomų duomenų, stebint realų vartotojų elgesį kasdienėje aplinkoje.

Disertacijos struktūra. Ši disertacija susideda iš septynių pagrindinių skyrių. *Pirmajame skyriuje* pateikiama tvaraus sprendimų priėmimo literatūros apžvalga. Jame konceptualizuojamas tvarus ir žiedinis vartojimas bei analizuojami šių dviejų vartojimo tipų veiksniai. *Antrasis skyrius* skirtas literatūros analizei ir tyrimo hipotezių kūrimui, susijusiam su skirtingų asmenybės bruožų įtaka tvariam ir žiediniam sprendimų priėmimui. Kadangi šiame skyriuje nagrinėjamas bruožų vaidmuo tvariame ir žiediniame vartojime bei pateikiamas teorinis pagrindas skirtingų bruožų aktyvacijai

susidūrus su įvairiais produktais, *trečiasis ir ketvirtasis skyriai* yra skirti atskiram šių dviejų atsakingo vartojimo tipų tyrimui. Konkrečiau, *trečiasis skyrius* skirtas literatūros analizei ir tyrimo hipotezių kūrimui, susijusiam su grėsmės prasmei, liūdesio kaip mediatoriaus ir tvaraus sprendimų priėmimo sąsajomis, o *ketvirtasis* – užuominų apie kilmę svarbai žiedinio vartojimo kontekste. *Penktasis disertacijos skyrius* aprašo taikytą tyrimo metodologiją. Šiame skyriuje taip pat pateikiami atlikto empirinio tyrimo rezultatai, įskaitant hipotezių patikrą. *Šeštajame skyriuje* pateikiama bendra disertacijos diskusija, kuri apima gautus rezultatus, mokslinį indėlį, teorines ir praktines implikacijas, apribojimus bei ateities tyrimų kryptis. Galiausiai, *septintajame skyriuje* pateikiamos pagrindinės šios disertacijos išvados.

DISERTACIJOS REZULTATŲ PUBLIKAVIMAS IR PRANEŠIMAI KONFERENCIJOSE

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TRUMPA DISERTACIJOS TURINIO APŽVALGA

Skirtingų asmenybės bruožų poveikis tvariam ir žiediniam sprendimų priėmimui

Iš pirmo žvilgsnio tvaraus ir žiedinio vartojimo apibrėžimai gali atrodyti turintys reikšmingų konceptualių sutapimų. Abi šios vartojimo formos siekia sumažinti neigiamą poveikį aplinkai, pabrėžia efektyvų išteklių naudojimą, atliekų vengimą ir siekį išsaugoti išteklius ateities kartoms. Tačiau aš teigiu, kad nepaisant bendrų tikslų, tvarus ir žiedinis vartojimas skiriasi pagal (1) jų apimtį, (2) fokusą ir (3) orientaciją. Remiantis pabrėžiamais skirtumais, tvarus vartojimas apibrėžiamas kaip produktų, kuriais siekiama platesnės aplinkosauginės, socialinės ir ekonominės naudos, vartojimas, susijęs su abstraktesniu, nematerialiu fokusu ir skatinamąja orientacija, siekiant gerinti planetos gerovę. Tuo tarpu žiedinis vartojimas apibrėžiamas kaip produktų, kuriais siauresne apimtimi siekiama užtikrinti išteklių išsaugojimą ir kurie siejami su labiau apčiuopiamomis naudomis, sąnaudų efektyvumo fokusu ir prevencine orientacija, vartojimas, siekiant gerinti mūsų planetos gerovę.

Pirmojoje šios disertacijos dalyje taikytas konceptualusis modelis buvo įkvėptas Bruožų aktyvacijos teorijos (Tett ir Burnett, 2003). Ši teorija nagrinėja, kaip asmenybės bruožai sąveikauja su situacijomis ir pabrėžia, kad ta pati situacija gali skirtingai paveikti individus, priklausomai nuo jų asmenybės bruožų stiprumo. Priklausomai nuo situacijos sukeltų stimulų, tam tikro bruožo poveikis gali būti sustiprintas arba nuslopintas (Tett ir Burnett, 2003). Šiame darbe, remiantis Bruožų aktyvinimo teorija, situacijos siejamos su susidūrimu su skirtingais produktais, ir tikimasi, kad su konkrečiu bruožu susiję vartojimo tipai turės įtakos vartotojų elgesiui. Tiksliau tariant, siūlau, kad tam tikri asmenybės bruožai gali būti suaktyvinti specifinių tvaraus ir žiedinio vartojimo ypatybių, kurios lemia didesnę ar mažesnę įsitraukimą į vieną ar abu šiuos vartojimo tipus. Pavyzdžiui, remiantis tvaraus ir žiedinio vartojimo konceptualizavimu, tikėtina, kad jei tvarus produktas signalizuoja socialines naudas (pvz., gamintojo įsipareigojimus gyvūnų gerovei ar darbuotojų įdarbinimą iš pažeidžiamų bendruomenių), individai, pasižymintys bruožais, vertinančiais socialinį įsitraukimą (pvz., altruizmu, empatija), gali teigiamai reaguoti į šiuos signalus. Panašiai ir žiediniame vartojime: jei žiedinis produktas pabrėžia mažesnę kainą, jis gali tapti

teigiamu stimulu asmenims, kurie pasižymi taupumu, tačiau gali būti neigiamai vertinamas tų, kurie siekia socialinio statuso.

Šis tyrimas siekia praplėsti žinias apie tvarų ir žiedinį vartojimą, pabrėžiant trijų pagrindinių asmenybės bruožų vaidmenį: gyvenimo prasmės siekį (tiek siekiant prasmės, tiek jaučiant jos buvimą), dispozicinį godumą ir atvirumą patirčiai. Susiejant šiuos bruožus su tvarių ir žiedinių produktų konceptualia apibrėžtimi, siekiama iširti bruožus, kurie iš esmės skiriasi pagal skatinamąją arba prevencinę orientaciją. Tiksliau tariant, gyvenimo prasmė bei atvirumas patirčiai atspindi skatinamąją motyvaciją (žr. Higgins, 1997; Miao ir Gan, 2020; Vaughn et al., 2008). Tuo tarpu, dispozicinis godumas yra prevencinės orientacijos pavyzdys (žr. Higgins, 1997; Holt ir Laury, 2002; Krekels ir Pandelaere, 2015). Kadangi šie bruožai konceptualiai siejasi su skatinamąja arba prevencine orientacija, tikėtina, kad jie jautriai užčiuops unikalias tvaraus ir žiedinio vartojimo skirtis.

Grėsmės gyvenimo prasmei, liūdesio tarpininkaujantis vaidmuo ir tvarūs sprendimai

Ankstesni tyrimai nagrinėjo, kaip žmonės susidoroja su grėsmėmis gyvenimo prasmei. Pavyzdžiui, Pragmatinė prasmės reguliavimo teorija (van Tilburg ir Igou, 2011) teigia, kad žmonės, siekiantys atkurti ar sustiprinti savo prasmės jausmą, yra imlesni galimoms elgesio strategijoms, kurios gali padėti reguliuoti jų prasmės pojūtį. Tuo tarpu Prasmės kūrimo modelis (Park ir Folkman, 1997) apibrėžia grėsmes prasmei kaip neatitikimų tarp konkrečių patirčių ir bendrų orientacinių sistemų suvokimą. Tokie neatitikimai sukelia distresą ir motyvuoja šiuos neatitikimus sumažinti (Park, 2013). Remiantis Prasmės palaikymo modeliu, susidūrę su grėsme vienoje gyvenimo srityje, žmonės gali bandyti atkurti savo prasmingumo jausmą įsitraukdami į veiklas net ir visiškai nesusijusiose srityse (Heine et al., 2006). Šis modelis pabrėžia, kad tam tikros prasmės sistemos, tokios kaip savivertė, tikrumo jausmas, priklausomybė bendruomenei ir simbolinė nemirtingumo samprata, gali būti tarpusavyje keičiamos – jei viena iš jų patiria grėsmę, kita gali ją kompensuoti (Heine et al., 2006). Taip pat Zhang ir kt. (2019) pažymėjo, kad beprasmybės pripažinimas yra pernelyg skausmingas, todėl susidūrę su grėsmėmis prasmei žmonės aktyviai ieško patvirtinimų, kad gyvenimas turi prasmę. Šis mechanizmas gali būti aiškinamas

Kognityvinio disonanso teorija (Festinger, 1962), kuri atskleidžia, kad individai yra lankstūs įvairių prasmės šaltinių atžvilgiu: jei viena gyvenimo sritis nebesuteikia prasmės, alternatyvos tampa svarbesnės (Zhang et al., 2019). Apibendrinant galima teigti, kad visi šie modeliai ir teorijos akcentuoja motyvacinę beprasmybės funkciją.

Kadangi susidūrimas su grėsmėmis gyvenimo prasmei reiškia savęs neatitikimo patyrimą, tai gali sukelti neigiamas emocijas (Higgins, 1987; Packard ir Wooten, 2013). Ankstesni tyrimai parodė ryšį tarp įvairių grėsmių prasmei ir neigiamų emocijų. Jei kyla grėsmė gyvenimo prasmei, individai praranda gyvenimo tikslo, veiksmingumo ir vertės jausmą (Heintzelman ir King, 2014). Atitinkamai, kai žmogus sužino apie netektį (pvz., tikslo ar svarbios savęs dalies praradimą), atsiranda liūdesys – ši emocija skiriasi nuo kitų persidengiančių emocijų, tokių kaip pyktis, nerimas ar ilgesys (Dalgleish ir Power, 2000; Freed ir Mann, 2007). Liūdesys turi tam tikrų savybių, kurios gali paskatinti teigiamus rezultatus. Jis siejamas su negrįžtamai prarastais dalykais (pvz., mylimo žmogaus netektimi), o būtent netekties ir bejėgiškumo derinys lemia norą kompensuoti (Garg ir Lerner, 2013).

Vienas iš būdų, kaip žmonės stiprina savo gyvenimo prasmės jausmą, yra įsitraukimas į tam tikras atsakingo elgesio formas, pavyzdžiui, savanorystę, pinigų skyrimą kitų gerovei (Klein, 2017) ar aplinką tausojančias veiklas (Jia et al., 2021). Šioje disertacijoje teigiama, kad grėsmė gyvenimo prasmei gali paskatinti ketinimus įsigyti tvarių produktų. Be to, jei grėsmė prasmei sukelia liūdesį, o liūdesys gali paskatinti naujus būdus įgyti prasmę per vartojimą, tuomet tokia prasmė gali būti pasiekama priimant tvaresnius sprendimus. Naujausi tyrimai iš tiesų rodo, kad liūdesys, sukeltas primenant apie socialines normas, gali paskatinti elgtis tvariau (Schwartz Perloth ir Loewenstein, 2017). Šiame darbe teigiama, kad grėsmės prasmei didins liūdesį, kuris savo ruožtu taps mechanizmu, padedančiu atkurti norimą vidinę būseną ir paskatins didesnį norą įsigyti tvarių produktų.

Užuominų apie kilmę svarba žiedinio vartojimo srityje

Žmonės turi fundamentinį poreikį pažinti ir suprasti juos supantį pasaulį (pvz., Festinger, 1954; Fiske ir Taylor, 2013), o vartotojai dažniau renkasi aiškiai suprantamus ir lengvai suvokiamus produktus (Aaker ir Keller, 1990; Becker-Olsen ir Hill, 2006). Būtent tai vartotojams gali suteikti užuominos apie kilmę – jos yra papildomas informacijos šaltinis apie tai, iš kur atkeliauja prekė. Be to, kadangi

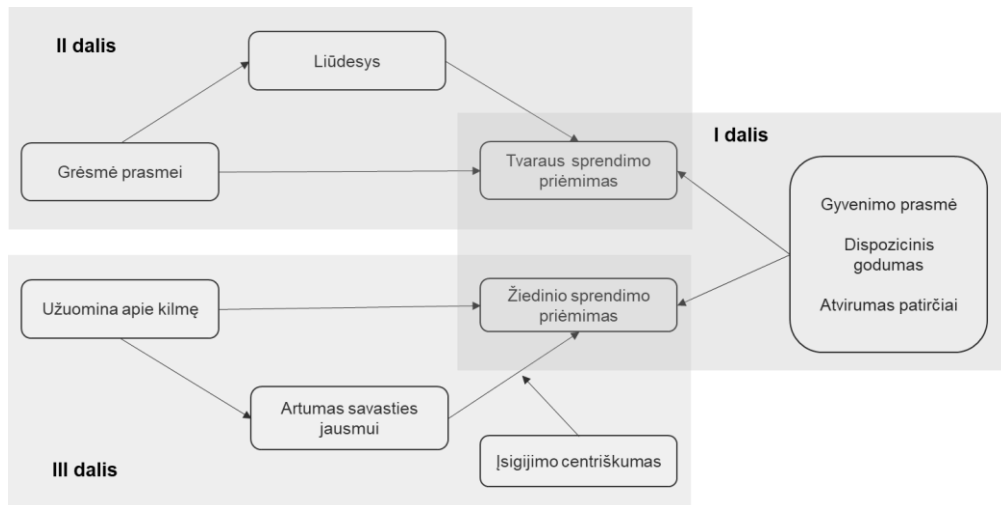
užuominos apie kilmę yra informacinio pobūdžio, jos padeda lengviau suprasti prekes. Taigi, žinojimas apie kilmę suteikia papildomos informacijos ir geresnį žinojimo jausmą. Dėl šios priežasties tikiuosi, kad vartotojai labiau vertins prekes su *užuominomis apie kilmę* (lyginant su tomis, kurios tokios informacijos neturi).

Individai siekia plėsti savo „aš“ ribas įgydami naujų išteklių ir skirtingų perspektyvų (Aron et al., 1998). Tokia plėtra gali vykti ir per prekių integravimą į savąjį „aš“ (pvz., Batra et al., 2012; Trump ir Brucks, 2012; Escalas ir Bettman, 2003; Reimann ir Aron, 2009). Remdamasi šiomis išvadomis, teigiu, kad prekės su užuomina apie kilmę turės didesnę potencialą prisidėti prie savęs plėtros, nes jos padeda suvokti, kad vartotojas turi prieigą prie papildomų išteklių (pvz., Reimann et al., 2012). Ankstesni tyrimai taip pat rodo, kad objektai gali tapti savasties dalimi, jei žinoma, jog jie *kilę* iš tam tikrų vietų ar aplinkų (Belk, 1988). Kadangi užuominos apie kilmę yra žiniomis grįstos informacinės nuorodos, kurie sieja mus su vertingomis ir svarbiomis vietomis, logiška manyti, kad atnaujintos ir naudotos prekės su kilmės užuomina (palyginti su tomis, kurios tokios užuominos neturi) gali stipriau integruotis į mūsų savasties jausmą. Savo ruožtu, artumas savasties jausmui mediacijos būdu turėtų sustiprinti kilmės poveikį siekiant įsigyti žiedines prekes, nes žmonės dažniau renkasi prekes, su kuriomis gali tapatintis (pvz., Perkins ir Forehand, 2012; Reed et al., 2012). Taigi, tikėtina, kad artumas savasties jausmui padidins prekių su užuominomis apie kilmę patrauklumą, palyginti su prekėmis, kurios užuominų apie kilmę neturi.

Šioje disertacijoje taip pat teigiu, kad kilmės poveikis siekiant įsigyti prekes nebus vienodas visiems vartotojams. Greičiau užuominos apie kilmę labiau didins prekių patrauklumą tiems vartotojams, kurie prekes vertina kaip šaltinį, padedantį įgyti ryšio jausmą. Taigi, individualūs skirtumai, susiję su tuo, kiek žmonės daiktus ir jų įsigijimą laiko savo gyvenimo centru, turės moderuojantį poveikį kilmės ir siekio įsigyti prekių ryšiui. Tokie skirtumai atsispindi materializmo konstrukto įsigijimo centriškumo faktoriuje (Richins ir Dawson, 1992). Žmonės, kurie materialinių gėrybių įsigijimui skiria centrinę vietą savo gyvenime, tiki, kad šios gėrybės yra didžiausias pasitenkinimo šaltinis (Belk, 1984), padedantis jiems pasiekti trokštamą būseną (Fournier ir Richins, 1991). Tuo tarpu mažesnę materializmo lygį turintys asmenys labiau vertina gyvenimo tikslus ir santykius nei materialias gėrybes (Belk, 1984). Jei žinojimas apie produkto kilmę gali suteikti didesnę konteksto suvokimą, tuomet galima tikėtis, kad

žmonės, kurių įsigijimo centriškumas yra mažesnis, labiau vertins tokias prekes nei tie, kuriems svarbesnis pats įsigijimo procesas, o ne kontekstas.

Paveikslas 15. Empirinio tyrimo koncepcinis modelis



Tyrimo metodologija ir pagrindiniai tyrimo rezultatai

Šioje disertacijoje buvo taikomi du skirtingi kiekybinio tyrimo metodai. Pirmajam klausimų rinkiniui, kuriuo siekta viename duomenų rinkinyje iširti tvarų ir žiedinį vartojimą, buvo atlikta apklausa (pirmasis tyrimas), o pagrindiniu statistinės analizės metodu pasirinktas struktūrinės lygtys modeliavimas. Tokia analizė pasirinkta dėl to, kad ji leidžia vienu metu tirti sudėtingus ryšius ir kruopščiai vertinti matavimo validumą (Beran ir Violato, 2010). Norint patikrinti hipotezes, skirtas atskirai paaiškinti pagrindinius tvaraus ir žiedinio vartojimo mechanizmus, buvo būtina iširti priežastinį ryšį, todėl buvo atlikti eksperimentai (2-8 tyrimai). Šis tyrimo metodas yra pagrindinis siekiant nustatyti priežastinius ryšius (Cook et al., 2002). Taigi, siekiant atsakyti į tyrimo klausimus iš viso buvo atlikti aštuoni tyrimai: viena apklausa ir septyni tarpgrupinio dizaino eksperimentai. Visi tyrimai atlikti internetu, naudojantis profesionalia tyrimų platforma „Prolific Academic“, kurioje už nedidelį piniginių atlygį buvo įtraukti 2254 Didžiosios Britanijos piliečiai. Tyrimuose buvo nagrinėjama tiek tvarių ir žiedinių prekių ženklų nuosavybė, tiek ketinimai vartoti tvarius ir žiedinius produktus. Taip pat buvo tiriamos įvairios produktų kategorijos.

Gyvenimo prasmės jausmas, dispozicinis godumas, atvirumas patirčiai ir tvarių bei žiedinių prekių nuosavybė. Teoriniu požiūriu pirmojoje disertacijos dalyje (Tyrimas 1) buvo siekiama vienu metu stebėti, kaip įvairūs asmeniniai bruožai, tokie kaip gyvenimo prasmė (tiek jos siekimas, tiek jos buvimas), dispozicinis godumas ir atvirumas patirčiai, yra susiję su tvarių ir žiedinių prekių ženklų turėjimu. Pirmojo tyrimo rezultatai rodo, kad gyvenimo prasmės ieškojimas yra teigiamai susijęs su tvarių prekių ženklų nuosavybe, tačiau ryšio tarp gyvenimo prasmės buvimo ir tokių prekių ženklų nuosavybės nėra. Tuo tarpu, gyvenimo prasmės buvimas teigiamai susijęs su žiedinių prekių ženklų turėjimu, tačiau ryšio tarp gyvenimo prasmės ieškojimo ir tokių prekių ženklų turėjimo rasta nebuvo. Tyrimo rezultatai atskleidė, kad nėra statistiškai reikšmingo ryšio tarp dispozicinio godumo ir tvarių prekių ženklų nuosavybės; tačiau dispozicinis godumas yra teigiamai susijęs su žiedinių prekių ženklų nuosavybe. Galiausiai, pirmojo tyrimo rezultatai atskleidė, kad atvirumas patirčiai yra teigiamai susijęs su tvarių prekių ženklų turėjimu, tačiau ne su žiedinių prekių ženklų turėjimu.

Grėsmė gyvenimo prasmei, neigiama liūdesio emocija ir tvarus vartojimas. Antroji disertacijos dalis apėmė keturis eksperimentus (2, 3, 4 ir 5 tyrimai), kurie buvo pagrįsti Prasmės palaikymo modeliu (Heine et al., 2006) ir Diskrečiųjų emocijų teorija. Šiuose eksperimentuose buvo tiriamas liūdesio emocijos tarpininkaujantis vaidmuo santykiuose tarp grėsmės prasmei ir tvaraus vartojimo. Antrasis tyrimas parodė, kad kai žmonės susiduria su grėsme prasmei (lyginant su kontroline grupe), jų patiriamas liūdesys padidėja. Trečiasis tyrimas testavo tiesioginio ryšio efektą ir atskleidė, kad žmonės, susidūrę su grėsme gyvenimo prasmei (lyginant su kontroline grupe), labiau linkę pirkti tvarius produktus. Ketvirtasis tyrimas atskleidė koks psichologinis mechanizmas glūdi po ryšiu tarp grėsmės prasmei ir ketinimo pirkti tvarų produktą – grėsmė gyvenimo prasmei padidina jaučiamą liūdesį, o šis, savo ruožtu, skatina didesnę norą pirkti tvarius produktus. Šie rezultatai buvo replikuoti penktajame tyrime su kitu tvariu produktu.

Užuominų apie kilmę poveikis žiedinių prekių suvokiamai vertei ir siekiui įsigyti, mediacija ir ribojančios sąlygos. Galiausiai, trečiojoje disertacijos dalyje buvo tiriama, kaip žiedinių produktų pristatyme pateikiamos užuominos apie kilmę veikia vartotojų sprendimus. Buvo atlikti trys eksperimentai (6, 7 ir 8 tyrimas). Šeštajame tyrime pateikta empirinių įrodymų, kad užuominos apie kilmę (lyginant su jų nebuvimu) padidina prekės suvokiamą piniginę vertę. Naudojant kitą produktų

kategoriją, septintajame tyrime buvo patvirtintos šeštojo tyrimo išvados ir parodytos tolesnės pasekmės siekiui įsigyti. Tyrimo rezultatai atskleidė, kad užuominos apie kilmę (lyginant su jų nebuvimu) sukuria stipresnį ryšį su savastimi, o tai savo ruožtu didina siekį įsigyti tokių produktų. Galiausiai, aštuntasis tyrimas replikavo septintojo tyrimo rezultatus, pademonstruodamas esminį užuominos apie kilmę poveikį siekiui įsigyti – t. y., vartotojai siekė įsigyti žiedinį produktą su užuomina apie kilmę labiau nei produktą, kuris buvo be tokios nuorodos ar lyginant su kontrolinės grupės produktu. Aštuntuoju tyrimu taip pat siekta nustatyti, kokios sąlygos riboja ryšį tarp užuominos apie kilmę ir siekio įsigyti žiedinį produktą. Tyrimo rezultatai atskleidė, kad užuominų apie kilmę poveikį siekiui įsigyti moderuoja įsigijimo centriškumas. Tiksliau, žmonės, kurių įsigijimo centriškumas yra žemesnis, siekia tokių produktų įsigyti labiau nei tie, kurių įsigijimo centriškumas yra aukštesnis. Šie eksperimentai buvo atlikti su skirtingomis produktų kategorijomis (raktų pakabukais, žvakėmis).

IŠVADOS

Pirmoji disertacijos dalis buvo grindžiama tvaraus ir žiedinio sprendimų priėmimo srities išvadamis. Remiantis Bruožų aktyvavimo teorija (Tett ir Burnett, 2003) kaip teoriniu pagrindu, šiame tyrime parodyta, kaip asmenybės bruožai veikia skirtingus tvaraus ir žiedinio vartojimo tipus. Vienu metu vertinant įvairius bruožus, kurie atspindi skatinimo arba prevencijos orientacijas, rezultatai rodo skirtingą jų poveikį tvarių ir žiedinių prekių ženklų vartojimui. Konkrečiai, rezultatai rodo, kad tvarų vartojimą gali skatinti gyvenimo prasmės pojūtis ir atvirumas patirčiai. Įdomu tai, kad, nepaisant bendro tvaraus vartojimo tikslo, susijusio su aplinkos išsaugojimu, žiedinis vartojimas neturi jokio ryšio su minėtais bruožais ir yra skatinamas tik gyvenimo prasmės buvimo ir dispozicinio godumo. Šis tyrimas taip pat prisideda prie tvaraus ir žiedinio vartojimo konceptualizavimo ir nukreipia praktikus taikyti specializuotą požiūrį inicijuojant pokyčius, susijusius su tvarumu ir žiediniu vartojimu, visuomenėje. Antroje disertacijos dalyje daugiausia dėmesio skirta Prasmės palaikymo modeliui (Heine et al., 2006) ir Diskrečiųjų emocijų teorijai, o trečioje – fundamentiniam poreikiui pažinti ir suprasti supantį pasaulį (pvz., Festinger, 1954; Fiske ir Taylor, 2013). Atlikti aštuoni empiriniai tyrimai (viena apklausa ir septyni eksperimentai), kurių metu testuotos įvairios tvarių ir žiedinių produktų kategorijos Jungtinėje Karalystėje. Pagrindinės šios disertacijos išvados yra šios:

1. Šios disertacijos išvados įrodė, kad gyvenimo prasmės buvimas yra teigiamai susijęs su žiedinių, bet ne tvarių prekių ženklų turėjimu. Ir, priešingai, prasmės gyvenime ieškojimas teigiamai susijęs su tvarių, bet ne žiedinių prekių ženklų turėjimu. Šie rezultatai atitinka ankstesnius tyrimus, rodančius, kad gyvenimo prasmę sudaro du konceptualiai skirtingi faktoriai (Steger et al., 2006), o elgesio strategijos gali skirtis priklausomai nuo poreikio reguliuoti jausmą, kad gyvenimas kupinas prasmės (Pragmatinė prasmės reguliavimo teorija; van Tilburg ir Igou, 2011).
2. Šis darbas rodo, kad dispozicinis godumas teigiamai susijęs su žiedinių prekių ženklų turėjimu. Tačiau ryšio su tvarių prekių ženklų turėjimu nėra. Šie rezultatai atitinka ankstesnes išvadas, rodančias, kad dispozicinis godumas yra stiprus noras įsigyti, orientuotas į maksimalios vertės siekimą (žr. Zeelenberg ir

Breugelmans, 2022), bei atitinka tam tikrus žiedinių produktų savybes, kurios susijusios su vartotojų vertės motyvacija.

3. Šioje disertacijoje taip pat buvo tiriama, kaip atvirumo patirčiai bruožas yra susijęs su tvarių ir žiedinių prekių ženklų nuosavybe. Gauti rezultatai atitinka ankstesnius, rodančius, kad atvirumas patirčiai yra teigiamai susijęs su tvariu vartojimu (pvz., Lange ir Dewitte, 2019). Įdomu tai, kad tarp atvirumo patirčiai ir žiedinių prekių ženklų nuosavybės ryšio nėra. Dariau prielaidą, kad toks rezultatas gautas dėl specifinių žiedinių produktų savybių (jie gaminami iš antrinių žaliavų), tačiau tam išsiaiškinti reikalingi tolesni tyrimai.
4. Šiame darbe pasiūliau, kad žmonės, susiduriantys su grėsmėmis prasmei, gali būti linkę įsitraukti į tvarų vartojimą. Empiriniai šio tyrimo duomenys iš tiesų rodo, kad kai žmonės susiduria su grėsmėmis jų gyvenimo prasmės pojūčiui, jie yra linkę įsitraukti į tvarų vartojimą. Ši išvada atitinka Prasmės palaikymo modelį (Heine et al., 2006), Kognityvinio disonanso teoriją (Festinger, 1962), Pragmatinės prasmės reguliavimo teoriją (van Tilburg ir Igou, 2011) ir Prasmės kūrimo modelį (Park ir Folkman, 1997). Visuose šiuose modeliuose ir teorijose kalbama apie grėsmių gyvenimo prasmės pojūčiui motyvacinę funkciją: grėsmės prasmei patiriantys žmonės yra motyvuoti atkurti prasmingo gyvenimo jausmą, net pasitelkdami kitus šaltinius nei tie, kuriems kilo grėsmė.
5. Šioje disertacijoje pasiūlytas naujas mediacijos modelis, paaiškinantis, kodėl vartotojai yra motyvuoti įsitraukti į tvarų vartojimą. Atliktų eksperimentų rezultatai rodo, kad neigiama liūdesio emocija atlieka tarpininkaujantį vaidmenį santykiuose tarp patiriamos grėsmės prasmei ir tvaraus vartojimo. Kai kyla grėsmė žmonių gyvenimo prasmingumo jausmui, jie jaučia didesnę liūdesį, o tai savo ruožtu lemia didesnę norą vartoti tvariai. Teigiau, kad toks glūdintis mechanizmas grindžiamas Diskrečiųjų emocijų teorija, teigiančia, kad diskrečiosios emocijos keičia pažinimo, vertinimo, patirčių, elgesio ir fiziologinius procesus (žr. apžvalgą Lench et al., 2011). Tiksliau, rezultatai rodo, kad žmonės, patiriantys padidėjusį liūdesį, kuris atsiranda susidūrus su grėsme prasmei, siekia su tuo susidoroti, ir tvarus vartojimas laikomas vienu iš šaltinių, padedančių tai pasiekti.
6. Šioje disertacijoje taip pat buvo tiriama, kokią poveikį užuominos apie žiedinių produktų kilmę turi tokių produktų paklausai. Iš tiesų šis darbas rodo, kad tokios užuominos padidina suvokiamą žiedinių prekių piniginę vertę ir siekį tokių prekių įsigyti. Tokios išvados grindžiamos ankstesniais įrodymais, kad žmonės turi

esminį poreikį pažinti ir suprasti juos supantį pasaulį (pvz., Festinger, 1954; Fiske ir Taylor, 2013), o vartotojai teikia pirmenybę aiškiems ir lengvai suprantamiems pasirinkimams (Aaker ir Keller, 1990; Becker-Olsen ir Hill, 2006).

7. Šiame darbe taip pat buvo siekiama paaiškinti, kodėl užuominos apie kilmę pateikimas skatina žiedinių produktų paklausą, ir buvo tikrinamas mediacijos modelį kur tarpininkaujantį kintamuoju testuotas artumas savasties jausmui. Hipotezė buvo suformuluota remiantis ankstesnėmis žiniomis, kad individai siekia išplėsti savąjį „aš“ įgydami papildomų išteklių ir skirtingų perspektyvų (Aron et al., 1998). Konkrečiai, pasiūliau, o eksperimento rezultatai parodė, kad užuominos apie kilmę didina artumą savasties jausmui, o šis artumas savo ruožtu lemia didesnę siekį įsigyti žiedinių produktų.
8. Šioje disertacijoje buvo tiriama, ar užuominų apie kilmę poveikis siekiui įsigyti žiedinių produktų priklauso nuo įsigijimo centriškumo. Remiantis įrodymais, kad žmonės, kurių materializmo rodiklis žemas, labiau vertina savo gyvenimo tikslus ir santykius nei patį turtą (Belk, 1984) ir kad kilmės žinojimas gali suteikti didesnę konteksto pojūtį, šioje disertacijoje siūloma, kad žmonės, kurių įsigijimo centriškumas žemas, tokių prekių norės labiau nei žmonės, kurių centre yra įsigijimai, bet ne kontekstas. Iš tiesų rezultatai rodo, kad žemesnio (bet ne aukštesio) įsigijimo centriškumo vartotojai labiau siekia įsigyti žiedinių prekių, kai apie jų kilmę pateikiamos užuominos (lyginant su prekėmis, apie kurias tokių užuominų nėra pateikiama).

ISM UNIVERSITY OF MANAGEMENT AND ECONOMICS

Živilė Kaminskiė

CONSUMER JUDGMENT AND DECISION MAKING IN THE SUSTAINABILITY-
RELATED DOMAIN: DRIVERS FOSTERING EFFICIENT CHANGE

Summary of the Doctoral Dissertation

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Prof. Dr. Rūta Kazlauskaitė (ISM University of Management and Economics, Social Sciences, Management – S 003)

Members:

Prof. Dr. Žaneta Gravelines (Kaunas University of Technology, Social Sciences, Management – S 003)

Prof. Dr. Rutger Daniel van Oest (BI Norwegian Business School, Norway, Social Sciences, Economics – S 004)

Prof. Dr. Aušra Rūtelionė (Kaunas University of Technology, Social Sciences, Management – S 003)

Assoc. Prof. Dr. Beata Šeinauskienė (Kaunas University of Technology, Social Sciences, Management – S 003)

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The summary of the dissertation was sent on January 20, 2025. The dissertation is available at Martynas Mažvydas National Library and the library of ISM University of Management and Economics.

INTRODUCTION¹⁵

The relevance of the research. Prior literature provides evidence that consumers' responsible consumption – consumption that considers environmental, economic, social, and health dimensions – is complex and can be affected by multiple psychological factors (Gifford, 2014; Van Vugt, 2009; Zaval et al., 2015). Many studies have demonstrated that different types of responsible consumption are driven by environmental concerns. For example, environmental concern was found to predict ecologically conscious consumer behavior (e.g., Yarimoglu & Binboga, 2019; Kinnear & Taylor, 1973; Roberts & Bacon, 1997; Roberts, 1996; Straughan & Roberts, 1999) and green purchases (e.g., Albayrak et al., 2013; Bamberg, 2003; Park & Lin, 2020). Also, environmental concern was positively linked to socially responsible consumption behavior (e.g., Antil, 1984; Hosta & Zabkar, 2021). Yet, some more recent studies failed to find a link between environmental concerns and responsible behavior, indicating that more psychological mechanisms are responsible for consumer judgment and decision-making. For example, green awareness does not always predict the purchase intention of remanufactured products (Singhal et al., 2019), and the environmental benefits of refurbished products do not play a primary role in purchase decisions (van Weelden et al., 2016). In addition, some research shows that environmental concerns do not solely drive responsible behavior but can be guided by personally and socially driven motivations. For instance, one study found that it is not environmental concerns but a direct benefit to the consumer that drives the willingness to pay for products with socially responsible labels (Tully & Winer, 2014). Other studies confirmed that consumers tend to select sustainable options to convey social status conspicuously or to impress others (Green & Peloza, 2014; Griskevicius et al., 2010). Self-interest motives and self-benefits frequently drive pro-environmental behaviors (Griskevicius et al., 2012; White et al., 2019).

¹⁵ The summary is based on:

Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.

Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.

Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.

These findings suggest that the category of responsible consumption may be too broad to meaningfully and univocally be associated with diverse drivers. Following the logic of domain specificity, different types of responsible consumption may be influenced by various traits. To date, only a few studies have simultaneously addressed the preferences for different types of responsible products and their underlying drivers (e.g., Hosta & Zabkar, 2021; Tully & Winer, 2014). Yet, there are multiple reasons to expect that different types of responsible consumption are associated with different and even divergent motivators. I use sustainable and circular brands as a case in point. I acknowledge that sustainable consumption and circular consumption show considerable overlap. Yet, I argue that sustainable consumption is a psychologically different type of consumption than circular consumption, thus, the underlying traits and judgment and decision-making may also differ. Specifically, sustainable consumption brings many social benefits by providing access to basic services, green and decent jobs, and a better quality of life for everyone, contributing to the reduction of economic, environmental, and social costs in the future, strengthening economic competitiveness, and alleviating poverty (Ritchie & Mispay, 2018). Meanwhile, circular consumption has a narrower resource conservation aim and involves “sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible,” so the life cycle of products would be extended (EP, 2022; see also Geissdoerfer et al., 2017). In some cases, products are considered to be sustainable, although they are produced not according to circularity principles, e.g., greater sustainability in producing red meat may be achieved by introducing sustainable practices increasing eco-efficiency (e.g., changing animals’ diet, so it would be of higher-energy, grain-based which in turn leads to lower methane emissions) or ensuring gender equality, worker safety, etc. A circular approach, on the other hand, would focus on creating a meat substitute from plants, ensuring losses of materials prevention. Furthermore, even though sometimes circular products are considered to be a form of sustainable consumption, efforts to achieve circularity do not always guarantee sustainable results. A recent study pointed out that circular products may also be unsustainable, e.g., when producing products from harmful secondary materials such as polymers that incorporate hazardous additives (Blum et al., 2020).

This dissertation aims to address the questions related to drivers fostering efficient change in the sustainable consumption domain. For this aim, this work focuses on three levels: (1) analyzes sustainable and circular consumption simultaneously, then (2) delves deeper into consumer judgment and decision-making regarding sustainable products and, lastly, (3) into consumer judgment and decision-making regarding circular products.

First, this dissertation aims to expand knowledge by highlighting the role of specific underlying traits that possibly drive sustainable and circular consumption in different ways. In this research, I argue that the differences in the scope of aim and different features of sustainable and circular products are linked to different individual orientations and, therefore, will be driven by different traits. These questions are investigated in the first study.

Moreover, the second set of questions of this dissertation is related to consumer judgment and decision-making regarding sustainable products. More particularly, this dissertation aims to explain the underlying mechanism of the negative emotion of sadness. Emotions influence what we think and how we do it – our attention, perception, memory, physiological state, mood, as well as our goals and behaviors (Cosmides & Tooby, 2000). As such, emotions facilitate adaptation to the environment and serve important psychological functions (Salerno et al., 2014). Emotions help us understand goals, solve problems, protect our health, strengthen resilience, create an attachment to other people, and guide the behavior of groups, social systems, and nations (Pekrun et al., 2002). Research has mostly addressed the bright side of positive emotions and has shown that positive emotions expand a person's cognitive domain and thus nurture personal resources (Fredrickson, 2013). Furthermore, positive emotions can provide long-term benefits in important areas, including work, physical health, and relationships (Armenta et al., 2017). However, another stream of studies provides evidence that negative emotions can also serve a positive function and have a motivating effect (Forgas, 2013), leading to more cautious, calculated behavior (Tan & Forgas, 2010), indicating a need to take concrete action to deal with the situation in accordance with existing social norms (Tan & Forgas, 2010). For instance, a sense of guilt is a negative feeling people experience when they reflect on past behaviors and realize that their behavior does not fit their personal goals, norms, or standards (Baumeister & Leary, 1995; Tangney & Dearing, 2002). Studies show that guilt activates the desire to deal with this stressful situation by correcting past

behaviors and situations (Lazarus & Folkman, 1984; Skinner & Brewer, 2002). In this specific case, a sense of guilt activates focus on a problem – people try to improve their environment and their well-being (Antonetti & Maklan, 2014; Lazarus, 1993). Research on regret focuses primarily on reducing probable regret through conventional means (Inman & Zeelenberg, 2002). Fear motivates preventively caring for health (Consedine et al., 2004), and improves driver safety (Lewis et al., 2007). Interestingly, prior research suggests that in some cases, negative rather than positive emotions can be more effective (e.g., changing target behavior when emotions and moods are not only destructive but also constructive; Shuman et al., 2018). If sadness can offer new ways to acquire meaning in the consumption domain, such meaning can be obtained by making more sustainable choices. Recent research, indeed, shows that sadness evoked by reminders of social norms can lead to more sustainable behaviors, such as using an energy footprint calculator or donating larger sums for specific environment-related projects (Schwartz Perloff & Loewenstein, 2017). I argue that meaning threats will increase sadness, which, in turn, will act as a mechanism for restoring the desired state by experiencing a greater desire to purchase sustainable products. To test this notion, I employ the second set of four experimental studies (Study 2, Study 3, Study 4, and Study 5).

Lastly, the third set of questions aims to investigate consumer judgment and decision-making regarding circular products. Prior research on circular decision-making has primarily focused on the seller's side, for example, how consumers give away or sell used goods to other consumers (e.g., Brough & Isaac, 2012; Donnelly et al., 2017); how they part with identity-linked products (e.g., Trudel et al., 2016); how different traits, norms or convenience drive recycling intentions (e.g., Ebreo & Vining, 2001; Goldstein et al., 2008; McCarty & Shrum, 2001). While understanding why people recycle is important, it provides only part of the whole picture explaining circular choices. This dissertation argues that it is equally important to gain a deeper understanding of why and when already recycled (used or remodeled) goods are acquired and how to increase the *demand* for these goods. If, in general, demand is driven by the value of a good, how is this value of used or remodeled goods perceived? First intuition suggests that, because of previous usage by others, used or remodeled goods should be seen as having a lower intrinsic value in comparison to regular goods. Yet, the contrary is also possible – under certain conditions, the intrinsic subjective

value of used or remodeled goods may be increased because of unique properties that are only present for such goods. In contrast to new goods, used or remodeled goods may possess characteristics that can be reflected in informational stimuli signaling *the origin* of the good connected to a certain place. In this dissertation it is proposed that such origin cues represent a neglected yet powerful driver of consumer behavior – simply knowing the origin may change the subjective intrinsic value of used or remodeled goods. The current project seeks to advance theoretical knowledge and understanding by identifying the novel psychological mechanisms that determine how and under what conditions origin cues help the appeal of used or remodeled goods and so may drive the success of circular consumption. Therefore, the last set of experimental studies (Study 6, Study 7, and Study 8) addresses these questions.

The gaps in the research area. While previous research shows the importance of understanding traits towards responsible consumption in general, currently available insights are limited, as previous studies do not examine whether traits differ for different types of responsible consumption at once. Previous work has suggested that underlying traits are the same for circular and sustainable choices. Only recently it was pointed out that specific characteristics of circular products distinguish them from sustainable ones and that these two types of responsible consumption should be considered distinct categories; therefore, drivers also can vary (Pretner et al., 2021). However, to date, no research has tested whether certain traits predict sustainable and circular consumption similarly in one dataset. Moreover, previous research focused on measuring intentions, and research has documented that on the surface, consumers may feel positive and intend to buy sustainable brands but do not follow up when it comes to actually buying such brands (e.g., White et al., 2019). In this dissertation, I aim to grasp actual consumption by measuring ownership of sustainable and circular brands.

Next, previous research has investigated such constructs as meaning in life, openness to experience, and dispositional greed, however, the research was performed not in the sustainability-related domain, or the findings are mixed. Further, prior research has dedicated a lot of attention to how various positive and negative emotions affect behavior. However, the role of negative emotion of sadness remains poorly understood as previous findings are mixed, and the relationship between meaning threats and sustainable consumption has not been studied at all.

Further, to date, a mere handful of studies have examined perceptions of single, particular exemplars of circular products: recycled and upcycled products (Kamleitner et al., 2019), re-used products (Hazen et al., 2017); remanufactured products (Guide Jr. & Li, 2010; Michaud & Llerena, 2010), refurbished products (Harms & Linton, 2016; van Weelden et al., 2016). Moreover, the research so far has been overwhelmingly descriptive: merely documenting mostly negative outcome variables such as consumer avoidance. For instance, several studies suggest that people avoid buying reused products (Hazen et al., 2017) and tend to pay less for products that are remanufactured or refurbished (Abbey et al., 2015; Harms & Linton, 2016; Michaud & Llerena, 2011). Previous findings explaining underlying reasons and boundary conditions for circular consumption show that consumers are concerned about the quality and reliability of reused goods (Bundgaard & Huulgaard, 2019; Harms & Linton, 2016). Environmentally sustainable and remanufactured products are often rejected because of an association with perceived higher risks (van Weelden et al., 2016) or disgust caused by physical contact with a previous owner (Abbey et al., 2015). Yet, a clear understanding of what antecedents predict and proactively drive circular consumption is missing from the scientific literature.

Research problem: (a) a lack of understanding of how different traits are related to different forms of responsible consumption, i.e., consumer judgment and decision-making regarding sustainable and circular brands; (b) a lack of knowledge of how the negative emotion of sadness elicited from experienced meaning threat affects consumers' decisions in the sustainability domain; and (c) a lack of knowledge of why and under what conditions consumers make positive decisions regarding circular products when origin cues of such products are present (vs. absent).

This research aims (1) to test how the same traits are related to ownership of sustainable and circular products; (2) to analyze whether meaning threat causes the emotion of sadness and how sadness affects willingness to consume sustainably; and (3) to investigate the role of origin cues in steering consumer decision making regarding circular products. More precisely, to research what spill-over effect the presence of origin cues (versus absence) has, how it affects the desirability of circular products, and what boundary conditions are.

Research objectives:

- To analyze the academic literature on sustainable decision-making.

- To analyze the academic literature on different orientations such as collective benefitting, self-benefitting, and cognitive flexibility, how they correspond to such motivational traits as meaning in life, dispositional greed, and openness to experience, and what relationships they might have with sustainable and circular consumption.
- To analyze the relationships between meaning threats, sadness, and sustainable consumption.
- To analyze the relationships between origin cues and perceived monetary value, connection with the sense of self, desirability for circular products, and acquisition centrality.
- To develop the methodology for testing the proposed hypotheses.
- To perform the empirical research and analyze the obtained data.
- To compare the findings of conducted empirical research to the ones of existing research in the field.
- To provide managerial implications, indicate research limitations and implications for future research.

Scientific contribution. This dissertation contributes to the existing scientific literature as it provides a refined conceptualization of sustainable and circular consumption by exploring their overlapping and distinct aspects. This work also shows that sustainable and circular consumption may be influenced by different traits in diverging ways. Drawing on the Trait Activation Theoretical framework, I suggest that sustainable and circular consumption types signal different features that correspond to distinct traits. Next, this dissertation deepens the understanding of the complexity of different traits in predicting sustainable and circular consumption, highlighting their nuanced effects on different consumption types. Further, previous research has documented the intentions-behavior gap – that is, consumers may report positive intentions toward responsible consumption but do not follow up when it comes to actually buying responsible brands (e.g., White et al., 2019). Therefore, in this research, I focus on studying ownership of brands, defined as “the state or fact of owning something” (Cambridge University Press, n.d.a), and thus contribute to prior work providing a thorough picture of responsible consumption¹⁶.

¹⁶ Note that ownership is a prerequisite of consumption that is a broader term encompassing all behavioral outcomes linked to “the process of buying and using goods, or the amount that is bought and used” (Cambridge University Press, n.d.b).

This dissertation also expands knowledge about the negative emotion of sadness and shows its previously not studied motivational role towards responsible behavior, i.e., sustainable consumption. Although one stream of the literature highlights the directing role of sadness towards compensatory consumption, which brings negative consequences (e.g., Allard & White, 2015), this work shows that such frequently felt emotion, in some cases, can actively direct people to positive behavior, i.e., sustainable consumption. Further, prior studies researching how people cope with meaning threats have indicated many ways to reinstate the sense of life being full of meaning. However, to my best knowledge, this research is the first one showing the link between meaning threats and sustainable consumption.

Moreover, this dissertation advances theoretical knowledge by identifying the psychological mechanisms that determine how and under what conditions origin cues help the appeal of used or remodeled goods and so may drive the success of circular consumption. This is one of the first works to explore how to increase the demand for remodeled or used goods by exploring their intrinsic characteristics as a resource, increasing the value of the good (for an exception, see Kamleitner et al., 2019). Contrary to the large stream of previous studies, this research shows that consumers can desire more used or remodeled goods when certain aspects inherent in such goods are highlighted (i.e., origin). Next, this current research provides evidence that used or remodeled goods have the potential to have higher subjective intrinsic value compared to new goods. Moreover, research findings add to the literature on circular consumption by showing that origin cues drive the subjective intrinsic value of used or remodeled goods via the underlying mechanism of connection with the self – a mediator that has not been researched in the context of circular choices. As well, provides evidence on the novel boundary condition as the documented effects are particularly present for consumers who are centered on the relationships and the surrounding context but not on acquisitions themselves – people scoring lower on the acquisition centrality. Overall, the results of this dissertation contribute to a better understanding of how to boost circular consumption and increase the demand for used or remodeled goods by highlighting certain aspects inherent in such goods.

Relevance to practice. The findings of this dissertation may help to address actual social and economic problems that sustainable and circular consumption address (e.g., improving quality of life, strengthening health, safety, diversity, human

rights, equitable labor practices, reducing waste, and benefiting the environment in other ways, etc.). Indeed, consumers are considered to play a central role in sustainable development as they determine the demand for sustainable production (OECD, 2008); thus, understanding how to encourage people to consume sustainably and circularly is of utmost importance. The findings of the current work provide insights on how to boost the demand for sustainable and circular products, a deeper understanding of how to target consumers, how to develop effective communication and education programs, give general guidelines on how to encourage people to make better choices. Most importantly, the results show that not always the same tactics can be effective when encouraging sustainable and circular consumption, and an individual approach to these consumption forms is needed. Such insights are relevant for policy-makers, as well as public and private organizations aiming to shift consumption towards more sustainable and circular.

Limitations of the dissertation and directions for future research. While the data of the first survey offers highly externally valid findings for indicating diverging effects of distinct traits on ownership of sustainable and circular brands, future research might consider isolating and testing underlying effects using experimental design in more controlled lab settings and also investigate boundary conditions. Further, future studies could also estimate the generalizability of the findings and test other forms of sustainable and circular consumption (e.g., collaborative consumption) or highlight other benefits of the products. Also, to test propositions in other contexts, e.g., with vulnerable, resilient, and hesitant regarding the transition to more sustainable consumption consumers. Moreover, future studies could also provide more insights into the underlying mechanism of effects, adding parallel mediators and expanding knowledge about other boundary conditions for proposed models. As well, field studies could observe actual consumer behavior in real-life settings.

The structure of the dissertation. This dissertation consists of seven main chapters. In the first chapter, an overview of sustainable decision-making literature is provided. In this chapter, sustainable and circular consumption are conceptualized, and then the drivers of these two consumption forms are analyzed. Further, the second chapter aims to review the literature and develop research hypotheses related to the diverging effects of distinct traits on sustainable and circular decision-making. As the second chapter discusses the role of traits in sustainable and circular consumption and provides the theoretical framework for the activation of different traits in

encounters with different products, the third and fourth chapters are dedicated to separate research of these two responsible consumption forms. More precisely, the third chapter is dedicated to reviewing the literature and developing research hypotheses for meaning threats, the mediating role of sadness, and sustainable decision-making, and the fourth to the importance of origin cues in the circular consumption domain. Further, the fifth part of this dissertation describes the research methodology applied. Also, this chapter presents the findings of empirical research conducted, including hypothesis testing. The sixth chapter represents the general discussion of the dissertation and provides a representation of the findings, scientific contribution, theoretical and managerial implications, limitations, and future research directions. Lastly, the seventh chapter presents the main conclusions of this dissertation.

PUBLICATION OF DISSERTATION RESULTS AND CONFERENCE PRESENTATIONS

Peer-reviewed publications:

1. Kaminskiene, Z., Barsyte, J., Dewitte, S., & Uzdavinyte, E. (*under review*). The Meaningful, the Open-Minded, or the Greedy? Diverging Effects of Distinct Traits on Sustainable and Circular Consumption. *European Journal of Marketing*.
2. Kaminskiene, Z., Barsyte, J., Uzdavinyte, E. (*under review*). Through Sadness to Sustainability: How Meaning Threat Sparks Sustainable Consumption. *Organizations and Markets in Emerging Economies*.
3. Uzdavinyte, E., Barsyte, J., & Kaminskiene, Z. (2023). It's the smallness that counts: Consumer preferences for small versus large companies' products. *Psychology & Marketing*, 40(12), 2576-2587.
4. Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., & Dewitte, S. (2021). Boosting circular consumption: origin cues drive the subjective intrinsic value of used or remodeled goods. In Dewitte, S., & Botchway, E. *Incentivisation and behavioral insights methodologies*. (Deliverable n°3.1). Leuven: Pop-Machina project 821479 – H2020, 37-46.
5. Barsyte, J., Kaminskiene, Z., Uzdavinyte, E., Fennis, B. & Dewitte, S (2021). Fixing our Reflected Failure: In-group Underachieving Promotes Healthy Consumer Decision-Making. Proceedings of the European Marketing Academy, 50th, (93917).

Conference and scientific events presentations:

1. Kaminskiene, Z., Baršytė, J. (2022). Intrinsic vs. Extrinsic Motivational Traits Driving Responsible Consumer Behavior. *EMAC Regional Conference*.
2. Kaminskiene, Z.; Baršytė, J. (2021). Meaning Threats, Mediating Role of Sadness and Sustainable Decision Making. *EMAC online Doctoral Colloquium*.
3. Barsyte, J.; Kaminskiene, Z., Dewitte, S. (2024). Boosting Circular Consumption: Origin Cues Drive the Subjective Intrinsic Value of Used or Remodeled Goods. *2024 AMA Winter Academic Conference*.

BRIEF OVERVIEW OF THE DISSERTATION CONTENT

Diverging effects of distinct traits on sustainable and circular decision-making

At first sight, sustainable consumption and circular consumption definitions might show considerable conceptual overlap. They both focus on minimizing environmental impact, emphasizing efficient use of resources, avoiding waste, and preserving resources for future generations. However, I argue that despite sharing several common goals, sustainable consumption and circular consumption differ in their (1) scope, (2) focus, and (3) orientation. Building on the highlighted differences, sustainable consumption is defined as the consumption of products that seek to provide a broader scope of environmental, social, and economic benefits and are linked with a more abstract, intangible focus and promotion orientation to improve the well-being of our planet. Circular consumption is defined as the consumption of products that seek to ensure a narrow scope of resource conservation and are linked with more tangible benefits and cost-efficiency focus and prevention orientation to improve the well-being of our planet.

The conceptual framework applied in the first research of this dissertation was inspired by the Trait Activation Theory (Tett & Burnett, 2003). This theory examines how traits interact with situations and highlights that the same situation can impact individuals differently based on their distinct trait levels. Depending on the situation stimuli, the effect of the trait might be amplified or suppressed (Tett & Burnett, 2003).

Drawing on the rationale of the Trait Activation Theory, in this work, the situations are linked to *encounters with different products*, and it is expected that trait-relevant forms of consumption have an effect on behavior. More precisely, I propose that specific traits might be triggered by certain features of sustainable and circular consumption, which lead to engagement or withdrawal in both or one of these consumption forms. For instance, in line with the conceptualization of sustainable and circular consumption, I expect that if a sustainable product signals social benefits (e.g., producers' obligations regarding animal welfare or hiring employees from vulnerable and underserved communities), individuals distinguished by traits valuing attempts (e.g., altruism, empathy), might positively react to these signals. The same applies to circular consumption: if a circular product highlights a lower price, it might become a

positive stimulus for individuals who may be described as frugal and negative for those who score high as status-seeking.

The current research aims to expand knowledge by highlighting the role of three specific underlying traits that possibly drive sustainable and circular consumption in different ways: meaning in life (both striving towards it and its presence), dispositional greed, and openness to experience. Linking traits with the conceptual definition of sustainable and circular products, I aim to explore traits that fundamentally differ in their promotion vs. prevention orientation. Specifically, meaning in life, as well as openness to experience, represent promotion-focused motivation (see Higgins, 1997; Miao & Gan, 2020; Vaughn et al., 2008). On the contrary, dispositional greed exemplifies prevention orientation (see Higgins, 1997; Holt & Laury, 2002; Krekels & Pandelaere, 2015). As these traits are conceptually linked with either promotion or prevention focus, I expect them to sensitively grasp the non-overlapping differences between sustainable and circular consumption.

Meaning threats, mediating role of sadness, and sustainable decision-making

Prior research has investigated how people deal with meaning threats. For instance, the Pragmatic Meaning Regulation Theory (van Tilburg & Igou, 2011) proposes that people striving to regain or strengthen their sense of meaning are more attuned to potential behavioral strategies that can regulate their meaning. Next, according to the Meaning Making Model (Park & Folkman, 1997), meaning threats are understood as discrepancies in perception between specific instances and general orienting systems. These discrepancies lead to distress and motivate to reduce those discrepancies (Park, 2013). Moreover, the Meaning Maintenance Model states that when people face a meaning threat in one domain, they may seek to restore their sense of meaningfulness by engaging in activities even in unrelated areas (Heine et al., 2006). This model has focused on specific meaning frameworks such as self-esteem, certainty, affiliation, and symbolic immortality and argued if one is threatened, another one can provide meaning interchangeably (Heine et al., 2006). Moreover, Zhang et al. (2019) pointed out that it is too painful to admit meaninglessness; thus, people start actively searching for confirmations that life has meaning after facing meaning threats. Such mechanism might be explained by the Cognitive Dissonance Theory (Festinger, 1962), revealing individuals' flexibility regarding various sources of

meaning: if one domain does not provide meaning in life anymore, alternatives start becoming more important (Zhang et al., 2019). In sum, all these models and theories refer to the motivational function of meaninglessness.

As exposure to meaning threats means experiencing self-discrepancy, it can produce negative emotions (Higgins, 1987; Packard & Wooten, 2013). Previous research has shown the link between various meaning threats and negative emotions. If the sense of meaning in life is threatened, individuals lose a sense of purpose, agency, and value in life (Heintzelman & King, 2014). Respectively, when a person learns about the loss (e.g., a goal or valued aspect of the self), this is a moment when the emotion of sadness arises, and this is one of the features that makes sadness different from other overlapping emotions such as anger, anxiety, or yearning (Dalgleish & Power, 2000; Freed & Mann, 2007). Sadness has specific properties that offer the potential for positive outcomes. Sadness is associated with the feeling of losing an irretrievable thing (e.g., the loss of a loved one). It is the combination of loss and helplessness that determines compensatory tendencies (Garg & Lerner, 2013).

One of the ways how people strengthen their sense of meaning in life is by engaging in some forms of responsible behavior, such as volunteering, spending money to benefit others (Klein, 2017), and pro-environmental actions (Jia et al., 2021). In this dissertation, I suggest that meaning threat might also increase the purchase intention of sustainable products. Moreover, if exposure to meaning threat increases sadness, and if sadness can offer new ways to acquire meaning in the consumption domain, such meaning can be obtained by making more sustainable choices. Recent research, indeed, shows that sadness evoked by reminders of social norms can lead to more sustainable behaviors (Schwartz Perloff & Loewenstein, 2017). I argue that meaning threats will increase sadness, which, in turn, will act as a mechanism for restoring the desired state by experiencing a greater desire to purchase sustainable products.

Importance of origin cues in the circular consumption domain

People have a fundamental need for knowing and understanding the surrounding world (e.g., Festinger 1954; Fiske & Taylor, 2013) and consumers prefer choices that are clear and easy to comprehend (Aaker & Keller, 1990; Becker-Olsen & Hill, 2006).

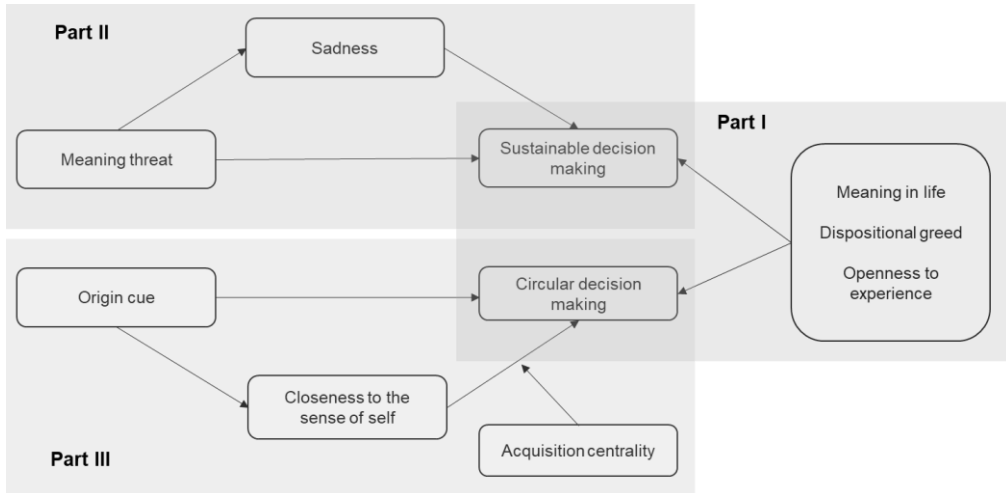
This is exactly what origin cues can provide consumers as they constitute an additional source of information about where a good is coming from. Furthermore, being informational type of cues, origin cues also make goods easier to understand. Thus, *knowing an origin* provides an additional piece of information and an elevated sense of knowledge. As a result, I expect that people would value more goods with origin cues (vs. no origin cues).

Individuals seek to expand one's self by acquiring additional resources and different perspectives (Aron et al., 1998). Such expansion may also be done by incorporating goods in the self (e.g., Batra et al., 2012; Trump & Brucks, 2012; Escalas & Bettman, 2003; Reimann & Aron, 2009). Drawing on these findings, I argue that goods with origin will possess greater potential of providing self-expansion because they facilitate the perception of having access to additional resources (e.g., Reimann et al., 2012). Previous research also suggests that objects may become part of the self through knowing that an object *originates* from particular places or settings (Belk, 1988). If origin cues are knowledge-based informational cues that connect us to valuable and important places, it stands to reason that remodeled and used goods with origin (vs. without origin) might constitute bigger parts of our sense of self. In turn, connection to the sense of self will mediate the effects of origin on desirability because people prefer goods with which they can identify (e.g., Perkins & Forehand, 2012; Reed et al., 2012). Thus, it is expected that a greater sense of connection to the self would increase the desirability of goods with origin cues as compared to goods without an origin cue.

Furthermore, I argue that the effects of origin on desirability will not be equally pronounced for different consumers. Rather, origin cues will lead to greater desirability for consumers who focus on goods as a resource for obtaining a sense of connection. Thus, individual differences in the extent to which people place possessions and their acquisition at the center of their lives will moderate the effects of origin on desirability. Such differences are captured by the acquisition centrality factor of the materialism construct (Richins & Dawson, 1992). People who put their acquisitions of material goods at a central place in their lives believe that those goods are the greatest sources of satisfaction (Belk, 1984), helping them to achieve desired states (Fournier & Richins, 1991). Meanwhile, people who score low on materialism value their life goals and relationships more than their possessions (Belk, 1984). If knowing an origin can provide a greater sense of context, then it is reasonable to expect that people who

score low on acquisition centrality would desire such goods more than people who are centered on acquisitions but not on the context.

Figure 16. The conceptual model of empirical research



Research methodology and key research findings

In this dissertation, two different quantitative research methods were employed. For the first set of questions, which aimed to research both sustainable and circular consumption in one dataset, a survey was conducted (Study 1), and structural equation modeling as the main statistical analysis method for the data of this study was applied. Such analysis was chosen as it allows the examination of complex relationships by simultaneously rigorous assessment of measurement validity (Beran & Violato, 2010). Further, for testing hypotheses addressed to explain underlying mechanisms for sustainable and circular consumption separately, researching the causality was a necessity; thus, experiments were conducted (Study 2-8). This research method is the major one for making causal inferences (Cook et al., 2002). In sum, eight studies were carried out in order to address research questions: one survey and seven between-subjects design experiments. All studies were conducted online using the professional research platform Prolific Academic, where 2254 British citizens were recruited in return for a small monetary reward. Studies addressed both

ownership of sustainable and circular brands and intentions to consume sustainable and circular products. Also, various product categories were tested.

Meaning in life, dispositional greed, openness to experience, and ownership of sustainable and circular brands. From the theoretical point of view, the first part of the dissertation (Study 1) aimed to simultaneously observe how different traits, such as meaning in life (both striving towards it and its presence), dispositional greed, and openness to experience, are linked to ownership of sustainable and circular brands. The results of Study 1 show that searching for meaning in life is positively related to ownership of sustainable brands, but there is no relationship between the presence of meaning in life and ownership of such brands. Moreover, the presence of meaning in life is positively related to the ownership of circular brands, however, there is no relationship between searching for meaning in life and ownership of such brands. Next, there is no significant relationship between dispositional greed and ownership of sustainable brands; however, dispositional greed is positively related to ownership of circular brands. Finally, the results of Study 1 reveal that openness to experience is positively related to ownership of sustainable brands; however not to ownership of circular ones.

Meaning threat, negative emotion of sadness, and sustainable consumption. The second part of the dissertation has a set of four experiments (Study 2, Study 3, Study 4, and Study 5) which are grounded on the Meaning Maintenance Model (Heine et al., 2006) and the Discrete Emotion Theory. These experiments explored the mediating role of the emotion of sadness in the relationship between meaning threat and sustainable consumption. Study 2 showed that when people face a threat to their feeling of life being full of meaning (vs. control), the emotion of sadness increases. Further, Study 3 tested the main effect of the direct path and revealed that people exposed to meaning threat (vs. control) are willing to buy sustainable products more. Moreover, Study 4 revealed an underlying mechanism between meaning threat (vs. control) and purchase intention of a sustainable product. More particularly, the findings showed that meaning threat (vs. control) increases the extent of sadness felt and, in turn, leads to a greater intention to purchase sustainable products. These results were replicated in Study 5 with a different sustainable product.

Origin cues effect on perception of the monetary value and desirability of circular goods, underlying process and boundary conditions. Lastly, the third part of the dissertation explored how adding origin cues when presenting circular products

affects consumers' decision-making. Three experiments were conducted (Study 6, Study 7, and Study 8). Study 6 provided empirical evidence that origin cues (vs. no origin cues) increase the perceived monetary value of a good. Using a different product category, Study 7 corroborates the findings of Study 6 and showed the downstream consequences on desirability. Furthermore, it demonstrated the robustness of the propositions by conveying that origin cues (vs. no origin cues) elicit a greater connection with the self and, in turn, lead to more desirability compared to products with no origin cues. Finally, Study 8 replicated the findings of Study 7 by showing the existing main effect of origin cue on desirability, i.e., the circular product with origin present is more desirable compared to the product without origin cue or the product of the control group. Study 8 also aimed to set the boundary conditions of the relationship between circular goods with origin cues present (vs. absent) and desirability. The findings of Study 8 also showed that origin effects on desirability are moderated by acquisition centrality. More particularly, people who score lower on acquisition centrality experience elevated levels of desirability compared to people who score higher on acquisition centrality. These experiments tested propositions across different product categories (keychain, candles).

CONCLUSIONS

The first part of the dissertation was built on the findings in the sustainable and circular decision-making domain. Drawing on the Trait Activation Theory (Tett & Burnett, 2003) as a theoretical framework, the current study demonstrates how traits affect different types of sustainable and circular consumption. Simultaneously evaluating a range of traits, representing promotion and prevention orientations, the findings show their diverging effects on the consumption of sustainable and circular brands. Specifically, the results demonstrate that sustainable consumption may be boosted by the sense of meaning in life and openness to experience. Interestingly, despite the shared aim of sustainable consumption regarding environmental conservation, circular consumption has no relationship with the mentioned traits and is driven only by the presence of meaning in life and dispositional greed. This research also contributes to the conceptualization of sustainable and circular consumption and directs practitioners to apply a specialized approach when initiating societal changes linked to sustainability and circularity. The second part of the dissertation focused on the meaning maintenance model (Heine et al., 2006) and the discrete emotion theory, and the third one on the fundamental need for knowing and understanding the surrounding world (e.g., Festinger, 1954; Fiske & Taylor, 2013). Empirical research was conducted with eight studies (one survey and seven experiments) exploring different sustainable and circular product categories in the United Kingdom. The main conclusions of this dissertation are the following:

1. The findings of the current dissertation provided evidence that the presence of meaning in life is positively related to the ownership of circular but not sustainable brands. In contrast, searching for meaning in life has a positive relationship to ownership of sustainable but not circular brands. These findings are in line with previous work, showing that meaning in life consists of two conceptually different facets (Steger et al., 2006), and the behavioral strategies might vary depending on the need to regulate the sense of life being full of meaning (the Pragmatic Meaning Regulation Theory; van Tilburg & Igou, 2011).
2. The current work shows that the trait of dispositional greed is positively related to the ownership of circular brands. However, there is no link to ownership of sustainable ones. These results are in line with previous findings showing that

dispositional greed represents a strong acquisitiveness drive with maximum value orientation (see Zeelenberg & Breugelmans, 2022) and corresponds to certain features of circular products referring to consumers' value-related motivation.

3. The current dissertation also explored how the trait of openness to experience is related to the ownership of sustainable and circular brands. The findings are in line with previous ones showing that openness to experience is positively related to sustainable consumption (e.g., Lange & Dewitte, 2019). Interestingly, there is no relationship between openness to experience and ownership of circular brands. I presumed that such a result was produced because of specific features of circular products (they are produced from secondary materials), however, further research is needed to sort that out.
4. In this work, I proposed that people exposed to meaning threats might be prone to engage in sustainable consumption. The empirical evidence of this research indeed shows that when people face threats to their sense of life being full of meaning, they are willing to engage in sustainable consumption. This finding is in line with the meaning maintenance model (Heine et al., 2006), as well as with the cognitive dissonance theory (Festinger, 1962), the pragmatic meaning regulation theory (van Tilburg & Igou, 2011), and the meaning-making model (Park & Folkman, 1997). All these models and theories refer to the motivational function of threats to the sense of meaningful life: people experiencing meaning threats are motivated to reinstate the sense of life being full of meaning even using other sources than those that were threatened.
5. The current dissertation proposed a novel underlying mechanism for why consumers are motivated to engage in sustainable consumption. The results of conducted experiments show that the negative emotion of sadness performs a mediating role in a relationship between experiencing meaning threats and sustainable consumption. When people's sense of life being meaningful is threatened, they feel a greater extent of sadness, which, in turn, leads to an increased willingness to consume sustainably. I argued that such an underlying mechanism is based on the discrete emotion theory stating that discrete emotions make changes in cognitive, judgmental, experiential, behavioral, and physiological processes (see Lench et al., 2011 for review). More precisely, results show that people experiencing elevated sadness, which occurs after facing

a meaning threat, aim to cope with it, and engagement in sustainable consumption is perceived as one of the sources of that.

6. This dissertation also investigated how providing origin cues about circular products impacts the demand for such products. Indeed, this work shows that such origin cues increase the perceived monetary value and desirability of circular goods. Such findings are based on the evidence that people have a fundamental need to know and understand the surrounding world (e.g., Festinger, 1954; Fiske & Taylor, 2013), and consumers prefer choices that are clear and easy to comprehend (Aaker & Keller, 1990; Becker-Olsen & Hill, 2006).
7. The current work also aimed to explain why providing origin cues drives the demand for circular products and tested the mediating role of closeness to the sense of self. The proposition was formulated building on the prior knowledge that individuals seek to expand one's self by acquiring additional resources and different perspectives (Aron et al., 1998). Specifically, I proposed, and the results of the experiment showed that origin cues increase the closeness to the sense of self and, in turn, this closeness leads to greater desirability of circular good.
8. This dissertation investigated whether the effect of origin cues on desirability depends on the acquisition centrality. Based on the evidence that people, who score low on materialism, value their life goals and relationships more than possessions themselves (Belk, 1984) and that knowing an origin can provide a greater sense of context, this dissertation proposed that people who score low on acquisition centrality would desire such goods more than people who are centered on acquisitions but not on the context. Indeed, results show that lower-acquisition centrality consumers (but not higher-acquisition centrality consumers) have a greater desirability for circular goods with origin cues (vs. no origin cues).

SHORT BIO



Živilė Kaminskienė gained her Master's degree in Communication Sciences at Vilnius University and began her doctoral studies in Management at ISM University of Management and Economics in 2019.

The main Živilė's research interests lie in the field of consumer behavior. She is interested in how to encourage consumers to engage in consumption that positively affects

their health, environment, and society. Specifically, she aims to dig deeper into sustainable, circular, and health benefits bringing consumption domains. Applying experimental design, Živilė analyzes the decision-making processes' underlying mechanisms and tests how effectively various incentives work toward positive changes.

Živilė had training at the European Institute for Advanced Studies in Management (EIASM) in Belgium and a research visit to the University of Groningen (Netherlands). She is continuously working on various research projects aiming to encourage consumers to make more healthy and sustainable decisions funded by the Research Council of Lithuania and the European Commission Horizon 2020 program.

APPENDICES

Appendix 1

Study 1 questionnaire

INFO 1. Welcoming, instructions, and consent form.

Please indicate your nationality:

- British
- Other [screen out]

INFO 2. Let's start with the first part of the survey.

Please note which of the following brands you have bought over the last year (by ticking the boxes below) [randomized order in each category]

	Sustainable	Regular	Circular
FOOD			
Coffee	Cafédirect, Taylors of Harrogate ground coffee, Percol	Kenco, Nescafe instant coffee, Starbucks (from a non-Starbucks shop and a Starbucks shop)	
Ice-cream	Yeo Valley Organic ice cream, Roskilly's ice cream, Mackie's organic dairy ice cream	Magnum, Cadbury's ice cream, Häagen-Dazs Ice Cream	
Tea	The London Tea, Company tea, Cafedirect tea, Clipper tea	Lipton tea, Twinings tea, Tetley tea	
Chocolate	Montezuma's organic chocolate, Tony's Chocolonely chocolate, Seed and Bean chocolate	Cadbury's chocolate, Milka chocolate, Sainsbury's chocolate	
HOUSEHOLD GOODS			
Laundry detergents	Ecover laundry detergent, Bio-D laundry detergent, Greenscents laundry detergents	Surf laundry detergent, Persil laundry detergent, Woolite laundry liquid	
Toilet paper	Who Gives a Crap Recycled Toilet Paper, Ecolleaf recycled toilet paper	Tesco toilet paper, ASDA Shades toilet paper	

Cleaning products	Bentley Organic cleaners, Sonett cleaners, Method household cleaners	Domestos cleaners, Cif household cleaners, Vanish cleaning products	Fill, Clean Living, Elmkind
COSMETICS			
Shampoo	Lush shampoo bars, Faith in Nature liquid & bar shampoo, Green People shampoo	Head & Shoulders, Dove shampoo, TRESemme	by Humankind, Fill, Acala
Skincare products	Lucy Bee, ATTITUDE, Queenie Organics	Kiehl's, Vaseline, Garnier	Proverb Natural Refillable Deodorant, Milly & Sissy
Toothpaste	Georganics, Ecoliving toothpaste tabs, Truthpaste	Aquafresh toothpaste, Colgate toothpaste, Sensodyne toothpaste	Unpaste Zero Waste Toothpaste Tablets
CLOTHING			
High Street Clothes Shops	Nobody's Child clothing, COS clothing, H&M clothing, Reformation	Primark clothing, Next clothing, Amazon clothes, Pretty Little Thing	Patagonia clothing, MUD Jeans, Napapijri, Vinted, A.BCH, The R Collective, OhSevenDays (only for women), Náz, Loop Swim, Deadwood, Ecoalf, Whimsy + Row, ARIELLE (only for women), 337 BRAND, tonlé
Shoes	Blackspot boots, Wills vegan shoes, Po-Zu shoes, Freerangers	Hush Puppies shoes, Timberland shoes and boots, Crocs shoes, Clarks footwear	Salubata, Etiko, Funky Kalakar, Adidas UltraBoost DNA Loop shoes, Thousand Fell, Rothy's
VARIOUS THINGS			
Various things			Relicplastic, BEEN London, IKEA's second-hand store (the buyback and resell service), Naturalmat

INFO 3. You have completed the first part of the questionnaire. Now you will be asked to answer questions about yourself.

The Meaning in Life Questionnaire (Steger et al., 2006)

Please take a moment to think about what makes your life and existence feel important and significant to you.

Please respond to the following statements as truthfully and accurately as you can, and also please remember that these are very subjective questions and that there are

no right or wrong answers. Evaluate by using a seven-point scale where 1 = “absolutely untrue”, 7 = “absolutely true.”

1. I understand my life’s meaning.
2. I am looking for something that makes my life feel meaningful.
3. I am always looking to find my life’s purpose.
4. My life has a clear sense of purpose.
5. I have a good sense of what makes my life meaningful.
6. I have discovered a satisfying life purpose.
7. I am always searching for something that makes my life feel significant.
8. I am seeking a purpose or mission for my life.
9. My life has no clear purpose. (*reversed*)
10. I am searching for meaning in my life.

Items 1, 4, 5, 6, & 9 make up the Presence of Meaning subscale Items 2, 3, 7, 8, & 10 make up the Search for Meaning subscale

The seven-item Dispositional Greed Scale (Seuntjens et al., 2015)

Please indicate the extent of agreement with the following statements, where 1 = “totally disagree“ and 7 = “totally agree.“

1. I always want more.
2. Actually, I’m kind of greedy.
3. One can never have too much money.
4. As soon as I have acquired something, I start to think about the next thing I want.
5. It doesn’t matter how much I have. I’m never completely satisfied.
6. My life motto is “More is better.”
7. I can’t imagine having too many things.

Openness to Experience (Jackson et al., 2000)

Please evaluate each statement below. Evaluate by using a 7-point scale, where 1 = “definitely false”, 7 = “definitely true.”

1. I carry the conversation to a higher level.
2. I am interested in many things.
3. I prefer variety to routine.
4. I want to increase my knowledge.
5. I am open to change.

6. I prefer to stick with things that I know. *(reversed)*
7. I am not interested in abstract ideas. *(reversed)*
8. I am not interested in theoretical discussions. *(reversed)*
9. I try to avoid complex people. *(reversed)*
10. I rarely look for a deeper meaning in things. *(reversed)*

INFO 4. Now you will be asked to answer a few demographic questions.

Please indicate your gender:

1. Male
2. Female
3. Other *[indicate]*
4. Prefer not to say

Please indicate your age: _____ *[open-ended]*

Please indicate your average disposable income per household (after taxes, per year):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £30,001-£35,000
8. £35,001-£40,000
9. > £40,001

INFO 5. Thanking and debriefing.

Appendix 2

Study 2 questionnaire

Design: a single factor (meaning threat (present vs. absent) between-subjects design

INFO 1. Welcoming, instructions, and consent form.

Manipulation procedure (adapted from Park and Baumeister (2017), Routledge et al. (2011), and Vohs and Schooler (2008)

INFO 2. In this task, you will be presented with 10 different sentences once at a time.

Each sentence will be presented for 30 seconds.

Please think about the meaning of each sentence and then rewrite the sentence in your own words on the next page.

Please move on to the next page when you are ready.

Sentences for the meaning threat condition

1. The Earth is 5 billion years old and the average human lifespan across the globe is 68 years.
2. No one asks about the ultimate meaning.
3. In the grand scheme of things, how significant are you?
4. Humans are no more significant than any other form of life in the universe.
5. After I am dead, what mark will I have left on the world to show that I have existed?
6. What if I had never been born?
7. Will I be remembered for even 100 years?
8. Human life seems like a useless, meaningless treadmill.
9. What's the point of running around in a squirrel cage, or giving my life to a rat race without a meaningful or enduring goal?
10. Sometimes the world seems like a colony of ants, each individual endlessly repeating his behavior until he dies.

Neutral sentences for the control condition

1. Oceans cover 71% of the earth's surface.
2. Alkaline power cells generally work longer than ordinary batteries.
3. Monarch butterflies fly slowly but have been sighted hundreds of miles at sea.
4. The Olympics are held every four years.
5. Half a day's boat ride away from Athens lies the isle of Mykonos.
6. Sugar cane and sugar beets are grown in 112 countries.
7. Many of the mountain peaks in the Rockies are over 14,000 feet high.
8. The Appalachian Highlands are worn-down mountains and plateaus stretching from northern Alabama to the St. Lawrence River in Canada.
9. The greatest distance the earth is from the sun is 94,452,000 miles.
10. The Nile River in Africa is the world's longest river.

Discrete Emotions Questionnaire, sadness subscale (Harmon-Jones et al., 2016)

Please indicate the extent to which the following words describe your feelings right now, at this moment. Use 7-point rating scale, where 1 = "don't harbor this feeling", 4 = "slightly", and 7 = "extremely."

1. Sad
2. Grief
3. Lonely
4. Empty

Manipulation check (adapted from Park & Baumeister, 2017; Routledge et al., 2011)

Now please remember again the beginning of this task where you had to rewrite sentences in your own words. How much did the sentences cast doubt on the belief that life is full of meaning? 1 = "not at all", 7 = "very much."

INFO 3. You have completed the main part of the questionnaire. Now you will be asked to answer demographic questions.

Please indicate your gender:

- Male

- Female

Please indicate your age: _____ [*open-ended*]

Please indicate your average disposable income per household (after taxes, per year):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £30,001-£35,000
8. £35,001-£40,000
9. > £40,001

Appendix 3

Study 3 questionnaire

Design: a single factor (meaning threat (present vs. absent) between-subjects design

INFO 1. Welcoming, instructions, and consent form.

INFO 2. Let's start with the first part of the survey.

Manipulation procedure (adapted from Park & Baumeister (2017), Routledge et al. (2011), and Vohs & Schooler (2008)

INFO 3. In this task, you will be presented with 10 different sentences once at a time.

Each sentence will be presented for 30 seconds. Please think about the meaning of each sentence and then rewrite the sentence in your own words on the next page.

If you need less time than 30 seconds to memorize the sentence, please feel free to press the "Next" button, so you can rewrite it at once.

Please move on to the next page when you are ready.

Sentences for the meaning threat condition

1. The Earth is 5 billion years old and the average human lifespan across the globe is 68 years.
2. No one asks about the ultimate meaning.
3. In the grand scheme of things, how significant are you?
4. Humans are no more significant than any other form of life in the universe.
5. After I am dead, what mark will I have left on the world to show that I have existed?
6. What if I had never been born?
7. Will I be remembered for even 100 years?
8. Human life seems like a useless, meaningless treadmill.

9. What's the point of running around in a squirrel cage, or giving my life to a rat race without a meaningful or enduring goal?
10. Sometimes the world seems like a colony of ants, each individual endlessly repeating his behavior until he dies.

Neutral sentences for the control condition

1. Oceans cover 71% of the earth's surface.
2. Alkaline power cells generally work longer than ordinary batteries.
3. Monarch butterflies fly slowly but have been sighted hundreds of miles at sea.
4. The Olympics are held every four years.
5. Half a day's boat ride away from Athens lies the isle of Mykonos.
6. Sugar cane and sugar beets are grown in 112 countries.
7. Many of the mountain peaks in the Rockies are over 14,000 feet high.
8. The Appalachian Highlands are worn-down mountains and plateaus stretching from northern Alabama to the St. Lawrence River in Canada.
9. The greatest distance the earth is from the sun is 94,452,000 miles.
10. The Nile River in Africa is the world's longest river.

INFO 4. Now let's start with the second part of the survey.

The next part of the survey is a brief study of your product preferences for the marketing research company.

Below you will be presented with a description of the product.

Please look very carefully at the product description and then answer the following questions.



Reduce plastic waste with reusable drinking straws!

Sustainable, reusable stainless steel drinking straws.

Available in a convenient pack of 8. Two different lengths and shapes for different needs.

Intention to purchase (adapted from Putrevu & Lord, 1994)

Please evaluate each statement below. Evaluate by using a 7-point scale where 1 = „totally disagree“ and 7 = „totally agree.“

1. If someone offered me these drinking straws, I would probably buy them.
2. It is very likely that I would buy these drinking straws.
3. If the opportunity arises, I will purchase these drinking straws in the future.
4. I would like to buy these drinking straws if I see them while shopping.

Manipulation check (adapted from Park & Baumeister, 2017; Routledge et al., 2011)

Now please remember again the beginning of this task where you had to rewrite sentences in your own words. How much did the sentences cast doubt on the belief that life is full of meaning? 1 = “not at all”, 7 = “very much.”

INFO 5. You have completed the main part of the questionnaire. Now you will be asked to answer demographic questions.

Please indicate your gender:

- Male
- Female

Please indicate your age: _____ *[open-ended]*

Please indicate your average disposable income per household (after taxes):

1. < £5000
2. £5001-£10,000

3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 6. Thanking and debriefing.

Appendix 4

Study 4 questionnaire

Design: a single factor (meaning threat (present vs. absent) between-subjects design

INFO 1. Let's start with the first part of the survey.

INFO 2. Welcoming, instructions, and consent form.

Manipulation procedure (adapted from Park & Baumeister (2017), Routledge et al. (2011), and Vohs & Schooler (2008)

INFO 3. In this task, you will be presented with 10 different sentences once at a time.

Each sentence will be presented for 30 seconds. Please think about the meaning of each sentence and then rewrite the sentence in your own words on the next page.

If you need less time than 30 seconds to memorize the sentence, please feel free to press the "Next" button, so you can rewrite it at once.

Please move on to the next page when you are ready.

Sentences for the meaning threat condition

1. The Earth is 5 billion years old and the average human lifespan across the globe is 68 years.
2. No one asks about the ultimate meaning.
3. In the grand scheme of things, how significant are you?
4. Humans are no more significant than any other form of life in the universe.
5. After I am dead, what mark will I have left on the world to show that I have existed?
6. What if I had never been born?
7. Will I be remembered for even 100 years?
8. Human life seems like a useless, meaningless treadmill.

9. What's the point of running around in a squirrel cage, or giving my life to a rat race without a meaningful or enduring goal?
10. Sometimes the world seems like a colony of ants, each individual endlessly repeating his behavior until he dies.

Neutral sentences for the control condition

1. Oceans cover 71% of the earth's surface.
2. Alkaline power cells generally work longer than ordinary batteries.
3. Monarch butterflies fly slowly but have been sighted hundreds of miles at sea.
4. The Olympics are held every four years.
5. Half a day's boat ride away from Athens lies the isle of Mykonos.
6. Sugar cane and sugar beets are grown in 112 countries.
7. Many of the mountain peaks in the Rockies are over 14,000 feet high.
8. The Appalachian Highlands are worn-down mountains and plateaus stretching from northern Alabama to the St. Lawrence River in Canada.
9. The greatest distance the earth is from the sun is 94,452,000 miles.
10. The Nile River in Africa is the world's longest river.

The Discrete Emotions Questionnaire (Harmon-Jones et al., 2016)

Please indicate the extent to which the following words describe your feelings right now, at this moment. Use a 7-point rating scale, where 1 = "don't harbor this feeling", 7 = "extremely."

1. Lonely
2. Grief
3. Sad
4. Empty

INFO 4. Now let's start with the second part of the survey.

The next part of the survey is a brief study of your product preferences for the marketing research company.

Below you will be presented with a description of the product.

Please look very carefully at the first product description and then answer the following questions.



Reduce plastic waste with reusable drinking straws!
Sustainable, reusable stainless steel drinking straws.
Available in a convenient pack of 8. Two different lengths and shapes for different needs.

Intention to purchase (adapted from Putrevu & Lord, 1994)

Please evaluate each statement below. Evaluate by using a 7-point scale where 1 = „totally disagree“ and 7 = „totally agree.“

1. If someone offered me these drinking straws, I would probably buy them.
2. It is very likely that I would buy these drinking straws.
3. If the opportunity arises, I will purchase these drinking straws in the future.
4. I would like to buy these drinking straws if I see them while shopping.

Manipulation check (adapted from Park & Baumeister, 2017; Routledge et al., 2011)

Now please remember again the beginning of this task where you had to rewrite sentences in your own words. How much did the sentences cast doubt on the belief that life is full of meaning? 1 = “not at all”, 7 = “very much.”

INFO 5. You have completed the main part of the questionnaire. Now you will be asked to answer demographic questions.

Please indicate your gender:

- Male
- Female

Please indicate your age: _____ *[open-ended]*

Please indicate your average disposable income per household (after taxes):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 6. Thanking and debriefing.

Appendix 5

Study 5 questionnaire

Design: a single factor (meaning threat (present vs. absent) between-subjects design

INFO 1. Let's start with the first part of the survey.

INFO 2. Welcoming, instructions, and consent form.

Manipulation procedure (adapted from Park & Baumeister (2017), Routledge et al. (2011), and Vohs & Schooler (2008)

INFO 3. In this task, you will be presented with 10 different sentences once at a time.

Each sentence will be presented for 30 seconds. Please think about the meaning of each sentence and then rewrite the sentence in your own words on the next page.

If you need less time than 30 seconds to memorize the sentence, please feel free to press the "Next" button, so you can rewrite it at once.

Please move on to the next page when you are ready.

Sentences for the meaning threat condition

1. The Earth is 5 billion years old and the average human lifespan across the globe is 68 years.
2. No one asks about the ultimate meaning.
3. In the grand scheme of things, how significant are you?
4. Humans are no more significant than any other form of life in the universe.
5. After I am dead, what mark will I have left on the world to show that I have existed?
6. What if I had never been born?
7. Will I be remembered for even 100 years?
8. Human life seems like a useless, meaningless treadmill.

9. What's the point of running around in a squirrel cage, or giving my life to a rat race without a meaningful or enduring goal?
10. Sometimes the world seems like a colony of ants, each individual endlessly repeating his behavior until he dies.

Neutral sentences for the control condition

1. Oceans cover 71% of the earth's surface.
2. Alkaline power cells generally work longer than ordinary batteries.
3. Monarch butterflies fly slowly but have been sighted hundreds of miles at sea.
4. The Olympics are held every four years.
5. Half a day's boat ride away from Athens lies the isle of Mykonos.
6. Sugar cane and sugar beets are grown in 112 countries.
7. Many of the mountain peaks in the Rockies are over 14,000 feet high.
8. The Appalachian Highlands are worn-down mountains and plateaus stretching from northern Alabama to the St. Lawrence River in Canada.
9. The greatest distance the earth is from the sun is 94,452,000 miles.
10. The Nile River in Africa is the world's longest river.

The Discrete Emotions Questionnaire (Harmon-Jones et al., 2016)

Please indicate the extent to which the following words describe your feelings right now, at this moment. Use a 7-point rating scale, where 1 = "don't harbor this feeling", 7 = "extremely."

1. Lonely
2. Grief
3. Sad
4. Empty

INFO 4. Now let's start with the second part of the survey.

The next part of the survey is a brief study of your product preferences for the marketing research company.

Below you will be presented with a description of the product.

Please look very carefully at the first product description and then answer the following questions.



Be practical with a portable charger and external backup battery!

Charger and portable power bank with high-efficiency solar panel.

Battery is capable of charging your tablet or smartphone for several times.

Protection for over discharges allows you to use your electric devices even more efficiently!

Intention to purchase (adapted from Putrevu & Lord, 1994)

Please evaluate each statement below. Evaluate by using a 7-point scale where 1 = „totally disagree“ and 7 = „totally agree.“

1. If someone would offer me this power bank, I would probably buy it.
2. It is very likely that I would buy this power bank.
3. If the opportunity arises, I will purchase this power bank in the future.
4. I would like to buy this power bank if I see it while shopping.

Manipulation check (adapted from Park & Baumeister, 2017; Routledge et al., 2011)

Now please remember again the beginning of this task where you had to rewrite sentences in your own words. How much did the sentences cast doubt on the belief that life is full of meaning? 1 = “not at all”, 7 = “very much.”

INFO 5. You have completed the main part of the questionnaire. Now you will be asked to answer demographic questions.

Please indicate your gender:

- Male
- Female

Please indicate your age: ____ *[open-ended]*

Please indicate your average disposable income per household (after taxes):

1. < £5000

2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 6. Thanking and debriefing.

Appendix 6

Study 6 questionnaire

Design: a single factor (origin salience (absent vs. present vs. control) between-subjects design

INFO 1. Let's start with the first part of the survey.

Please indicate your nationality:

British

Other [screen out]

INFO 2. Keychain maker asked us to evaluate attitudes towards products. In front of you is a remodeled keychain. Please carefully read the description. Later you will be asked to provide some answers about this product.



Condition 1. No concrete origin

Keychain made from steel and concrete originating from different construction demolition sites

Condition 2. Origin

Keychain made from steel and concrete originating from demolished old bridge in London

Condition 3. Control

Keychain made from steel and concrete

INFO 3. Now please imagine that this keychain is yours. Think for a while about this keychain as your possession. Try to imagine it as vividly as you can and answer the following questions.

Desirability (adapted from Frazier et al., 2009)

What do you think this keychain is worth? (estimate in pounds)

Origin manipulation check

Please now again remember the keychain presented at the beginning of the survey. Evaluate by using a 7-point scale where 1 = “totally disagree”, 7 = “totally agree.”

- Originating from different construction demolition sites
- Originating from a demolished old bridge in London

Please indicate your gender:

- Male
- Female

Please indicate your age: ____ [*open-ended*]

Please indicate your average disposable income per household (after taxes):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 4. Thanking and debriefing.

Appendix 7

Study 7 questionnaire

Design: a single factor (origin salience (absent vs. present vs. control) between-subjects design

INFO 1. Let's start with the first part of the survey.

Please indicate your nationality:

- British
- Other [*screen out*]

INFO 2. A candle maker asked us to evaluate attitudes towards products. Please carefully read the description of the product presented on the next page. Later you will be asked to provide some answers about this product.

Condition 1. No concrete origin

Scented candle made in recycled wine bottles



Scented candle made in recycled wine bottles

Condition 2. Origin

Scented candle made in recycled French wine bottles
From France



Scented candle made in recycled French wine bottles
From France

Condition 3. Control

Scented candle



Scented candle

Boosting the manipulation

Now please evaluate this candle. What do you think about this candle? What is your inner feeling about such a product? Describe all feelings and thoughts you have using 5-7 sentences. *[open-ended]*

INFO 3. Now please imagine that this candle is yours. Think for a while about this candle as your possession. Try to imagine it as vividly as you can and answer the following questions.


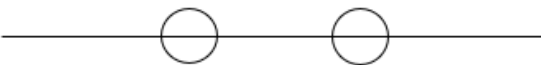
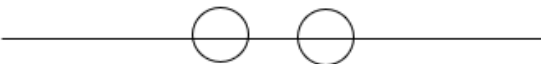


Desirability (Frazier et al., 2009)

1. Is this candle worth keeping or would you throw it out? (1 = “definitely throw out” to 7 = “definitely keep”)
2. How much do you like to own this candle? (1 = “not at all” to 7 = “very much”)
3. How much would you want to touch this candle? (1 = “not at all” to 7 = “very much”)

Overlap of Self, Ingroup, and Outgroup Scale (Schubert & Otten, 2002)

Now please depict how close this candle would seem to be to your sense of self.

↓

	<input style="width: 30px; height: 20px;" type="checkbox"/>
Candle	Self
	<input style="width: 30px; height: 20px;" type="checkbox"/>
Candle	Self
	<input style="width: 30px; height: 20px;" type="checkbox"/>
Candle	Self
	<input style="width: 30px; height: 20px;" type="checkbox"/>
Candle	Self
	<input style="width: 30px; height: 20px;" type="checkbox"/>
Candle	Self

Origin manipulation check

Please now again remember the candle presented at the beginning of the survey. Evaluate by using a 7-point scale where 1 = “totally disagree”, 7 = “totally agree.”

- Made in recycled French wine bottles from France
- Made in recycled wine bottles

Please indicate your gender:

- Male
- Female

Please indicate your age: _____ [*open-ended*]

Please indicate your average disposable income per household (after taxes):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 4. Thanking and debriefing.

Appendix 8

Study 8 questionnaire

Design: a single factor (origin salience (absent vs. present vs. control) between-subjects design

INFO 1. Let's start with the first part of the survey.

Please indicate your nationality

- British
- Other [*screen out*]

INFO 2. A candle maker asked us to evaluate attitudes toward products. Please carefully read the description of the product presented on the next page. Later you will be asked to provide some answers about this product.

Condition 1. No concrete origin

Scented candle made in recycled wine bottles



Scented candle made in recycled wine bottles

Condition 2. Origin

Scented candle made in recycled French wine bottles
From France



Scented candle made in recycled French wine bottles
From France

Condition 3. Control

Scented candle



Scented candle

Boosting the manipulation.

Now please evaluate this candle. What do you think about this candle? What is your personal feeling about such a product? Describe all the feelings and thoughts you have using 5-7 sentences. *[open-ended]*

INFO 3. Now please imagine that this candle is yours. Think for a while about this candle as your possession. Try to imagine it as vividly as you can and answer the following questions.

Desirability (Frazier et al., 2009)

1. Is this candle worth keeping or would you throw it out? (1 = “definitely throw out” to 7 = “definitely keep”)
2. How much would you like to own this candle? (1 = “not at all” to 7 = “very much”)
3. How much would you want to touch this candle? (1 = “not at all” to 7 = “very much”)

INFO 4. We are done with the first part of questionnaire.

The Material Values scale, Acquisition Centrality subscale (Richins & Dawson, 1992)

Now a couple of questions about you. Please evaluate each statement below. Evaluate by using a 7-point scale where 1 means „totally disagree” and 7 means „totally agree.”

1. I usually buy only the things I need. *(reversed)*
2. I try to keep my life simple, as far as possessions are concerned. *(reversed)*
3. The things I own aren't all that important to me. *(reversed)*
4. I enjoy spending money on things that aren't practical.
5. Buying things gives me a lot of pleasure.
6. I like a lot of luxury in my life.
7. I put less emphasis on material things than most people I know. *(reversed)*

Origin manipulation check

Please think back to the candle presented at the beginning of the survey. Evaluate by using a 7-point scale where 1 = “totally disagree”, 7 = “totally agree.”

- Made in recycled French wine bottles from France
- Made in recycled wine bottles

Please indicate your gender:

- Male
- Female

Please indicate your age: ____ [*open-ended*]

Please indicate your average disposable income per household (after taxes):

1. < £5000
2. £5001-£10,000
3. £10,001-£15,000
4. £15,001-£20,000
5. £20,001-£25,000
6. £25,001-£30,000
7. £35,001-£40,000
8. > £40,001

INFO 5. Thanking and debriefing.

Appendix 9

Table 4. The brand list used to compile the brand ownership measures

Sustainable brands		Circular brands		Regular brands	
1.	Cafédirect	1.	Clean Living	1.	Kenco
2.	Taylors of Harrogate ground coffee	2.	Patagonia clothing	2.	Nescafe instant coffee
3.	Percol	3.	Napapijri	3.	Starbucks (from a non- Starbucks shop and a Starbucks shop)
4.	Yeo Valley Organic ice cream	4.	Vinted	4.	Magnum, Cadbury's ice cream
5.	Roskilly's ice cream	5.	Adidas UltraBoost DNA Loop shoes	5.	Häagen-Dazs Ice Cream
6.	Mackie's organic dairy ice cream	6.	IKEA's second-hand store	6.	Lipton tea
7.	The London Tea Company tea			7.	Twinnings tea
8.	Cafedirect tea			8.	Tetley tea
9.	Clipper tea			9.	Cadbury's chocolate
10.	Montezuma's organic chocolate			10.	Milka chocolate
11.	Tony's Chocolonely chocolate			11.	Sainsbury's chocolate
12.	Seed and Bean chocolate			12.	Surf laundry detergent
13.	Ecover laundry detergent			13.	Persil laundry detergent
14.	Bio-D laundry detergent			14.	Woolite laundry liquid
15.	Who Gives A Crap Recycled Toilet Paper			15.	Tesco toilet paper
16.	Ecoleaf recycled toilet paper			16.	ASDA Shades toilet paper
17.	Method household cleaners			17.	Domestos cleaners
18.	Lush shampoo bars			18.	Cif household cleaners
19.	Faith in Nature liquid & bar shampoo			19.	Vanish cleaning products
20.	Green People shampoo			20.	Head & Shoulders
21.	Nobody's Child clothing			21.	Dove shampoo
22.	COS clothing			22.	TRESemme
23.	H&M clothing			23.	Kieh's
				24.	Vaseline
				25.	Garnier
				26.	Aquafresh toothpaste
				27.	Colgate toothpaste
				28.	Sensodyne toothpaste
				29.	Primark clothing
				30.	Next clothing
				31.	Amazon clothes
				32.	Pretty Little Thing
				33.	Hush Puppies shoes
				34.	Timberland shoes and boots
				35.	Crocs shoes
				36.	Clarks footwear

13 product categories were singled out: coffee, ice cream, tea, chocolate, laundry detergents, toilet paper, cleaning products, shampoo, skincare products, toothpaste, high street clothes, shoes, and other things. We selected product categories applying these criteria: (1) they belong to fast-moving consumer goods (FMCG) categories,

meaning they are “inexpensive products that people usually buy on a regular basis” (Collins COBUILD Advanced Learner’s Dictionary, 2024); (2) *Ethical Consumer* provides ratings for this category and there are several product options to choose from; (3) these products are sold in the grocery shops in the UK.

Appendix 10

Table 5. Study measures

Construct	Items	Factor loading	Reliability
Presence of Meaning subscale (Steger et al., 2006)	I understand my life's meaning.	0.83	$\alpha = 0.93$; C.R. = 0.93; AVE = 0.73
	My life has a clear sense of purpose.	0.92	
	I have a good sense of what makes my life meaningful.	0.85	
	I have discovered a satisfying life purpose.	0.88	
	My life has no clear purpose. (R)	0.78	
Search for Meaning subscale (adapted from Steger et al., 2006; Martela & Steger, 2016)	I am looking for something that makes my life feel meaningful.	0.74	$\alpha = 0.90$; C.R. = 0.9; AVE = 0.7
	I am always looking to find my life's purpose.	0.82	
	I am always searching for something that makes my life feel significant.	0.90	
	I am seeking a purpose or mission for my life.	0.88	
Dispositional Greed (adapted from Seuntjens et al., 2015b)	I always want more.	0.74	$\alpha = 0.87$; C.R. = 0.87; AVE = 0.53
	Actually, I'm kind of greedy.	0.69	
	As soon as I have acquired something, I start to think about the next thing I want.	0.75	
	It doesn't matter how much I have. I'm never completely satisfied.	0.81	
	My life motto is "More is better."	0.76	
	I can't imagine having too many things.	0.63	
Openness to Experience (adapted from Jackson et al., 2000)	I am interested in many things.	0.50	$\alpha = 0.83$; C.R. = 0.83; AVE = 0.43
	I want to increase my knowledge.	0.58	
	I am open to change.	0.41	
	I am not interested in abstract ideas. (R)	0.72	
	I am not interested in theoretical discussions. (R)	0.80	
	I try to avoid complex people. (R)	0.74	
	I rarely look for a deeper meaning in things. (R)	0.72	
Income level (average disposable income per household (after taxes, per year)	1) < £5000; 2) £5001-£10,000; 3) £10,001-£15,000; 4) £15,001-£20,000; 5) £20,001-£25,000; 6) £25,001-£30,000; 7) £30,001-£35,000; 8) £35,001-£40,000; 9) > £40,001	na	na

Notes: AVE = average variance extracted; C.R. = composite reliability, na – not assessed.

Table 6. Discriminant validity assessment and inter-construct correlations

		Mean	SD	1	2	3	4	5	6	7	8
1	Presence of Meaning	4.51	1.44	0.73	.02	.02	.01	.02	.003	.005	.004
2	Search for Meaning	4.59	1.27	-.14 (.002)	0.73	.01	.05	.0004	.01	.01	.01
3	Dispositional Greed	3.23	1.27	-.12 (.008)	.22 (.000)	0.43	-.25 (.000)	.01	.0004	.02	.03
4	Openness to Experience	5.2	1	.15 (.001)	.12 (.007)	.06	0.43	.003	.03	.0009	.0009
5	Income level	5.31	2.70	.14 (.002)	-.02 (.646)	-.05 (.303)	.10 (.027)	na	.02	.0009	.005
6	Ownership of sustainable products	12.81	6.33	.05 (.277)	.11 (.011)	.16 (.000)	-.02 (.696)	.13 (.005)	na	.08	.08
7	Ownership of circular products	.34	.68	.07 (.122)	.11 (.014)	.03 (.560)	.15 (.001)	.03 (.476)	.28 (.000)	na	.08
8	Ownership of regular products	12.81	6.33	.06 (.200)	.12 (.009)	.03 (.523)	.16 (.000)	.07 (.102)	.28 (.000)	.28 (.000)	na

Notes: Correlations are shown below the diagonal, AVEs on the main diagonal (bold text), and squared correlations above the diagonal. P values in brackets.

na = not applicable; AVE = average variance extracted; SD = standard deviation.

Appendix 11

Table 7. Common method variance assessment

With Method Factor	
χ^2 , df = 202	801.55
RMSEA	0.077
CFI	0.939
Without Method Factor	
χ^2 , df = 203	962.27
RMSEA	0.084
CFI	0.930

Živilė Kaminskienė

**Consumer Judgment and Decision Making in the Sustainability Related
Domain: Drivers Fostering Efficient Change [Vartotojų vertinimas ir sprendimų
priėmimas tvarumo srityje: veiksniai skatinantys efektyvius pokyčius]**

Daktaro disertacija

Išleido ISM Vadybos ir ekonomikos universitetas, Gedimino pr. 7, LT- 01103 Vilnius

Spausdino leidyklos „Technologija“ spaustuvė, Studentų g. 54, LT-51424 Kaunas

26,25 leidyb. apsk. Tiražas 14 egz. Užsakymas 011



UNIVERSITY OF MANAGEMENT
AND ECONOMICS

Vilnius, Gedimino av. 7, LT-01103
Tel. +370 5 212 3960, e-mail phd@ism.lt
www.ism.lt