A Work Project, presented as part of the requirements for the Award of a Master's degree in Management from the Nova School of Business and Economics.

An Empirical Examination of the Relationship between Sustainable Consumption and Luxury Purchases: A Consumer Behavior Perspective – The Impact of Framing on Consumers Willingness to Pay

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Defense Date: 31st of January 2025

Work project carried out under the supervision of:

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15/12/2024

Abstract

This study examines the relationship between luxury and sustainability, focusing on how sustainable luxury marketing influences consumer behavior. Using an experimental survey design, four hypotheses were tested to evaluate the impact of sustainability marketing, product guarantees, sustainable framing, and messaging strategies on consumer choices. Findings indicate that sustainability marketing in the luxury sector has the potential to promote sustainable consumption. The study examines how integrating authenticity and durability into brand strategies is essential to aligning luxury with sustainability and fostering long-term consumer trust. While sustainability is a key factor for consumers, its direct influence on willingness to pay remains limited.

Keywords: sustainability, durability, sustainable luxury, fashion, sustainable consumption, consumer behavior

This work used infrastructure and resources funded by Fundação para a Ciência e a Tecnologia (UID/ECO/00124/2013, UID/ECO/00124/2019 and Social Sciences DataLab, Project 22209), POR Lisboa (LISBOA-01-0145-FEDER-007722 and Social Sciences DataLab, Project 22209) and POR Norte (Social Sciences DataLab, Project 22209).

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List of Abbreviations

AUC……..Area Under the ROC Curve

CAGR……Compound Annual Growth Rate

CI……Confidence Interval

CSR…….Corporate Social Responsibility

EU…….....European Union

PwC……PricewaterhouseCoopers

ROC…… Receiver Operating Characteristic

TPB……...Theory of Planned Behavior

TRA……...Theory of Reasoned Action

UK……...United Kingdom

US…….United States

VIF…….Variance Inflation Factor

WTP…….....Willingness to Pay

1 Introduction

"Buy less, choose well, make it last" (Vivienne Westwood, n.d.). This statement by Vivienne Westwood, renowned British fashion designer and pioneer of the punk fashion movement, encapsulates a significant shift in the luxury industry. Traditionally characterized by indulgence and opulence, luxury is being redefined to align with broader societal demands for accountability. This transition is particularly important in the fashion industry, as the sector is responsible for 10% of global carbon emissions (UNECE 2018). By encouraging consumers to prioritize durable, high-quality items over short-lived alternatives, luxury brands have the potential to significantly reduce these emissions and address a key factor driving global warming (Sun, Bellezza, and Paharia 2021).

This shift reflects not only a response to environmental challenges but also changing consumer values. According to PricewaterhouseCoopers' (PwC; 2024) Voice of the Consumer Survey, 80% of consumers are willing to pay more for sustainably produced or sourced goods. Similarly, McKinsey & Company (2023b) highlights that 87% of fashion executives believe sustainability regulations will impact their business in the coming year. These findings underscore a new reality: sustainability is no longer optional but central to the luxury market.

As consumers increasingly prioritize products that align with their values, luxury brands operate in a dynamic environment that requires constant adaptation to changing expectations. Attributes such as ethical sourcing, eco-friendly practices, and product longevity have become critical to staying competitive. Brands like *Gucci* and *Stella McCartney*, pioneers of sustainable luxury, demonstrate their leadership through initiatives such as their commitment to carbon neutrality and the use of innovative sustainable materials such as mushroom leather (Gucci 2023; Stella McCartney 2024). However, this shift is not without tension. The traditional ethos of indulgence and exclusivity often clashes with sustainability's emphasis on conservation and moderation, creating a paradox that the industry must navigate.

This intersection of luxury and sustainability is reshaping the entire definition of luxury. It is no longer just about exclusivity or rarity; but about creating lasting value for both consumers and the planet. As the industry evolves, it has the potential to become a powerful force for positive change, balancing timeless craftsmanship with modern responsibility.

While much of the discussion around sustainability focuses on corporate practices, this research takes a consumer-centric perspective, specifically in the context of the luxury fashion industry. The study is limited to examining how consumers perceive sustainability attributes in luxury fashion products, such as durability, ethical sourcing, and environmentally friendly practices. By narrowing the focus to consumption patterns, the study seeks to understand how consumer behavior interacts with evolving sustainability demands in this market.

This consumer focus is supported by a growing body of research that examines the relationship between luxury and sustainability. Sun, Bellezza, and Paharia (2021) emphasize that framing luxury products as durable and long-term investments encourages consumers to view them as consistent with sustainable values. Their concept of "buy less, buy luxury" suggests that quality purchases can counteract the overconsumption associated with fast fashion (Sun, Bellezza, and Paharia 2021, 28). However, prior studies also reveal contradictions in consumer attitudes. Achabou and Dekhili (2013) argue that while consumers express interest in sustainable luxury, their purchasing behavior often prioritizes exclusivity and status over environmental concerns. Similarly, Kapferer and Michaut-Denizeau (2014) highlight the difficulty consumers face in reconciling sustainability with luxury's traditional emphasis on indulgence and rarity.

Existing research highlights the potential for luxury to promote sustainable consumption, particularly through attributes like durability. However, a limited understanding remains on how consumers reconcile the tension between luxury's exclusivity and sustainability's focus on responsibility. Additionally, luxury has the potential to encourage

behaviors that prioritize reduced consumption in favor of fewer, higher-quality purchases. This shift, which may also increase consumers' financial commitment, is a promising area for further research. This thesis addresses these gaps by examining how consumers navigate indulgence and responsibility, exploring whether luxury can drive more mindful consumption practices. In doing so, it builds on existing literature and offers insights for aligning the luxury sector with environmental priorities.

Following this introduction, key concepts central to this study are defined to provide a contextual framework. This is proceeded by a review of the existing literature on luxury and sustainability, which provides theoretical insights and identifies key research gaps in understanding consumer behavior. Building on this, the core of the study is structured around four hypotheses, each addressing a different aspect. The first explores how sustainability marketing that emphasizes durability and timelessness can shift consumer preferences toward luxury products over cheaper alternatives. The second analyzes whether life-cycle extensions, such as lifetime guarantees, encourage consumers to prioritize fewer, higher-quality purchases. The third looks at how framing luxury as an investment in quality and longevity affects willingness to pay (WTP) for sustainable features. Finally, the fourth examines how different approaches to sustainability messaging, contrasting excessive versus moderate claims, influence purchase intent and perceived authenticity. The thesis concludes by synthesizing these findings in a broader discussion and reflecting on their implications for both theory and practice. It also offers recommendations for how luxury brands can align themselves with sustainability while preserving their core values.

2 Background

2.1 Understanding Luxury

The concept of luxury is inherently multifaceted and varies across cultures, industries, and individual preferences. It combines tangible qualities, such as superior craftsmanship, with

intangible attributes, such as exclusivity, status, and symbolic value (Kapferer and Michaut 2016). This complexity makes it essential to clearly define luxury, particularly in the context of its intersection with sustainable consumption, which is the foundation of this study. Without a precise understanding of luxury, assessing how sustainability aligns with or challenges its traditional characteristics becomes difficult.

Luxury has been described as “more than necessary” (Bearden and Etzel 1982, 184) and as an “art applied to functional items” (Kapferer 1997, 253). These definitions demonstrate that luxury goes beyond mere functionality to create elevated experiences rooted in beauty, and aspiration. Historically, luxury has symbolized a dream or idealized lifestyle, being associated with indulgence, and superfluity (Barnier, Rodina, and Valette-Florence 2006; Seringhaus 2002). For consumers, luxury goods often serve as tools of conspicuous consumption, allowing individuals to signal social status and assert identity (O’Cass and McEwen 2004). Core characteristics such as rarity, cultural significance, and emotional value further distinguish luxury from other categories and reinforce its symbolic and desirable role in society (Brun et al. 2008; Vigneron and Johnson 2004).

In practice, the distinction between luxury and premium products is less clear but crucial for this study. While luxury is defined by its focus on artistry, heritage, and symbolic value, premium products emphasize superior functionality and measurable quality (Kapferer and Bastien 2009; Karpik and Scott 2010). This divergence is also manifested in pricing strategies: premium products rely on competitive justification, while luxury pricing is rooted in perceived uniqueness and cultural prestige (Kapferer and Bastien 2012).

For the purposes of this research, we focus primarily on premium products because they are more closely aligned with the attributes of interest. While these distinctions set premium products apart from true luxury, consumer perceptions often blur the boundaries between the two categories. This overlap is particularly evident in the context of sustainable consumption,

where both premium and luxury goods are increasingly evaluated not only for their symbolic value but also for their potential to align with ethical and environmental considerations. By adopting a broader definition of luxury, this study captures the nuanced ways in which consumers navigate these overlapping categories. This perspective allows for a comprehensive examination of how sustainability attributes influence purchase decisions across both segments. It reveals the evolving role of premium and luxury products as instruments for expressing not only social status, but also personal values associated with responsibility and environmental stewardship.

2.2 Assessing the Luxury Fashion Market

The luxury fashion market continues to grow steadily, solidifying its position as a key driver of the global economy. Valued at approximately $245 billion in 2023, the market is projected to reach $410 billion by 2032, representing a compound annual growth rate (CAGR) of 5.8% over the forecast period (Straits Research 2023). This growth reflects the industry's ability to adapt to evolving consumer expectations while maintaining its core values.

The United States (US) will remain the largest domestic market for luxury goods, with estimated sales of $35 billion in 2024 (Statista 2024). However, the Asia-Pacific region, particularly China, is predicted to drive future expansion. By 2025, Chinese consumers are expected to account for nearly 40% of global luxury spending, driven by a growing middle class and increasing demand for aspirational purchases (Bain & Company 2023). This shift reflects not only rising purchasing power, but also a growing appreciation for Western luxury brands, solidifying the region's influence on global sales.

Long considered the epicenter of luxury fashion, the European market continues to play a pivotal role in the industry. Famous for iconic houses such as *Louis Vuitton*, *Chanel*, and *Hermès*, Europe continues to lead the world in both production and total consumption, which includes domestic and tourist spending. According to Bain & Company (2024), overall luxury

consumption in Europe reached €102 billion in 2023, supported by a 50% year-on-year increase in tourist spending, entirely driven by higher purchase prices. Data indicates that spending by US tourists in Europe has increased by a factor of 2.5 since 2019, while spending by Middle Eastern tourists has risen by 70% over the same period. However, expenditures by Chinese tourists have yet to regain their pre-pandemic level, remaining at approximately 40% of the 2019 figure. European craftsmanship continues to underpin the market, exemplified by *LVMH*, one of the world's top-performing luxury conglomerates. In 2023, Europe (excluding France) accounted for 17% of the group's total revenue, while France contributed an additional 8% (LVMH 2023). These figures underscore the region's importance in the global luxury landscape. Despite increasing competition from other regions, Europe's dual role as a producer and consumer of luxury goods ensures its continued dominance in the global market.

2.3 Understanding Sustainable Fashion

Sustainable fashion has emerged as an essential focus at the intersection of environmental responsibility and consumer behavior, reflecting broader societal trends toward eco-conscious living. However, in order to gain a comprehensive understanding of sustainable fashion and its implications, it is essential to first define sustainability itself. As a dynamic and multifaceted concept, sustainability evolves continually to address pressing global challenges across environmental, social, and economic domains (Purvis, Mao, and Robinson 2019; Vogt and Weber 2019). The Brundtland Report (1987) provides a foundational definition of sustainable development, describing it as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs" (37). This definition highlights the intrinsic adaptability of sustainability, enabling its objectives to evolve in alignment with emerging global priorities (Purvis, Mao, and Robinson 2019). However, the lack of a universally accepted definition presents a challenge to researchers. Scholars have identified over 300 definitions of sustainability across various disciplines, underscoring the

concept's diverse interpretations and applicability (Geissdoerfer et al. 2017).

This dynamic understanding of sustainability provides a foundation for examining its specific role within the fashion industry, which represents a critical point in global sustainability discussions. Frequently identified as one of the most polluting industries globally, fashion production is associated with considerable water consumption, the use of harmful dyeing chemicals, and the disposal of large quantities of unsold goods (Legere and Kang 2020). Such practices endanger ecosystems and give rise to concerns regarding the long-term sustainability of the industry. The need to address these challenges has led to the emergence of the concept of sustainable fashion, which aims to integrate sustainability principles into every stage of the value chain, from the sourcing of materials to post-consumer recycling.

Sustainable fashion discussions began in the 1960s, driven by increased awareness of the environmental impact of traditional production practices (Purvis, Mao, and Robinson 2019). By the 1980s and 1990s, consumer advocacy prompted brands to adopt sustainable practices, including the use of organic and fair-trade materials (Henninger, Alevizou, and Oates 2016; Jung and Jin 2014). In the early 2000s, it transitioned from a niche to a mainstream movement, driven by advances in material sourcing and recycling (Beard 2008).

This evolution of sustainable fashion reflects an ongoing effort to reconcile environmental and social responsibility with consumer expectations. However, its implementation remains challenging, as interchangeable terms like "green," "ecological," "organic," and "ethical" fashion often confuse consumers, researchers, and businesses (Thomas 2008, 530). This ambiguity, coupled with higher costs of sustainable materials and logistical hurdles in post-use recycling, complicates the realization of fully sustainable practices (Biswas 2017; Strübel et al. 2023).

Building on the challenges of implementing sustainable fashion, the market has

evolved significantly, driven by shifting consumer expectations. Luxury brands are uniquely positioned to lead this transformation by emphasizing values like longevity, ethical sourcing, and environmental responsibility, which align naturally with sustainability principles. Nevertheless, meaningful progress can only be achieved by addressing the systemic challenges that persist, including those related to resource scarcity. As indicated by the Boston Consulting Group (2021), while global demand for sustainable raw materials is projected to triple by 2030, supply is expected to increase by only 50%. This imbalance thus calls for the development of innovative circular business models and material sourcing strategies. Consumer trends further underscore the importance of sustainability in fashion. It is anticipated that by 2025, Millennials (individuals born between 1981 and 1996) and Generation Z (those born between 1997 and 2012) will represent the majority of the luxury market (Dimock 2019). These demographics are inclined to prioritize ethical sourcing and transparency in purchasing decisions. As reported by McKinsey & Company (2023a), 60% of Generation Z consumers are willing to pay a premium for sustainably produced goods. These shifts make sustainability a pivotal factor in market success, compelling brands to strike a balance between environmental objectives and consumer preferences.

2.4 Market Trends in Sustainable Luxury Fashion

Building on the preferences of Millennials and Generation Z, the luxury fashion market is experiencing transformative changes. One of the most notable trends is the rapid growth of the pre-owned luxury market, which aligns with the values of younger, sustainability-conscious consumers. Platforms such as *The RealReal* and *Vestiaire Collective* have emerged as key players in meeting the demand for pre-owned luxury goods (The RealReal 2024; Vestiaire Collective 2024). According to Business Research Insights (2024), the global second-hand luxury market was valued at $26 billion in 2023 and is forecast to reach $69 billion by 2032, at a CAGR of 11.5%.

At the same time, digital innovation is playing a progressively important role in driving sustainability in the luxury market. For example, virtual fashion and augmented reality initiatives reduce the need for physical production, minimizing waste and carbon footprints. *Gucci's Sneaker Garage* is an example of this, allowing users to virtually try on, customize, and explore digital products such as the *Gucci Virtual 25*, providing an eco-friendly alternative to traditional product launches (Gucci 2024). Similarly, *Balenciaga*'s digital-only collections in virtual environments like *Fortnite* highlight how immersive digital spaces can redefine engagement while addressing environmental concerns (Fortnite 2024).

E-commerce is further accelerating this trend, with more than 25% of global luxury sales now occurring online; a figure that will grow as brands enhance immersive, personalized experiences (McKinsey & Company 2023b). These strategies foster deeper connections with consumers and support sustainability by reducing physical inventory and waste.

Additionally, digital technologies are driving transparency in supply chains. Platforms such as *Renoon* use blockchain to verify the origin of materials, empowering consumers to make ethical choices (Renoon 2024). Such innovations emphasize the luxury sector's evolving commitment to accountability and sustainable practices, positioning it as a leader in addressing global environmental challenges.

3 Literature Review

The evolving interplay between luxury and sustainability has received considerable attention in academic research, reflecting a broader shift in societal values and consumer expectations. At the heart of this discourse is the question of whether these two seemingly opposing domains can coexist in harmony (Kapferer and Michaut-Denizeau 2014). This question gives rise to the so-called *Luxury Sustainability Paradox*, which defines the intuitive contradiction between luxury's extravagance and sustainability's principles of preservation and resource efficiency (Athwal et al. 2019; Heil and Langer 2017).

To fully understand the market implications of this paradox and the state of research, it is essential to examine consumer perceptions and the motivations that influence their purchasing decisions. Identifying common attributes between luxury and sustainability may reveal ways in which they can coexist. From a marketing perspective, integrating sustainability into the value proposition of luxury brands is crucial for shaping consumer behavior and strengthening brand loyalty (Beckham and Voyer 2014).

3.1 Theoretical Frameworks Used to Assess Sustainable Behavior

To explore consumer perceptions and motivations of sustainable behavior in depth, a breakdown of the theoretical foundation is needed. Two key frameworks that have been used extensively in this context are the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA; Balasubramanian and Sheykhmaleki 2024).

The TPB is used to understand how consumers make rational decisions (Qi and Ploeger 2019). It states that, before deciding how to act, individuals are thought to carefully evaluate the information they have and consider the possible outcomes, assuming that they make decisions rationally (Lira and Costa 2022). The TPB has, therefore, been used to assess sustainable consumer behavior for several decades (Yuriev et al. 2020). Created by Ajzen (1991), the TPB proposes that individual intention can be understood through (1) attitude, which represents personal evaluations of an object or issue; (2) subjective norm, which reflects the perceived social pressure from others; and (3) perceived behavioral control, which captures an individual's sense of how easy or challenging it might be to engage in a particular behavior. According to Paul et al. (2015), looking at consumer attitudes is most important for predicting consumer intentions toward sustainable behavior. Consumers who like certain aspects of an item are more willing to translate their purchase intention into an actual purchase (Cerri, Testa, and Rizzi 2018). Similarly, subjective norms often shape intentions to purchase sustainable products, as social circles help to raise awareness and concern about environmental issues

(Moser 2015). Lira and Costa (2022) found that slow fashion, which prioritizes longevity, is driven by key elements of the TPB. Ethical concerns, in particular, lead consumers to reject fast fashion – characterized by rapid turnover – in favor of sustainable options.

The TRA, developed by Fishbein and Ajzen (1975), explains how motivation affects the likelihood of engaging in a particular behavior. Similar to the TPB, it highlights the links between personal attitudes, perceived social expectations, and resulting behaviors. People who strongly believe that a behavior will bring positive results are more likely to have positive attitudes toward it, which increases their chances of actually doing it (Liu, Segev, and Villar 2017). However, the TPB extends the TRA by recognizing that intentions alone do not always lead to action. External circumstances, such as limited resources or situational barriers, often determine whether an individual can translate his or her intentions into behavior.

3.2 Luxury Sustainability Paradox

While theoretical frameworks such as the TPB and TRA provide insights into individual sustainable behavior, the *Luxury Sustainability Paradox* shifts the focus to a broader systemic level. This paradox represents the intrinsic conflict between the defining attributes of luxury – exclusivity, indulgence, and high resource consumption – and the tenets of sustainability, which prioritize conservation, ethics, and moderation (Athwal et al. 2019; Heil and Langer 2017). Historically, luxury brands have pursued perfection and rarity, frequently utilizing resource-intensive materials such as exotic leathers and precious metals that raise concerns about biodiversity and animal welfare (Kapferer 2010; Kapferer and Michaut-Denizeau 2014). While luxury is criticized for its association with excess and social inequality, it is simultaneously praised for its exceptional craftsmanship, quality, and durability, traits that align with sustainable consumption practices (Heil and Langer 2017; Kapferer 2010; Kapferer and Bastien 2009; Vigneron and Johnson 2004). These attributes distinguish luxury from the fast fashion industry, offering the potential to contribute positively to sustainability by

emphasizing long-term value (Grazzini, Acuti, and Aiello 2021).

Luxury brands such as *Gucci* have responded to growing consumer demands for sustainability by implementing initiatives like its *Equilibrium program* to align with customer expectations and regulatory pressures (Gucci 2023). However, despite these efforts, sustainability often occupies a secondary position in consumer priorities regarding purchasing decisions (Ehrich and Irwin 2005; Gardetti and Torres 2013). Furthermore, consumer behavior frequently falls short of the expressed interest in sustainability, as WTP for sustainable luxury products does not consistently align with these values (Heil and Langer 2017). The WTP for sustainable luxury is influenced by diverse value perceptions, including conspicuousness, uniqueness, and quality (Kapferer and Bastien 2009; Vigneron and Johnson 1999; 2004). While younger generations, particularly Millennials and Generation Z, demonstrate a growing desire for sustainability, this does not always translate into a higher WTP for sustainable products (Bhattacharya and Sen 2004; Heil and Langer 2017). This divergence between attitudes and purchasing behavior underscores the complexity of aligning luxury consumption with sustainability principles.

Adding to this complexity are perceptions of quality, which remain a significant barrier to integrating sustainability into luxury. A notable concern among consumers is that environmentally friendly modifications may compromise product quality (Achabou and Dekhili 2013; Davies, Lee, and Ahonkhai 2012). This is supported by findings from Achabou and Dekhili (2013), who discovered that luxury products crafted from recycled materials were perceived as inferior in quality despite acknowledging their environmental benefits. Beyond quality concerns, other factors also shape perceptions of sustainable luxury. Social consciousness, personal style, and cultural context play essential roles in influencing how consumers balance sustainability and luxury attributes (Cervellon and Shammas 2013; Wang et al. 2021). These diverse influences reflect the multifaceted nature of consumer expectations,

which luxury brands must navigate to address the paradox effectively.

3.3 Consumer Perceptions of Luxury and Sustainability

Building on the complexity of aligning luxury and sustainability, it is essential to examine how consumer perceptions are defined and structured. Researchers consistently define consumers' perceptions of luxury items with qualities such as expensive, qualitative, rare, excessive, and aesthetic, among others (Dubois, Laurent, and Czellar 2001; Kunz, May, and Schmidt 2020). Generally, the perception of a luxury brand can be vastly influenced by marketing incentives, word-of-mouth, and interaction with the brand (Hudders 2012; Romaniuk and Huang 2020). However, as discussed in the previous chapter on the *Luxury Sustainability Paradox*, the combination of luxury and sustainability remains somewhat conflicting for several consumer groups. For instance, Kapferer and Michaut-Denizeau (2014) found that about one-third of their study respondents perceived luxury and sustainability as contradictory, whereas another third believed they were concordant.

Luxury consumers view a brand's commitment to the environment as a secondary factor in their decision to purchase luxury goods and perceive the use of recycled materials in luxury goods as negative (Ehrich and Irwin 2005; Achabou and Dekhili 2013). A prominent example of how an Italian leather company handles this negative perception is by emphasizing the uniqueness of the products rather than focusing on their eco-design itself (Cimatti, Campana, and Carluccio 2017; Kunz, May, and Schmidt 2020). Notably, this negative perception cannot be generalized, as perceptions of luxury product quality vary by nationality. For instance, Saudi consumers tend to view the quality of items as lower than French consumers when social and sustainability information is provided (Dekhili, Achabou, and Alharbi 2019).

This tension is further complicated by the duality of how consumers consciously and unconsciously associate luxury with sustainability. Beckham and Voyer (2014) tested

conscious and unconscious methods to investigate attitudes toward sustainable luxury, and the results show that while conscious attitudes can vary based on context, consumers tend to unconsciously associate luxury with unsustainability. Participants were quicker to associate luxury with unsustainability than with sustainability, highlighting an inherent tension in the consumer mindset between these two ideas (Beckham and Voyer 2014). It was also found that consumers are more favorable toward luxury items they personally deem sustainable, as opposed to items externally labeled as such. This suggests that authenticity and personal belief are critical to consumer acceptance of sustainable luxury, indicating a need for a deeper understanding of how personal ethics influence buying behavior, especially in the context of sustainability (Beckham and Voyer 2014; Irwin and Spira 1997).

Beyond individual attitudes, specific industries provide examples of how luxury and sustainability intersect in unique ways. In the hospitality sector, luxury hotels often emphasize environmental responsibility alongside high-end offerings, creating an opportunity to align these seemingly opposing concepts (Kunz, May, and Schmidt 2020). Research highlights that characteristics like scarcity and ephemerality may play a role in shaping this perception. For example, Janssen et al. (2014) suggest that when luxury experiences are exclusive but short-lived, this can influence consumers' perceptions of whether luxury hotels can genuinely incorporate sustainable practices. Similarly, companies like Tesla exemplify how luxury and sustainability can coexist in the automotive industry by integrating eco-friendly technology (Aybaly et al. 2017).

Finally, the perceptions of the individuals who purchase luxury products add another dimension to this discussion. Respondents to the aforementioned study conducted by Beckham and Voyer (2014) reacted very positively to sustainable luxury, yet argued that the typical luxury consumer would rather purchase conventional items compared to sustainable ones. In a romantic context, luxury buyers are perceived to be more physically appealing than eco-

friendly product buyers, who are perceived to be more competent, suitable for long-term relationships, and warmer than luxury purchasers (DiDonato and Jakubiak 2016). These stereotypes illustrate the complex interplay between luxury consumption, sustainability, and social perceptions.

3.4 Drivers of Sustainable Consumption

Understanding the drivers of sustainable luxury consumption is crucial for navigating the complexity of how consumers perceive the relationship between luxury and sustainability, and how these perceptions shape their behavior. Psychological and emotional factors are particularly important among the many influences on sustainable luxury consumption (Cervellon and Shammas 2013; Kapferer and Michaut-Denizeau 2020; Wang et al. 2021). These drivers not only shape how consumers perceive sustainability in the context of luxury but also play a critical role in their purchasing decisions. Hedonic satisfaction, self-expression, and personal style-related motivations emerge as key elements in this dynamic (Cervellon and Shammas 2013; Kapferer and Michaut-Denizeau 2020; Wang et al. 2021). The pleasure of owning luxury items, or hedonic satisfaction, is enhanced when sustainability is a factor, creating a sense of responsible indulgence (Athwal et al. 2019; Kunz, May, and Schmidt 2020).

Self-expression and social identity formation are equally important factors. Consumers utilize luxury goods to convey their values and social identity, and products with sustainable attributes introduce an ethical dimension to this form of expression (Pandelaere and Shrum 2020). Such an approach resonates strongly with Millennials and younger audiences, who actively seek out brands that align with their personal and environmental beliefs (Kunz, May, and Schmidt 2020). For these consumers, sustainable luxury serves as a marker of sophistication and social consciousness, blending ethical considerations with personal style (Kapferer and Michaut-Denizeau 2020). Despite the growing interest in sustainability across

various groups, significant differences in market participation exist based on income levels. High-income individuals remain the primary market for luxury goods, with their purchasing power shaping much of the industry (Dubois and Duquesne 1993; Ikeda 2006; Kapferer and Bastien 2009). However, the market has also expanded to include middle- and lower-income consumers, driven by the democratization of luxury through more accessible offerings (Truong, McColl, and Kitchen 2009; Vigneron and Johnson 2004).

While self-expression and social identity highlight the psychological and emotional dimensions of sustainable luxury, economic and environmental considerations further enhance its appeal, mainly through the concept of durability. Durable luxury products align with financial rationality by minimizing replacement and reducing overall consumption (Cervellon and Shammas 2013). This perspective frames goods as responsible investments that meet both economic and environmental criteria, enhancing their appeal as sustainable choices (Athwal et al. 2019). However, consumers often disregard their long-term benefits. This phenomenon, termed by Sun, Bellezza, and Paharia (2021) as the "durability neglect" (28), presents a challenge for luxury brands to effectively communicate these advantages. The long-term use of high-quality luxury products reinforces sustainable consumption practices by emphasizing resource efficiency and waste reduction, starkly contrasting the fast fashion model characterized by planned obsolescence and rapid consumption cycles (Joy et al. 2012; Kapferer and Michaut-Denizeau 2020). By offering timeless and resource-efficient products, luxury brands can position themselves as sustainability leaders and appeal to consumers who value both quality and environmental responsibility (Cervellon and Shammas 2013).

In addition to psychological and economic drivers, environmental and ethical factors, particularly corporate social responsibility (CSR), have become critical in driving consumer confidence in sustainable luxury. CSR has evolved from being perceived as a form of philanthropy to being integrated into business strategies to meet regulatory and transparency

standards (Galan 2006; Rojek-Nowosielska 2014). Contemporary CSR practices concentrate on aligning corporate operations with sustainable and ethical principles, thereby appealing to consumers who prioritize transparency and responsible business conduct (Raczkowski, Fijalkowska, and Sułkowski 2016). For luxury brands, CSR is crucial in maintaining a reputable image and meeting consumer expectations regarding ethical consumption (Athwal et al. 2019).

3.5 Brand and Marketing Implications

Building on the drivers of sustainable luxury consumption, effective brand and marketing strategies are critical for translating these values into consumer engagement. According to Mazzalovo (2008), luxury marketing relies heavily on selective advertising strategies to create an exclusive and prestigious brand image. Premium pricing reinforces this image by acting as a calculated signal of rarity and exceptional value, enhancing the consumer's perception of luxury (Dryl 2018).

With rising consumer awareness around sustainability, luxury brands increasingly integrate sustainable practices into their marketing to resonate with consumers' values in both emerging and developed markets (Osburg et al. 2024). The origin of luxury brands significantly influences consumer trust in these sustainability practices, as they often perceive brands from countries with high ethical standards as more credible in their environmental and social commitments. This country-of-origin effect can, therefore, reinforce the authenticity of sustainability claims, adding a layer of trust and perceived value to luxury products if communicated effectively (Godey et al. 2011).

To actively steer consumer choices toward sustainable luxury, marketers are leveraging insights from behavioral economics, which suggests that structured messaging and strategic product positioning can effectively influence purchasing behavior (Sun, Bellezza, and Paharia 2021). By emphasizing attributes such as durability, brands help customers see the long-term

value of luxury purchases and counter the tendency to overlook the opportunity costs associated with less sustainable options (Frederick et al. 2009). In addition to focusing on functional benefits, luxury marketers are also using emotional strategies to create deeper connections with consumers, encouraging them to identify with the sustainable values embedded in luxury products personally. This dual approach fosters symbolic connections and aligns brand identity with consumer values, allowing them to identify with the sustainable qualities of the products they choose (Platania, Santisi, and Morando 2019).

The CSR component in luxury branding is increasingly recognized as a key driver of brand loyalty, as effective communication of CSR initiatives increases brand recognition and fosters stronger emotional connections with consumers (Singh et al. 2023). Effective CSR messaging that highlights positive environmental impacts not only builds brand equity but also increases acceptance (Kunz, May, and Schmidt 2020). Luxury brands can further these efforts by creating products dedicated to charitable causes, raising awareness, and adding value to the brand (Dryl 2018). While some see a contradiction between luxury and CSR, key luxury attributes align well with CSR values such as environmental preservation and social responsibility. Thus, effective CSR communication can strengthen brand loyalty by reinforcing the brand's commitment to quality and social values (Schwartz 2012).

However, the relationship between CSR communication and brand perception remains complex. When consumer trust in a brand's motives is low, a strong fit between the brand and its CSR activities enhances evaluations. In contrast, when trust is already high, the importance of this alignment diminishes, as consumers are less reliant on CSR fit to evaluate the brand positively. As a result, luxury brands need to be mindful of consumers' beliefs about their intentions when promoting such initiatives (Kunz, May, and Schmidt 2020).

3.6 Challenges in Promoting Sustainable Luxury

In promoting sustainable luxury, marketers face several challenges. As highlighted in

Chapter 3.2, one of the central challenges in sustainable luxury marketing is the *Luxury Sustainability Paradox,* in which individuals question whether exclusivity and environmental consciousness can coexist without compromising the unique appeal of luxury products (Henninger, Alevizou, and Oates 2016; Walker 2006). Additionally, sustainability labels themselves can detract from a product's luxury appeal. Consumers may perceive these labels as signals of lower quality or mass production, which contrasts with the high craftsmanship and rarity typically associated with luxury brands (Hong et al. 2024).

Another challenge lies in consumers' limited knowledge of sustainable practices in the luxury sector. Many are unaware of the complex environmental impacts associated with luxury goods (Sun, Bellezza, and Paharia 2021). As a result, even when shoppers recognize the benefits of sustainable options, their choices are often driven by immediate factors that can overshadow the long-term value of quality and durability in luxury consumption (Sun, Bellezza, and Paharia 2021). Therefore, targeted marketing strategies must be used effectively to close the knowledge gap (Sesini, Castiglioni, and Lozza 2020).

A related challenge is the *Attitude Behavior Gap*, where consumers' positive attitudes toward sustainability do not always translate into purchasing behavior. In the luxury market, status and self-expression often precede ethical considerations (Carrigan and Attalla 2001; Wiederhold and Martinez 2018). Although many European consumers say they are willing to pay a premium for sustainable products, the market share of these products remains relatively low (Mandarić, Hunjet, and Vuković 2022). This discrepancy highlights a conflict between consumers' values and their motivations for luxury (Wiederhold and Martinez 2018). Studies confirm that even when individuals express environmental concerns, these concerns are often secondary to other motivations in the context of luxury purchases (Ehrich and Irwin 2005; De Klerk, Kearns, and Redwood 2019; Nguyen, Nguyen, and Nguyen 2019).

Given the complexity of consumer perceptions and behaviors, effectively

communicating sustainability initiatives is a significant challenge for luxury brands. Many view sustainability claims as superficial marketing tactics designed to enhance brand image rather than genuine environmental responsibility (Bryson, Atwal, and Hultén 2013; Henninger, Alevizou, and Oates 2016). This skepticism is heightened in the luxury sector, where expectations of authenticity and exclusivity are paramount (Bryson, Atwal, and Hultén 2013). If consumers perceive a brand's sustainability efforts as insincere, it can damage its reputation and undermine trust, ultimately threatening customer loyalty (Kunz, May, and Schmidt 2020; Torelli, Monga, and Kaikati 2012).

Finally, luxury brands face the challenge of promoting sustainability without diluting their prestigious image. While differentiating products based on ethical practices could help communicate sustainability, it could also lead consumers to question the luxury status of the product, as these values are often associated with more mainstream goods (Torelli, Monga, and Kaikati 2012). To maintain the exclusivity and appeal of high-end products, luxury brands must integrate sustainability into their brand identity as a core value rather than positioning it as a secondary feature (Henninger, Alevizou, and Oates 2016; Walker 2006).

3.7 Identified Research Gap

The existing research has established a robust foundation for understanding the interplay between luxury and sustainability, yet significant gaps still need to be addressed. A review of the literature revealed the potential for luxury to promote sustainable consumption through attributes such as durability. However, limited attention has been given to how consumers perceive and reconcile the inherent tension between luxury's traditional emphasis on exclusivity and sustainability's principles of responsibility and conservation.

Furthermore, the role of luxury in promoting more sustainable behaviors, such as reducing overall consumption in favor of fewer, higher-quality purchases, still needs to be explored. While prior studies often focus on consumer attitudes in isolation, this presents an opportunity

to investigate how these attributes translate into purchasing behaviors, particularly within the luxury fashion market, where fast consumption trends frequently prevail. By addressing this gap, our study aims to examine how consumers navigate the intersection of indulgence and responsibility, uncovering whether luxury can act as a catalyst for more mindful and sustainable consumption practices.

We aim to contribute to this field by addressing the overarching question of whether luxury can be in harmony with and promote sustainable consumption. Specifically, we investigate the impacts of (1) explicit sustainability marketing on consumer choices, (2) product guarantees on encouraging sustainable consumption, (3) framing strategies on consumers' WTP, and (4) sustainability claim intensity on consumer choices. Through these four sub-studies, we aim to provide a comprehensive understanding of the complex relationship between luxury purchases and sustainable consumption.

4 General Methodology

Following a comprehensive review of the existing literature, the methodology employed in this study was an experimental design. We conducted an online survey using the platform Qualtrics, and over 14 days, we recruited a total of 180 valid participants (completion rate of 100%; 47% female; median age = 27) via various channels, including personal communication, social media, and professional networks.

The survey was comprised of four individual sections, one for each sub-study presented in this paper, in addition to a set of general questions applicable to all studies. All participants were provided with an identical introduction to the survey, which outlined the purpose of the research and indicated what the subsequent sections would entail. The participants were informed that they would be presented with four distinct products and that it was imperative to read the product descriptions with great attention. Additionally, participants were advised that the research was focused on consumer behaviors in the context of premium/luxury fashion,

while the specific research questions were not disclosed to avoid any potential biases. To prevent influence from brand familiarity or loyalty, two fictitious brands were used: “Brand X” as the premium brand and “Brand Y” as the mid-range brand. Following this, the participants were automatically randomly assigned to either a control group or a test group for each of the four individual studies. Consequently, a participant may have encountered questions pertaining to the control group in one section of the survey and been presented with questions for the test group in another. Upon completion of the four sub-surveys, respondents proceeded to the general and final part of the survey, where they rated themselves on a scale from “1 – Tightwad” (difficulty spending money) to “7 – Spendthrift” (difficulty limiting their spending). Lastly, a series of demographic questions were posed, including those regarding gender, age, income, education, and country of residence (see Appendix A for complete survey questions and flow and Appendix B for respondent characteristics and demographics).

5 Study 3: The Impact of Framing on Consumers' Willingness to Pay

5.1 Introduction

Consumers increasingly demand that luxury should be aligned with sustainability, challenging brands to merge environmental responsibility with their core attributes of exclusivity and quality. However, can sustainability truly enhance luxury, or does it weaken its appeal? PwC's (2024) Voice of the Consumer survey shows that even in times of economic uncertainty, consumers are willing to pay 9.7% more for sustainably produced goods, signaling a profound shift in value perception. Research also demonstrates that consumers respond favorably when sustainability is linked to product quality and durability, as this increases perceived value and justifies higher prices (van Nes and Cramer 2005; Thompson and Coskuner-Balli 2007). However, an empirical gap remains regarding the relationship between luxury framing and consumers' WTP.

This study investigates whether framing sustainability as an investment in quality and longevity affects WTP for luxury goods. We hypothesize that consumers perceive greater justification for premium pricing when sustainability is framed as enhancing durability and long-term value. This investigation reflects growing ethical considerations and consumers' desire for practicality and lasting utility in their purchases.

The study employs an experimental approach informed by a comprehensive literature review to explore the integration of sustainability in luxury, the influence of framing on perceived value, and consumers' WTP for sustainable features. The survey examined the impact of this framing strategy on respondents' WTP and explored the perceived value of products presented with varying levels of emphasis on sustainability. The results are subsequently presented, followed by a discussion of their implications for consumers and brands, culminating in key takeaways and recommendations for future research.

5.2 Literature Review

The increasing significance of sustainability in the luxury sector has become a pivotal concern for consumers and brands. This trend is closely associated with the principles of durability and longevity. As Bendell and Kleanthous (2007), Joy et al. (2012), and Alghanim and Ndubisi (2022) point out, luxury products are inherently high-quality and designed for long-term use, which aligns naturally with sustainable practices. This contrasts with the fast fashion industry, which is defined by planned obsolescence and transient trends. The long-lasting nature of luxury items has the potential to contribute to sustainability by reducing waste and promoting resource conservation (Kapferer and Bastien 2009; Sun, Bellezza, and Paharia 2021). Furthermore, Alghanim and Ndubisi (2022) maintain that the inherent durability of luxury products reinforces the concept of sustainable consumption, aligning with consumers' growing inclination to engage with environmentally responsible purchases. These shifts demonstrate how the importance of durability and product lifespan has evolved from a secondary feature to a critical component of luxury marketing (Alghanim and Ndubisi 2022; Bendell and Kleanthous 2007).

Consumer perceptions of luxury and sustainability are complex and multifaceted, making them challenging to define and measure. Historically, luxury has been associated with excess, indulgence, and conspicuous consumption (Cervellon and Shammas 2013; Kapferer and Bastien 2009; Sun, Bellezza, and Paharia 2021). This perspective is based on the premise that luxury items represent wealth, status, and personal accomplishment, which often conflict with sustainability principles that emphasize moderation and ethical considerations (Achabou and Dekhili 2013). However, consumer attitudes are evolving. Joy et al. (2012) observed that younger consumers increasingly express concern for environmental issues and sustainability, even as they continue to engage in fashion consumption patterns that are often inconsistent with these values. This trend is driven by the desire for products that reflect personal values of

social responsibility (Kapferer 2010; Sun, Bellezza, and Paharia 2021). Despite this shift in consumer attitudes, Kapferer and Bastien (2009) note that while consumers may value sustainability, they often prioritize traditional luxury attributes such as exclusivity and superior quality over environmental benefits. This dual perception highlights the complex relationship between luxury and sustainability as consumers balance indulgence and ethical considerations.

Framing luxury goods as investments in quality and longevity can significantly impact consumer decision-making. As Joy et al. (2012) argue, framing luxury products as long-term investments resonates with consumers' desire for high-value, durable goods. Similarly, Sun, Bellezza, and Paharia (2021) emphasize that highlighting the durability of high-end products can be an effective marketing strategy to promote sustainable consumption by encouraging consumers to buy fewer, longer-lasting goods. This type of framing shifts the narrative from mere indulgence to practical and sustainable choices, positioning luxury items as valuable and environmentally responsible (Joy et al. 2012; Sun, Bellezza, and Paharia 2021). Alghanim and Ndubisi (2022) reinforce this concept by indicating that positioning luxury goods in terms of their longevity and enduring quality can align with consumers' rationales for making sustainable choices. Moreover, Cervellon and Shammas (2013) highlight that presenting luxury products emphasizing durability and investment potential enhances their perceived value. This framing aligns with consumer expectations of sustainable luxury, which increasingly prioritize both practical and ethical considerations, potentially influencing WTP.

The WTP for sustainable luxury is closely tied to perceived value, encompassing the purchase's financial and emotional aspects. As Kapferer and Michaut-Denizeau (2020) and Cervellon and Shammas (2013) have noted, while sustainability can enhance perceived value, it often remains secondary to more established luxury traits like brand heritage and exclusivity. Bendell and Kleanthous (2007) and Joy et al. (2012) posit that emphasizing sustainability as an added value can positively affect consumers' WTP, particularly when combined with messages

that underscore the product's long-term utility and reduced ecological footprint. Considering the perceived value of long-term use is essential, as this taps into both the rational and emotional motivations behind luxury consumption. This makes consumers more likely to justify the higher cost associated with sustainable luxury items.

Despite extensive discussions on the interplay between luxury and sustainability, there is a notable lack of research investigating how framing luxury goods with sustainable features as investments in quality and longevity influences consumers' WTP. Sun, Bellezza, and Paharia (2021) underscore the importance of emphasizing durability to foster more sustainable consumer choices. However, they also acknowledge the necessity for this messaging to be explicit to overcome consumers' tendency to neglect product longevity in decision-making. This gap in the existing literature highlights the need to investigate the potential of strategic framing that combines durability with investment appeal to enhance consumers' WTP for sustainable luxury goods.

Given these insights, the following hypothesis is proposed:

H_3: Consumers are willing to pay more for luxury goods with sustainable features when the brand frames the product as an investment in quality and longevity, appealing to both sustainable and financial value.

5.3 Methodology

In order to test Hypothesis 3, the study aimed to assess how different product framings affect consumers' WTP and how the perceived overall value mediates this effect.

A between-subjects design was used, with participants automatically randomized through Qualtrics and assigned to either the control or test group, thereby ensuring an unbiased distribution of participants. Both groups were shown the same visual representation of a jacket to maintain consistency across conditions. However, the descriptions varied to manipulate the

independent variable, product framing (for product images and descriptions, see Appendix A). The independent variable emphasized traditional luxury aspects in the control group and sustainability in the test group. The dependent variable was the participants' WTP for the luxury item, and perceived overall value served as the mediator to explore how framing influenced WTP. Within Qualtrics, this survey followed Study 2 as the third phase of the research.

Participants in the control group read a description focused on traditional luxury attributes: "This luxury jacket is crafted from the finest premium materials, designed for those who value timeless elegance and refined style. With a modern fit, it offers a balance of contemporary fashion and classic luxury. Every detail, from its high-end materials to its expert craftsmanship, reflects a commitment to quality and exclusivity. This jacket is perfect for individuals who prioritize sophistication and luxury, making it a distinguished addition to any wardrobe. A true reflection of high-end fashion, it offers an elegant, polished look that stands the test of time."

Conversely, participants in the test group were presented with a sustainability-focused description: "This luxury jacket is crafted from the finest eco-friendly materials, designed for those who value sustainability and refined style. With a modern fit, it offers a balance of contemporary fashion and ethical luxury. Every detail, from its recycled fabrics to its eco-conscious production, reflects a commitment to both quality and the environment. This jacket is perfect for individuals who prioritize sustainability without compromising on sophistication, making it a distinguished, responsible choice for any wardrobe. A true reflection of ethical luxury, it offers an elegant, polished look with a reduced environmental impact."

Subsequently, participants were requested to indicate their WTP for the jacket using a slider scale ranging from €100 to €1000. This approach facilitated the precise measurement of the dependent variable. In order to ascertain the rationale behind their pricing decisions,

participants were presented with a series of predetermined reasons in the second question. The considerations included the materials used, the design, the craftsmanship, the personal budget, the brand reputation, and the sustainability features.

The purchase intent was measured in the third question using a 7-point Likert scale, with 1 representing “very unlikely” and 7 “very likely”. This assessment evaluated the probability of participants purchasing the jacket based on the description provided. These data points enabled an examination of how product descriptions influenced consumer behavior.

Lastly, to evaluate the perceived overall value of the jacket, participants were asked to rate its value in meeting their needs (e.g., warmth, protection, style) on a 7-point Likert scale, with 1 indicating “very low value” and 7 “very high value”. This metric allowed the study to examine whether perceived overall value served as a mediator in the relationship between product framing and WTP.

5.4 Results

Of the 180 valid responses, 51.1% (n = 88) were randomly assigned to the test group, and 49.9% (n = 92) to the control group (Appendix C.1). The dependent variable, WTP, showed a mean value of €277.02 (SD = 133.26) in the control group and €264.94 (SD = 150.71) in the test group. These descriptive statistics illustrate that participants, on average, indicated similar WTP across both conditions, with high variability observed within each group.

An independent samples t-test was conducted to assess whether there was a statistically significant difference in WTP between the control and test groups. The results revealed no significant difference in WTP between both groups ($t[178] = 0.570$, $p = .569$; Appendix C.3). Additionally, the effect size (Cohen’s $d = 0.085$) indicated negligible practical difference, suggesting that sustainability framing alone did not significantly enhance consumers’ WTP for

luxury items.

To explore the reasoning behind participants' WTP, the most frequently selected factors in both groups were "Craftsmanship or quality of production" (55.6%), "Personal budget" (52.8%), and "Materials used" (42.2%; Appendix C.1). These percentages were calculated based on the proportion of cases, as participants could select multiple reasons.

A chi-square test was conducted to compare group responses, revealing notable differences in sustainability-related factors. Participants in the test group were significantly more likely to choose "Sustainability features" as a reason for the price indicated (43.2%) compared to the control group (15.2%; $\chi^2[1, N = 180] = 17.12$, $p < .001$; Appendix C.2). Similarly, "Environmental impact" was mentioned by 33.0% of participants in the test group compared to 7.6% in the control group ($\chi^2[1, N = 180] = 18.06$, $p < .001$; Appendix C.2).

Despite these differences, traditional luxury factors, such as "Craftsmanship or quality of production" and "Personal budget," remained similarly important across both groups. Other considerations, including "Materials used" and "Brand reputation" showed no significant differences between the groups (Appendix C.1). These findings suggest that sustainability framing increased awareness of environmental factors without diminishing the influence of traditional luxury values.

Moving from WTP rationale to purchase intent, the results revealed no substantial differences between the groups in terms of purchase intent. The control group reported a mean purchase intent score of 3.47 (SD = 1.50), while the test group's mean was 3.40 (SD = 1.74; Appendix C.1). An independent samples t-test confirmed that this difference was not statistically significant ($t[172] = 0.287$, $p = .387$; Appendix C.3). Although Levene's test indicated unequal variances ($F[1,178] = 5.255$, $p = .023$), the results of the adjusted t-test confirmed the absence of significant effects. These findings indicate that the framing of sustainability did not influence participants' intent to purchase.

Similarly, the analysis revealed no statistically significant difference in overall value perception between the groups. The control group reported a mean score of 4.59 (SD = 1.15), while the test group exhibited a slightly higher mean of 4.69 (SD = 1.36; Appendix C.1). A two-sample t-test confirmed that this difference was not statistically significant (t[178] = -0.567, p = .571), and Levene's test indicated homogeneity of variances (F[1,178] = 1.31, p = .254; Appendix C.3). Together, these findings indicate that while the sustainability framing influenced participants' awareness of specific product attributes, it did not affect their perceived overall value.

Given the lack of significant direct effects, further analyses examined the potential indirect effects of group framing on WTP through perceived overall value. A mediation analysis using PROCESS Model 4 included group framing as the independent variable, WTP as the dependent variable, and perceived overall value as the mediator (Hayes and Little 2022). As expected, the analysis revealed no significant direct effect of group framing on WTP (b = -15.95, SE = 20.13, t[177] = -0.792, p = .429; Appendix C.4). The estimated indirect effect through perceived overall value was also not significant (b = 3.87, BootSE = 7.23, 95% CI [-9.747, 19.415). These results indicate that perceived overall value did not mediate the relationship between sustainability framing and WTP.

A hierarchical multiple regression was conducted to provide additional context. When perceived overall value was added alongside group framing as predictors of WTP, the model explained 10.5% of the variance in WTP (R^2 = .105, F[2,177] = 10.44, p < .001; Appendix C.5). While group framing remained non-significant, the perceived overall value had a significant positive effect on (b = 36.43, SE = 8.04, t[177] = 4.529, p < .001). A correlation analysis further underscored this finding, revealing a moderate positive relationship between WTP and perceived overall value (r[180] = .359, p < .001) and a strong correlation between purchase intent and perceived overall value (r[180] = .554, p < .001; Appendix C.6). These

correlations emphasize the critical role of perceived overall value in shaping both purchase intention and WTP, regardless of the framing condition.

5.5 Discussion

This study aimed to investigate whether framing luxury goods with sustainable features as investments in quality and longevity would enhance consumers' WTP. The resulting data revealed that the presentation of luxury goods in a sustainable context led participants to mention sustainability-related reasons with greater frequency. However, this framing did not have a statistically significant effect on overall WTP, nor did perceived overall value mediate this relationship.

Contrary to initial expectations, the results indicate that sustainability framing alone is insufficient to drive higher financial commitment (i.e., WTP). While sustainability messaging can raise awareness and influence consumer reasoning, it must complement perceived overall product value to increase purchasing willingness effectively. While consumers may view sustainability as a positive attribute, they often consider it supplementary rather than a primary reason for higher spending. This is likely because consumers prioritize tangible benefits linked to perceived value, such as craftsmanship and practical utility, over ethical appeals. Therefore, ensuring consumers that sustainable features directly contribute to the product's quality, durability, and long-term value is crucial. To effectively influence WTP, sustainability framing must be part of a comprehensive strategy that combines ethical considerations with explicit, value-driven claims. Therefore, brands must address the fundamental question that consumers ask themselves: "What am I getting for my money?" Without such a connection, while sustainability may be acknowledged, it is unlikely to be a significant factor in driving a premium purchase decision. The continued significance of conventional factors, such as craftsmanship and personal budget, even when sustainability is a prominent aspect, demonstrates the complex nature of consumer decision-making processes. It would appear that

consumers attempt to balance ethical values with practical needs, seeking reassurance that their investment justifies a higher price through added quality and long-term benefits. This behavior reflects an economically rational mindset whereby consumers prioritize product utility over ethical satisfaction alone.

The implications for brands are significant. In order to maximize the impact of sustainability, brands must integrate it with tangible product benefits. By situating sustainability within the context of quality and financial advantage, brands can position themselves to appeal ethically and practically, thereby supporting premium pricing and enhancing brand reputation. Nevertheless, this strategy must be evaluated in light of the potential financial implications to ensure the economic viability of promoting sustainability.

The findings of this study address the research gap identified in the literature review regarding the influence of framing luxury products as investments in quality and durability on consumer behavior. Although sustainability framing prompted participants to cite sustainability-related reasons with greater frequency, it did not result in a notable increase in WTP. This outcome corroborates Sun, Bellezza, and Paharia's (2021) observation that consumers frequently only consider product longevity if explicitly highlighted. Therefore, while sustainability messaging increases awareness, its capacity to motivate financial commitment is contingent upon its integration with tangible product benefits. Kapferer and Bastien (2009) show that traditional luxury characteristics continue to hold a dominant influence on consumer preferences. This study confirms that consumers greatly value these attributes more than ethical considerations. In order to successfully integrate sustainability into consumer priorities, it is essential that brands emphasize sustainability not as a standalone feature but rather as a supplementary enhancement to durability and quality. This alignment is critical when addressing the *Attitude Behavior Gap*, as emphasized by Wiederhold and Martinez (2018). By developing a comprehensive strategy that seamlessly integrates ethical

and practical benefits, luxury brands can ensure that consumers perceive their premium investment as delivering tangible advantages, such as superior quality and extended durability. This approach is consistent with the perspective posited by Kapferer and Michaut-Denizeau (2020), which suggests that associating sustainability with established luxury values enhances the overall perceived value and fosters trust. Moreover, Alghanim and Ndubisi (2022) note that transparent and authentic messaging reinforces consumer loyalty and justifies premium pricing. By strategically integrating these elements, brands can strengthen their positioning in the evolving landscape of sustainable luxury, ensuring consumer satisfaction and loyalty.

In interpreting these results, it is important to consider the limitations of the design of the study. While these limitations do not substantially undermine the validity of the research, they provide important context for interpreting the findings and identifying potential directions for future improvement.

The reliance on self-reported WTP represents a notable limitation. Participants may have been influenced by social desirability bias, which could have resulted in an overstatement or understatement of their WTP for sustainable luxury goods. This is particularly pertinent in the context of sustainability, which is often regarded as a socially desirable trait.

A further limitation of the study is its focus on a single product category, namely a luxury jacket, which restricts the generalizability of the findings. Consumer responses to sustainability claims may vary significantly across luxury sectors, such as accessories, automobiles, or fine jewelry. In these sectors, attributes like durability and ethical sourcing may hold varying degrees of importance in decision-making. A more comprehensive understanding of how sustainability framing influences consumer behavior across the luxury market could be achieved by expanding the research to include a broader range of luxury product categories.

Despite these limitations, the study significantly contributes to the field by isolating key variables and exploring the intricate relationship between sustainability framing and WTP in

the luxury sector. Although the hypothesis was not confirmed statistically, the findings offer valuable insights. While sustainability framing raises awareness and encourages ethical reasoning, it needs to be integrated with quality and exclusivity to drive financial commitment. This highlights the nature of aligning ethical considerations with consumer expectations, providing a foundation for future research into the strategic messaging of sustainable luxury.

5.6 Conclusion

This study aimed to examine whether framing luxury goods with sustainable features as investments in quality and longevity would enhance consumers' WTP, appealing to both sustainable and financial value. The findings do not support the hypothesis, showing that although sustainability framing resulted in participants citing sustainability-related reasons with greater frequency, it did not significantly influence their WTP. These results indicate that while sustainability messaging can enhance awareness and ethical reasoning, it does not directly result in a higher financial commitment unless accompanied by perceived value factors such as product quality and durability.

Although consumers often perceive sustainability as a positive attribute, the lack of clear, practical benefits may not be enough to justify increased spending. The results of the study also highlight that the perceived overall value is a critical driver of WTP, aligning with previous research emphasizing the importance of integrating sustainability with tangible product benefits (Cervellon and Shammas 2013). This finding reinforces that consumers are driven by economic rationality and seek assurance that their investment in sustainable luxury goods will be reflected in the durability and utility of the product.

Consequently, brands should adopt a dual-focused approach that positions sustainability as a value enhancer rather than a standalone feature. This integration is essential for translating sustainability into higher WTP while aligning ethical considerations with consumer demands for quality and utility. However, this approach must consider financial

implications to ensure that promoting sustainability remains economically viable for brands.

However, the focus of this study on a single luxury product category – a jacket – limits the generalizability of its findings. Consumer responses to sustainability framing may vary significantly across different luxury sectors, such as accessories, automobiles, or fine jewelry, where attributes like ethical sourcing and durability may have different levels of importance in the consumers' decision-making. Future research should explore these variations to provide a more comprehensive understanding of how sustainability framing influences consumer behavior across the luxury market. In addition, examining how brand reputation interacts with sustainability framing could provide deeper insights into optimizing marketing strategies and refining the integration of ethical and practical appeals. Despite the limitations of this study, it provides a solid foundation for further research by isolating key variables, examining the complex relationship between sustainability framing and WTP, and exploring the integration of ethical and practical appeals in consumer behavior.

6 General Discussion and Conclusion

6.1 Discussion of Findings

The primary aim of this thesis was to investigate the relationship between sustainable consumption and luxury purchases. To achieve this, we conducted four independent sub-studies, each contributing unique insights and collectively providing a nuanced understanding of this research area.

Reflecting on the findings from these studies, Study 1 proved the significant relationship between explicit sustainability marketing and consumer preference. As previously hypothesized, consumers exposed to sustainability-focused framing were more likely to opt for the premium brand over the cheaper alternative. However, contrary to expectations, this relationship was not mediated by perceived durability. Building on these results, Study 2 provided further evidence that effective sustainability marketing can serve as a powerful tool to influence consumer behavior. In this specific case, prompting consumers with an unconditional guarantee enhanced their recognition of product durability, leading them to choose a single premium item over three mid-range alternatives. Study 3 further expanded on this relationship by investigating consumer decision-making under financial considerations. Explicitly, this study compared consumers' WTP for luxury items framed with sustainable messaging versus traditional framing. Although the hypothesized effect of a higher price acceptance for the former could not be confirmed, the perceived overall value was identified as a significant predictor of WTP. Recognizing the potential limits of sustainability marketing, Study 4 explored the possible adverse effect of excessive sustainability claims in luxury marketing on consumers' purchase intentions. While perceived authenticity was found to influence purchase intent, the intensity of sustainability claims did not have a significant effect.

In relation to the existing literature in this area, our findings yield several important

conclusions. A key takeaway from our research is that structured marketing can effectively encourage consumers to adopt more sustainable purchasing and consumption behaviors, as formerly suggested by Sun, Bellezza, and Paharia (2021). Within this context, we identified durability as a key factor in the decision-making of consumers. Not only does it serve as an effective instrument to position products as high-end, but it also aligns them with financial and environmental values (Cervellon and Shammas 2013; Sun, Bellezza, and Paharia 2021). Additionally, durability allows consumers to appreciate the long-term value of luxury purchases, further reinforcing its importance in purchasing decisions (Frederick et al. 2009).

Product lifespan enhancements (such as offering unconditional guarantees) can be perceived as investments that simultaneously address both economic and environmental considerations. Such features align closely with principles of sustainable consumption and motivate consumers toward such behaviors (Cervellon and Shammas 2013; Joy et al. 2012; Kapferer and Michaut-Denizeau 2020). This insight provides a valuable contribution to the research field, as it helps bridge the gap between utilitarian product attributes and sustainable consumption patterns.

While the significance of durability is evident, we recognize that a number of additional factors influence product selection in the context of premium items. Beyond financial considerations, such as price or budget constraints, psychological and emotional factors are pivotal determinants of consumer behavior. These include perceived quality, self-expression, or personal style (Cervellon and Shammas 2013; Kapferer and Michaut-Denizeau 2020; Wang et al. 2021).

Our research further revealed that while consumers generally recognize sustainability when prompted, more awareness is needed to translate this into more sustainable purchasing decisions. Environmental concerns often remain secondary to other motivations, with immediate and practical factors taking precedence in purchasing behavior (De Klerk, Kearns,

and Redwood 2019; Nguyen, Nguyen, and Nguyen 2019; Sun, Bellezza, and Paharia 2021). Building on this, it is notable that our study featured a considerably younger sample population compared to the EU's median age (27.0 vs. 44.5 years; Appendix B; Eurostat 2024). Therefore, our findings confirm prior observations by Bhattacharya and Sen (2004) and Heil and Langer (2017), who found that while younger generations consider sustainability in products, they are not necessarily inclined to pay a premium for such attributes. This suggests a potential avenue for future research whereby the present studies could be replicated with older cohorts to assess generational differences.

Our finding that authenticity influences consumers' purchase intentions offers further insights into the complex relationship between luxury branding and sustainability marketing. We proved the importance of this topic for future research as it touches upon crucial determinants such as trust and brand perception. In connection with consumers' personal beliefs, this finding is in line with research conducted by Irwin and Spira (1997) as well as Beckham and Voyer (2014). Consequently, luxury brands need to take these aspects into account when defining social responsibility strategies (Kunz, May, and Schmidt 2020).

Overall, our findings align closely with pre-existing research. While we identified durability and sustainability as essential factors in promoting sustainable consumption within the luxury sector, evidence suggests that consumers continue to prioritize other considerations (Ehrich and Irwin 2005; Gardetti and Torres 2013). This emphasizes the need for effectively addressing consumer priorities. Enhancing consumer education about the environmental impacts of their purchasing and consumption patterns could elevate the perceived significance of these factors. Such an approach offers a compelling counterpoint to fast fashion and resonates with the growing emphasis on sustainability, heightened environmental awareness, and the broader shift toward green initiatives.

6.2 Practical Implications

In order to formulate effective marketing strategies, management should take several practical implications into consideration. A fundamental step is ensuring that a brand's marketing efforts align with the company's overarching environmental strategy and the underlying questions of how the brand intends to position itself and how it wishes to be perceived by consumers within its target market. Given the increasing significance of sustainability, recognized as one of the most influential purchasing factors in the fashion industry (McKinsey & Company 2024), it is imperative for companies to integrate sustainability throughout their entire value chain. This integration extends beyond marketing communication to include earlier stages, such as production and logistics, as exemplified by brands prominent for their sustainable commitments, such as *Fjällräven* (2024b).

Brands should ensure that their marketing explicitly communicates sustainability attributes, fostering consumer awareness of factors like durability. Marketing campaigns should employ precise wording that highlights a product's quality and sustainable characteristics. For instance, *Fjällräven* (2024a) mentions durability not only in their detailed product descriptions but already prominently on their product listing pages, immediately drawing attention to this key attribute. By directing awareness to such qualities, consumers are more likely to engage in sustainable purchase behavior.

Another effective strategy involves offering features that enhance a product's lifecycle, thereby increasing its longevity and value for consumers. Companies could provide extended or unlimited guarantees, which signals both the brands' confidence in their product's quality and durability. This approach, commonly used by established eco-conscious brands like *Patagonia*, also proves effective for high-end luxury brands such as *Canada Goose*, as discussed in Study 2. By offering such assurances, brands provide not only environmental incentives but also functional value, which can justify premium pricing.

For these strategies to be effective, consumers must perceive them as authentic. Merely including sustainability claims in product descriptions may be insufficient to influence consumer preference and does not lead to a higher WTP for luxury goods. To ensure these claims translate into consumer action, companies must integrate their environmental commitments into their core brand identity (Henninger, Alevizou, and Oates 2016; Walker 2006). Achieving this requires addressing all aspects of the value chain, from sourcing sustainable raw materials to minimizing waste through care instructions and repair services.

In this context, transparency plays a pivotal role in fostering this perception of authenticity. Companies should actively communicate their tangible, sustainable practices to consumers. For example, the premium brand *Patagonia* provides detailed information for each product on "How it's made" and "Where it's made." This includes comprehensive data on the materials used, the certifications obtained, the suppliers involved, and the precise locations of the factories where the products are manufactured (Patagonia 2024).

Recognizing and evaluating authentic, sustainable practices in companies' offerings can be challenging from a consumer perspective. This difficulty is often compounded by limited knowledge of sustainability issues and a prevalent distrust rooted in widespread greenwashing within the fashion industry (Henninger, Alevizou, and Oates 2016). Such skepticism is particularly pronounced when higher prices are involved. To address these challenges, companies can take the initiative in educating consumers about the environmental impact of their products. While transparency regarding production processes and materials is essential, companies should also prioritize efforts to inform consumers about product care, typical product lifespans, and other related aspects. In this context, previous research highlights opportunities through educational initiatives such as tutorials or targeted advertising campaigns (Sun, Bellezza, and Paharia 2021).

However, these recommendations must be carefully balanced against financial

considerations. Developing educational advertising campaigns, offering lifetime guarantees, or providing free repair services entails substantial costs. Managerial decision-makers must evaluate these expenditures in relation to the potential for increased price acceptance as a means of offsetting them. Nevertheless, the potential for such initiatives to foster brand loyalty should not be underestimated. As the importance of sustainability will presumably continue to grow, companies that adopt proactive and authentic practices in this area are likely to secure lasting competitive advantages.

6.3 Limitations

In addition to study-specific constraints, several general limitations must be considered when interpreting the findings of this thesis.

First, the experimental design relies on hypothetical scenarios and a virtual shelf setup, which may not reflect actual consumer behavior. The actual purchasing behavior of consumers may be influenced by a number of factors, including the local conditions present in a physical shopping environment as well as in-store experiences, peer influence, and the consumers' financial circumstances or constraints. The *Attitude Behavior Gap* may play a role in this instance (Wiederhold and Martinez 2018), as consumers might indicate a preference for the sustainable option in a theoretical context but behave differently in practice.

Second, the study focuses exclusively on short-term consumer reactions immediately after exposure to sustainability claims. This approach does not account for potential long-term effects, such as the evolution of trust and purchase intent with repeated exposure, or how consumers assess the consistency between a brand's claims and actual practices over time. Examining these longitudinal dynamics would yield a more comprehensive understanding of the impact of sustainability messaging in the luxury sector.

Finally, the demographic characteristics of respondents limit the broader applicability

of the findings. For instance, a disproportionately high percentage of participants (92.2%) reside in Germany, making it challenging to generalize the conclusions to other countries with differing economic contexts (Appendix B). Consumers living under different economic conditions may exhibit distinct preferences and behaviors compared to the sampled population. Additionally, as previously mentioned, the respondents represent a relatively young population, with a median age of 27 years. Compared to this, the EU median age (44.5 years) is significantly higher, limiting our studies' generalizability to older generations, whose consumption patterns may differ significantly (Eurostat 2024b). Furthermore, there were notable differences between the educational profiles of our sample and that of the EU population. In 2023, 32.6% of EU residents had attained advanced levels of education (i.e., tertiary education), whereas 69.4% of our observation group reported holding a Bachelor's degree or higher (Appendix B; Eurostat 2024). Such differences in education levels could influence preferences and decision-making processes, as more educated consumers may make more informed or sustainability-conscious choices.

Despite these limitations, this thesis provides meaningful contributions to the study of consumer behavior in a luxury context. By addressing underexplored areas, the findings offer valuable insights and practical implications, which future research can build upon to further extend these results.

6.4 Concluding Remarks and Future Research Directions

The relationship between sustainable consumption and luxury purchases is multifaceted, and understanding it is crucial for both businesses and consumers. This study, grounded in an extensive review of prior literature and an empirical investigation employing an experimental survey design, offers a nuanced comprehension of this dynamic. We conclude that sustainability marketing within the luxury sector can serve as an effective mechanism for promoting sustainable consumption practices. Although sustainability emerged as a significant

factor recognized by consumers when appropriately framed, we acknowledge that its direct influence on purchasing decisions remains limited.

Based on four focused studies examining explicit marketing, product guarantees, sustainability framing, and sustainability claims and their impact on product preferences and choices, we observed diverse outcomes. The research revealed that explicit durability marketing for premium brands significantly enhances consumer preference for such products. However, only in the context of product guarantees were we able to identify significant indirect effects, leaving the underlying mechanisms of the remaining research areas needing to be clarified and warranting further exploration

We observed that explicit marketing strategies and product guarantees act as key drivers of product preference. Nevertheless, no substantial evidence was found to support consumers' increased WTP as a result of sustainability framing. Similarly, we did not observe adverse effects from varying intensities of sustainability claims in the luxury context. We suggest that marketers consider these findings when establishing communication strategies in this sector.

Methodologically, the empirical approach proved effective in capturing consumer behavior under various marketing conditions. Segmenting respondents into distinct groups enabled clear identification and differentiation of the efficacy of hypothesized marketing tools. The present study contributes to the existing discourse on the interplay between the seemingly contrasting areas of sustainable consumption and luxury purchasing. The evidence presented indicates that consumer behavior and perceptions can be shaped by eco-conscious communication.

However, in light of the limitations of this study, including the demographic disproportionality of the sample population and the insufficient capture of long-term effects, we propose the following avenues for future research. To enhance the generalizability of the

findings, it would be beneficial to broaden the scope of respondents and to undertake longitudinal studies to gain insight into the long-term effects of sustainability framing on brand identity and consumption behavior.

Moreover, a critical question remains: Are luxury brands truly more sustainable, or is this perception driven by superficial sustainability claims? Future research should delve deeper into actual sustainable practices within companies' supply chains. By fostering a more comprehensive understanding of this, consumers will be better equipped to make more informed choices, potentially driving shifts toward more sustainable consumption patterns in the premium market and beyond.

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Appendix

Appendix A – Experimental Survey Design

Appendix A.1 Survey Structure

Introduction

PLEASE SELECT YOUR PREFERRED LANGUAGE (ENGLISH / GERMAN) Thank you for participating in our survey for our master's thesis at Nova SBE! We aim to investigate consumer preferences in luxury / premium fashion. Completing the survey should take around 5-7 minutes. You will see four different products / scenarios. They are all independent from each other. Please review each product and its description very carefully, as you will be asked questions about them. We appreciate your participation! In case of any questions, please don't hesitate to contact us via 58883@novasbe.pt. All responses are collected anonymously and will remain confidential.

Additional information

In the following you will see different products from two fictitious brands:

Brand X – This is a premium brand known for high-quality materials and timeless design.
Brand Y – This is a mid-range brand known for its trendy designs and high accessibility (i.e., affordable, widely available).

ATTENTION: You cannot go back between pages, please read the descriptions carefully!

Section 1

In the following section, you will be shown two sweaters available for sale. Please take a moment to review each one carefully, as you will be asked to answer questions about them. Remember that you cannot go back between pages!

Participants saw product visualizations and descriptions for a premium and mid-range product

Question 1 – H1

Would you prefer to choose Brand X (€120) or Brand Y (€40)?

- 1 – Would definitely prefer Brand X (€120)
- 2
- 3
- 4
- 5
- 6
- 7 – Would definitely prefer Brand Y (€40)

Question 2 – H1

How durable do you believe the products are?

Sweater Brand X – €120 (1 – Not at all durable to 7 – Very durable)
Sweater Brand X – €40 (1 – Not at all durable to 7 – Very durable)

Section 2

In the following section, you will be shown two t-shirts available for sale. Please take a moment to review each one carefully, as you will be asked to answer questions about them. Remember that you cannot go back between pages!

Participants saw product visualizations and descriptions for a premium and mid-range product

Question 1 – H2

You have a budget of €60. Which of the following options would you choose if you had to select one?

- Buy <u>one</u> t-shirt of Brand X for €60
- Buy <u>three</u> t-shirts of Brand Y for €20 each

Question 2 – H2

In the previous question, how important was the consideration of durability in your decision?

- 1 – Not at all important
- 2
- 3
- 4
- 5
- 6
- 7 – Very important

Section 3

In the following section, you will be shown a jacket available for sale. Please take a moment to review it carefully, as you will be asked to answer questions about it. Remember that you cannot go back between pages!

Participants saw a product visualizations and description

Question 1 – H3

Based on the product description, how much are you willing to pay for this jacket? Please use the slider to indicate an amount between €100 and €1000.

Slider from €100 to €1000 with €100 interval steps

Question 2 – H3

Why did you choose the price you indicated for this jacket? Please select the most relevant reason(s) provided.

- Materials used
- Design and aesthetics
- Craftsmanship or quality of production
- Personal budget
- Prices of comparable products

- Brand reputation
- Perceived luxury or status associated with the product
- Sustainability features
- Environmental impact

Question 3 – H3

How likely are you to purchase this jacket based on the description you saw?

- 1 – Not likely at all
- 2
- 3
- 4
- 5
- 6
- 7 – Very likely

Question 4 – H3

How would you rate the overall value of this jacket, considering its ability to meet your needs or provide a solution (e.g., warmth, protection, style)?

- 1 – Very low value
- 2
- 3
- 4
- 5
- 6
- 7 – Very high value

Section 4

In the following section, you will be shown a pair of jeans available for sale. Please take a moment to review them carefully, as you will be asked to answer questions about them. Remember that you cannot go back between pages!

Participants saw a product visualizations and description

Question 1 – H4

How likely are you to purchase this product?

- 1 – Not likely at all
- 2
- 3
- 4
- 5
- 6
- 7 – Very likely

Question 2 – H4

To what extent did the sustainability claims in the product description influence your overall impression of the jeans?

- 1 – Not at all
- 2
- 3
- 4
- 5
- 6
- 7 – Very much

Question 3 – H4

How authentic (i.e., credible) do you find the sustainability claims in this product description?

- 1 – Not at all authentic
- 2
- 3
- 4
- 5
- 6
- 7 – Very authentic

Final Section

Shopping Behavior

The following question is about your usual shopping behavior. Please answer honestly. Which of the following descriptions fits you better?

- 1 – Tightwad (someone who has trouble spending money)
- 2
- 3
- 4
- 5
- 6
- 7 – Spendthrift (someone who has trouble limiting their spending)

Demographics

What is your individual monthly disposable income? (after taxes; incl. salary, alimony, family support, capital gains, pension, etc.)

Dropdown: Below €500; €501 to €1000; €1001 to €1500; €1501 to €2000; €2001 to €2500; €2501 to €3000; €3001 to €3500; €3501 to €4000; €4001 to €4500; €4501 to €5000; €5001 to €6000; €6001 to €7000; Above €7000

What is your gender?

- Male
- Female
- Non-binary
- Other
- Prefer not to say

What is your age?

Free text entry (only numerical values from 18 to 100)

What is the highest level of education you have completed?

- No formal education
- Secondary education (e.g., Highschool, GCSEs, A-Level, Hauptschule, Abitur) or equivalent
- Technical qualification (e.g., Apprenticeship) or equivalent
- Bachelor's degree or equivalent
- Master's degree or equivalent
- Doctoral degree or equivalent
- Other

Where is your primary country of residence?

Dropdown list with 197 countries

Appendix A.2 Product visualizations and descriptions

Appendix A.2.1 Study 1

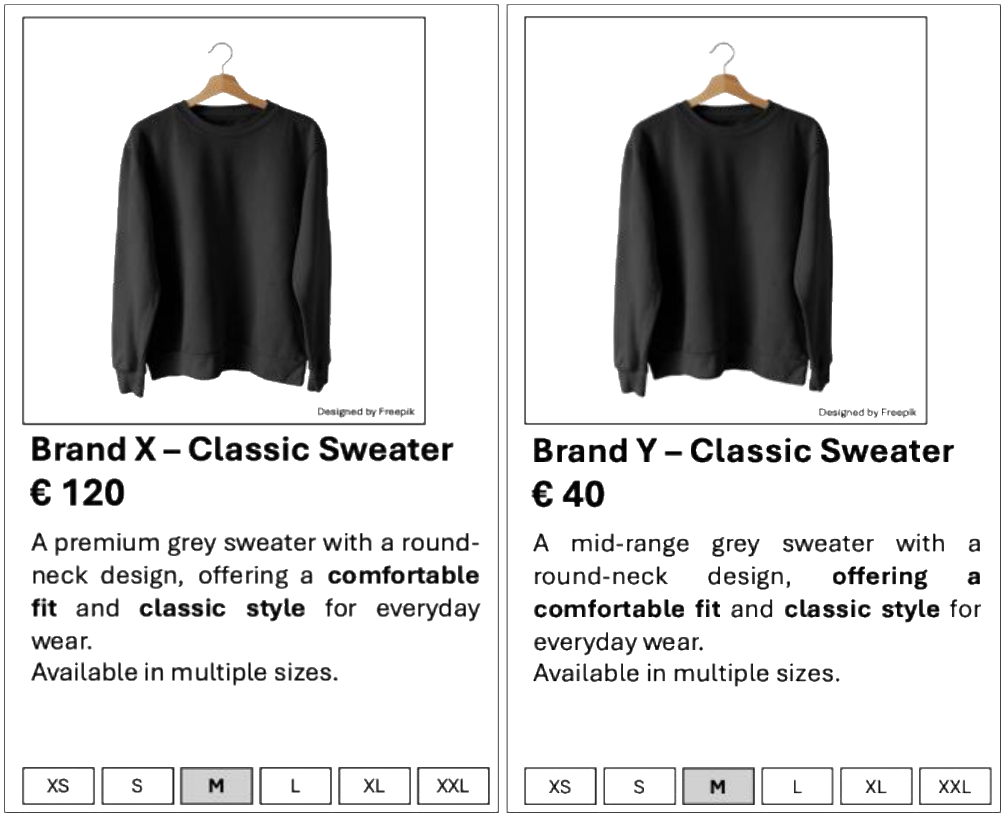

Figure 1 - Study 1: Control Group (implicit sustainability marketing)

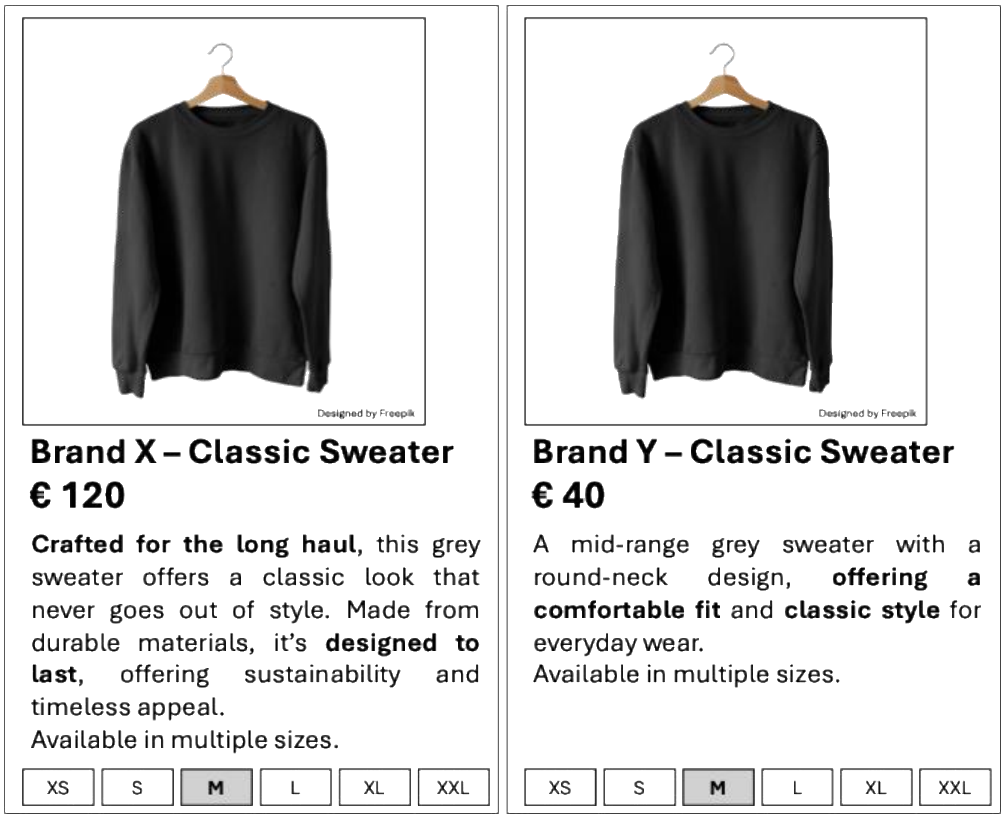

Figure 2 - Study 1: Test Group (explicit sustainability marketing)

Appendix A.2.2 Study 2

Figure 3 - Study 2: Control Group (no extended guarantees)

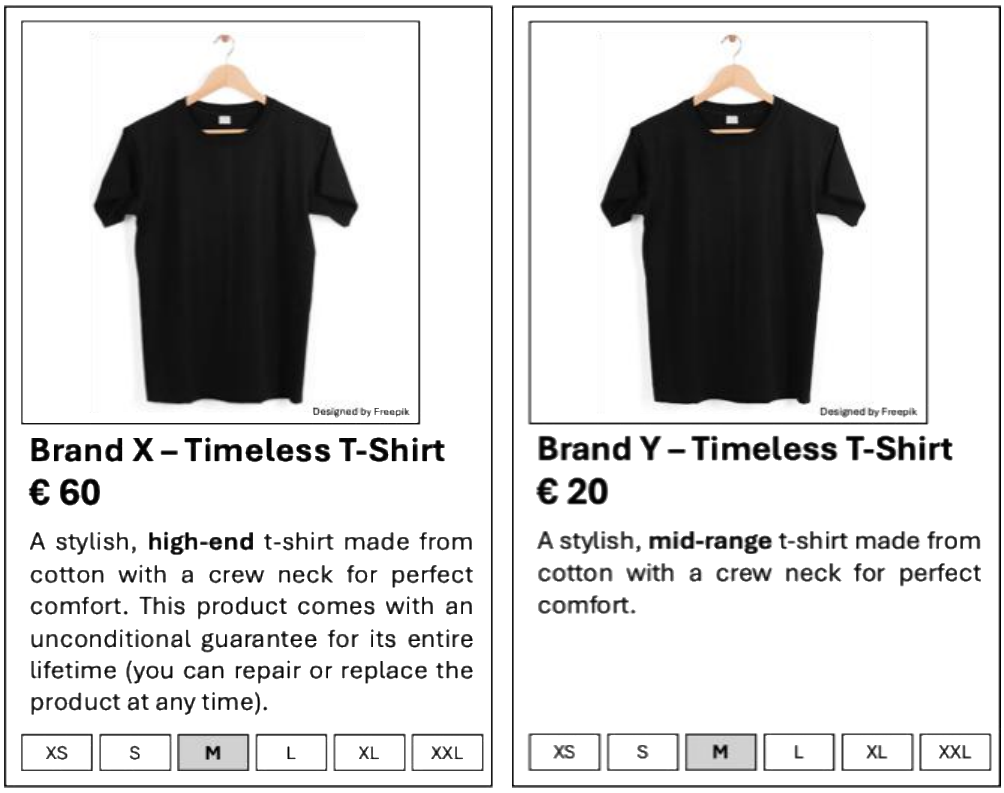

Figure 4 - Study 2: Test Group (unconditional product guarantee)

Appendix A.2.3 Study 3

Figure 5 - Study 3: Control Group (traditional luxury framing)

Brand X – Unisex Jacket

This luxury jacket is crafted from the finest eco-friendly materials, designed for those who value sustainability and refined style. With a modern fit, it offers a balance of contemporary fashion and ethical luxury. Every detail, from its recycled fabrics to its eco-conscious production, reflects a commitment to both quality and the environment. This jacket is perfect for individuals who prioritize sustainability without compromising on sophistication, making it a distinguished, responsible choice for any wardrobe. A true reflection of ethical luxury, it offers an elegant, polished look with a reduced environmental impact.

Figure 6 - Study 3: Test Group (sustainable luxury framing)

Appendix A.2.4 Study 4

Brand X – Jeans

€ 130

Crafted from a durable cotton blend, these jeans are designed for **comfort and durability**. Made to retain their shape and color over time, they are a conscious choice for those who value both quality and style. With attention to sustainable practices, these jeans are **probably the best choice** for those looking for a **responsible, premium wardrobe staple**.

Main fabric: Organic cotton blend (70% organic cotton, 30% regular cotton)

Lining: Partially recycled polyester

Dyeing process: Low impact, environmentally friendly dyes

Made in: EU (Produced under fair working conditions)

Delivery: Free standard shipping

Figure 7 - Study 4: Control Group (moderate sustainability claims)

Brand X – Jeans

€ 130

Made entirely from recyclable materials, these jeans are **100% environmentally friendly** and **carbon neutral**. Designed to retain their perfect fit and rich color through countless wears and washes, they resist fading and stretching, ensuring they look as good as new after each wear. Produced in line with the highest sustainability standards, these are the **best sustainable jeans** on the market, designed for those who value both **sustainability** and **quality**.

Main fabric: 100% recyclable materials

Lining: 100% recycled polyester

Dyeing process: Non-toxic, eco-friendly dyes

Made in: EU (Produced under ethical labor practices and strict environmental standards)

Delivery: Free standard shipping

Figure 8 - Study 4: Test Group (excessive sustainability claims)

Appendix A.3 Survey Flow

Qualtrics Survey Flow
Introduction
Section 1
Introduction Section 1
Block Randomizer 1 – Evenly Present Elements
Group: Test
If: Device Type is Mobile
Test Premium Product (Mobile) – H1
Test Mid-Range Product (Mobile) – H1
If: Device Type is Not Mobile
Test Premium Product – H1
Test Mid-Range Product – H1
Question 1 – H1
Group: Control
If: Device Type is Mobile
Control Premium Product (Mobile) – H1
Control Mid-Range Product (Mobile) – H1
If: Device Type is Not Mobile
Control Premium Product – H1
Control Mid-Range Product – H1
Question 1 – H1
Question 2 – H1
Section Break 1>2
Introduction Section 2
Block Randomizer 1 – Evenly Present Elements
Group: Control
Block Randomizer 2 – Evenly Present Elements
Group: Control / Premium
If: Device Type is Mobile
Control Premium Product (Mobile) – H2
If: Device Type is Not Mobile
Control Premium Product – H2
Group: Control / Mid-Range
If: Device Type is Mobile
Control Mid-Range Product (Mobile) – H2
If: Device Type is Not Mobile
Control Mid-Range Product – H2
Question 1 – H2
Group: Test
Block Randomizer 2 – Evenly Present Elements
Group: Test / Premium
If: Device Type is Mobile
Test Premium Product (Mobile) – H2
If: Device Type is Not Mobile
Test Premium Product – H2

Qualtrics Survey Flow
Group: Test / Mid-Range
If: Device Type is Mobile
Test Mid-Range Product (Mobile) – H2
If: Device Type is Not Mobile
Test Mid-Range Product – H2
Question 1 – H2
Question 2 – H2
Section Break 2>3
Introduction Section 3
Block Randomizer 1 – Evenly Present Elements
Group: Control
If: Device Type is Mobile
Control Product (Mobile) – H3
If: Device Type is Not Mobile
Control Product – H3
Question 1 – H3
Group: Test
If: Device Type is Mobile
Test Product (Mobile) – H3
If: Device Type is Not Mobile
Test Product – H3
Question 1 – H3
Question 2 – H3
Question 3 – H3
Question 4 – H3
Section Break 3>4
Introduction Section 4
Block Randomizer 1 – Evenly Present Elements
Group: Control
If: Device Type is Mobile
Control Product (Mobile) – H4
If: Device Type is Not Mobile
Control Product – H4
Question 1 – H4
Question 2 – H4
Group: Test
If: Device Type is Mobile
Test Product (Mobile) – H4
If: Device Type is Not Mobile
Test Product – H4
Question 1 – H4
Question 2 – H4
Question 3 – H4
Section Break 4>End
General Questions

Table 1 - Survey Flow in Qualtrics Platform (H1 = Study 1; H2 = Study 2; H3 = Study 3; H4 = Study 4)

Appendix B – Respondent Characteristics and Demographics

Appendix B.1: Frequency Statistics for Income

Income

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	€1001 to €1500	33	18.3	18.3	18.3
	€1501 to €2000	16	8.9	8.9	27.2
	€2001 to €2500	18	10.0	10.0	37.2
	€2501 to €3000	18	10.0	10.0	47.2
	€3001 to €3500	19	10.6	10.6	57.8
	€3501 to €4000	14	7.8	7.8	65.6
	€4001 to €4500	8	4.4	4.4	70.0
	€4501 to €5000	8	4.4	4.4	74.4
	€5001 to €6000	3	1.7	1.7	76.1
	€501 to €1000	26	14.4	14.4	90.6
	€6001 to €7000	2	1.1	1.1	91.7
	Above €7000	9	5.0	5.0	96.7
	Below €500	6	3.3	3.3	100.0
	Total	180	100.0	100.0	

Table 2 - Frequency Statistics for Income Distribution of Sample Population

Appendix B.2 Frequency Statistics for Gender

Gender

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	85	47.2	47.2	47.2
	Male	92	51.1	51.1	98.3
	Non-binary	1	.6	.6	98.9
	Prefer not to say	2	1.1	1.1	100.0
	Total	180	100.0	100.0	

Table 3 - Frequency Statistics for Gender Distribution of Sample Population

Appendix B.3 Frequency Statistics for Age

Statistics

Age		
N	Valid	180
	Missing	0
Mean		33.91
Median		27.00
Std. Deviation		12.825
Minimum		19
Maximum		82

Table 4 - Frequency Statistics for Age Distribution of Sample Population

Appendix B.4 Frequency Statistics for Education

Education

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Bachelor's degree or equivalent	60	33.3	33.3	33.3
	Doctoral degree or equivalent	7	3.9	3.9	37.2
	Master's degree or equivalent	58	32.2	32.2	69.4
	No formal education	1	.6	.6	70.0
	Secondary education (e.g., Highschool, GCSEs, A-Level, Hauptschule, Abitur) or equivalent	23	12.8	12.8	82.8
	Technical qualification (e.g., Apprenticeship) or equivalent	31	17.2	17.2	100.0
	Total	180	100.0	100.0	

Table 5 - Frequency Statistics for Education Distribution of Sample Population

Appendix B.5 Frequency Statistics for Country

Country

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Austria	1	.6	.6	.6
	Belgium	1	.6	.6	1.1
	Germany	166	92.2	92.2	93.3
	Italy	3	1.7	1.7	95.0
	Netherlands	3	1.7	1.7	96.7
	Portugal	1	.6	.6	97.2
	Switzerland	5	2.8	2.8	100.0
	Total	180	100.0	100.0	

Table 6 - Frequency Statistics for Country of Residence Distribution of Sample Population

Appendix C – Results Study 3

Appendix C.1 Study 3: Descriptive Statistics

Appendix C.1.1 – Frequency Statistics for Experimental Condition

		Frequency	Percent	Valid Percent
	Control	92	51.1	51.1
	Test	88	48.9	48.9
	Total	180	100.0	100.0

Table 7 – Study 3: Frequency statistics for experimental condition (Control vs. Test Group)

Appendix C.1.2 – Frequencies for Question 1 (Willingness to Pay)

Question 1 – Control Group (=0)

N	Valid	92
	Missing	0
Mean		277.02
Median		250.00
Std. Deviation		133.260
Skewness		.810
Std. Error of Skewness		.251
Kurtosis		.228
Std. Error of Kurtosis		.498
Minimum		100
Maximum		700
Percentiles	25	179.25
	50	250.00
	75	354.50

Table 8 – Study 3: Frequency statistics for WTP (control group)

Question 1 – Test Group (=1)

N	Valid	88
	Missing	0
Mean		264.94
Median		245.00
Std. Deviation		150.711
Skewness		2.306
Std. Error of Skewness		.257
Kurtosis		7.706
Std. Error of Kurtosis		.508
Minimum		100
Maximum		1000
Percentiles	25	176.25
	50	245.00
	75	317.75

Table 9 – Study 3: Frequency statistics for WTP (test group)

Appendix C.1.3 – Frequencies for Question 2 (Reasons Price Indicated)

Reasons Frequencies

		Responses		
		N	Percent	Percent of Cases
Reasons_WTP[a]	Materials used	76	13.6%	42.2%
	Design and aesthetics	75	13.4%	41.7%
	Craftsmanship or quality of production	100	17.9%	55.6%
	Personal budget	95	17.0%	52.8%
	Comparable products	64	11.4%	35.6%
	Brand reputation	28	5.0%	15.6%
	Perceived luxury or status associated with the product	34	6.1%	18.9%
	Sustainability features	52	9.3%	28.9%
	Environmental impact	36	6.4%	20.0%
Total		560	100.0%	311.1%

a. Dichotomy group tabulated at value 1.

Table 10 – Study 3: Frequency statistics for reasons behind WTP (question 2)

Appendix C.1.4 – Frequencies for Question 3 (Purchase Intent)

Question 3 – Control Group (=0)

N	Valid	92
	Missing	0
Mean		3.47
Median		4.00
Std. Deviation		1.501
Skewness		-.085
Std. Error of Skewness		.251
Kurtosis		-.712
Std. Error of Kurtosis		.498
Minimum		1
Maximum		7
Percentiles	25	2.00
	50	4.00
	75	5.00

Table 11 – Study 3: Frequency statistics for purchase intent (control group)

Question 3 – Test Group (=1)

N	Valid	88
	Missing	0
Mean		3.40
Median		4.00
Std. Deviation		1.739
Skewness		-.046
Std. Error of Skewness		.257
Kurtosis		-1.122
Std. Error of Kurtosis		.508
Minimum		1
Maximum		7
Percentiles	25	2.00
	50	4.00
	75	5.00

Table 12 – Study 3: Frequency statistics for purchase intent (test group)

Appendix C.1.5 – Frequencies for Question 4 (Overall Value)

Question 4 – Control Group (=0)

N	Valid	92
	Missing	0
Mean		4.59
Median		5.00
Std. Deviation		1.150
Skewness		-.594
Std. Error of Skewness		.251
Kurtosis		.507
Std. Error of Kurtosis		.498
Minimum		1
Maximum		7
Percentiles	25	4.00
	50	5.00
	75	5.00

Table 13 – Study 3: Frequency statistics for overall value (control group)

Question 4 – Test Group (=1)

N	Valid	88
	Missing	0
Mean		4.69
Median		5.00
Std. Deviation		1.359
Skewness		-.518
Std. Error of Skewness		.257
Kurtosis		.538
Std. Error of Kurtosis		.508
Minimum		1
Maximum		7
Percentiles	25	4.00
	50	5.00
	75	5.75

Table 14 – Study 3: Frequency statistics for overall value (test group)

Appendix C.2 Study 3: Chi-Square Tests

Appendix C.2.1 – Sustainability Features

Count

		Sustainability features		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	78	14	92
	1	50	38	88
Total		128	52	180

Table 15 – Study 3: Distribution of choices for "Sustainability features" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	17.121[a]	1	<.001		
Continuity Correction[b]	15.787	1	<.001		
Likelihood Ratio	17.594	1	<.001		
Fisher's Exact Test				<.001	<.001
Linear-by-Linear Association	17.026	1	<.001		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 25.42.

b. Computed only for a 2x2 table

Table 16 – Study 3: Chi-Square Test results for "Sustainability features"

Appendix C.2.2 – Environmental Impact

Count

		Environmental impact		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	85	7	92
	1	59	29	88
Total		144	36	180

Table 17 – Study 3: Distribution of choices for "Environmental impact" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	18.059[a]	1	<.001		
Continuity Correction[b]	16.510	1	<.001		
Likelihood Ratio	19.071	1	<.001		
Fisher's Exact Test				<.001	<.001
Linear-by-Linear Association	17.959	1	<.001		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 17.60.

b. Computed only for a 2x2 table

Table 18 – Study 3: Chi-Square Test results for "Environmental impact"

Appendix C.2.3 – Craftsmanship or Quality of Production

Count

		Craftsmanship or quality of production		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	34	58	92
	1	46	42	88
Total		80	100	180

Table 19 – Study 3: Distribution of choices for "Craftsmanship or quality of production" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	4.273[a]	1	.039		
Continuity Correction[b]	3.675	1	.055		
Likelihood Ratio	4.289	1	.038		
Fisher's Exact Test				.051	.027
Linear-by-Linear Association	4.249	1	.039		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 39.11.

b. Computed only for a 2x2 table

Table 20 – Study 3: Chi-Square Test results for "Craftsmanship or quality of production"

Appendix C.2.4 – Personal Budget

Count

		Personal budget		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	37	55	92
	1	48	40	88
Total		85	95	180

Table 21 – Study 3: Distribution of choices for "Personal budget" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	3.705[a]	1	.054		
Continuity Correction[b]	3.152	1	.076		
Likelihood Ratio	3.717	1	.054		
Fisher's Exact Test				.073	.038
Linear-by-Linear Association	3.684	1	.055		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 41.56.

b. Computed only for a 2x2 table

Table 22 – Study 3: Chi-Square Test results for "Personal budget"

Appendix C.2.5 – Materials used

Count

		Materials used		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	55	37	92
	1	49	39	88
Total		104	76	180

Table 23 – Study 3: Distribution of choices for "Materials used" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.310[a]	1	.578		
Continuity Correction[b]	.165	1	.685		
Likelihood Ratio	.310	1	.578		
Fisher's Exact Test				.651	.342
Linear-by-Linear Association	.308	1	.579		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 37.16.

b. Computed only for a 2x2 table

Table 24 – Study 3: Chi-Square Test results for "Materials used"

Appendix C.2.6 – Brand reputation

Count

		Brand reputation		
		Not chosen	Chosen	Total
Group (Control=0; Test=1)	0	77	15	92
	1	75	13	88
Total		152	28	180

Table 25 – Study 3: Distribution of choices for "Brand reputation" by group

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.080[a]	1	.777		
Continuity Correction[b]	.006	1	.938		
Likelihood Ratio	.080	1	.777		
Fisher's Exact Test				.839	.470
Linear-by-Linear Association	.080	1	.777		
N of Valid Cases	180				

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 13.69.

b. Computed only for a 2x2 table

Table 26 – Study 3: Chi-Square Test results for "Brand reputation"

Appendix C.3 Study 3: Independent Samples t-Tests

Appendix C.3.1 – Question 1 (Willingness to Pay)

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Q1	Equal variances assumed	.205	.651	.570	178	.285	.569	12.079	21.182	-29.721	53.878
	Equal variances not assumed			.569	173.182	.285	.570	12.079	21.240	-29.844	54.001

Table 27 – Study 3: Independent samples t-test results for WTP (question 1), including Levene's Test for Equality of Variances and confidence intervals

Independent Samples Effect Sizes

				95% Confidence Interval	
		Standardizer[a]	Point Estimate	Lower	Upper
Q1	Cohen's d	142.057	.085	-.207	.377
	Hedges' correction	142.659	.085	-.207	.376
	Glass's delta	150.711	.080	-.213	.372

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control (i.e., the second) group.

Table 28 – Study 3: Effect sizes for independent samples t-test on WTP (question 1)

Appendix C.3.2 – Question 3 (Purchase Intent)

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Q3	Equal variances assumed	5.255	.023	.288	178	.387	.774	.070	.242	-.407	.547
	Equal variances not assumed			.287	171.762	.387	.774	.070	.243	-.409	.548

Table 29 – Study 3: Results of independent samples t-test for purchase intent (question 3), including Levene's Test for Equality of Variances and confidence intervals

Independent Samples Effect Sizes

				95% Confidence Interval	
		Standardizer[a]	Point Estimate	Lower	Upper
Q3	Cohen's d	1.621	.043	-.249	.335
	Hedges' correction	1.628	.043	-.248	.334
	Glass's delta	1.739	.040	-.252	.332

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control (i.e., the second) group.

Table 30 – Study 3: Effect sizes for independent samples t-test on purchase intent (question 3)

Appendix C.3.3 – Question 4 (Overall Value)

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means							
						Significance				95% Confidence Interval of the Difference	
		F	Sig.	t	df	One-Sided p	Two-Sided p	Mean Difference	Std. Error Difference	Lower	Upper
Q4	Equal variances assumed	1.312	.254	-.567	178	.286	.571	-.106	.187	-.476	.263
	Equal variances not assumed			-.565	170.496	.286	.573	-.106	.188	-.477	.265

Table 31 – Study 3: Independent samples t-test results for overall value (question 4), including Levene's Test for Equality of Variances and confidence intervals

Independent Samples Effect Sizes

				95% Confidence Interval	
		Standardizer[a]	Point Estimate	Lower	Upper
Q4	Cohen's d	1.256	-.085	-.377	.208
	Hedges' correction	1.262	-.084	-.375	.207
	Glass's delta	1.359	-.078	-.370	.215

a. The denominator used in estimating the effect sizes.

Cohen's d uses the pooled standard deviation.

Hedges' correction uses the pooled standard deviation, plus a correction factor.

Glass's delta uses the sample standard deviation of the control (i.e., the second) group.

Table 32 – Study 3: Effect sizes for independent samples t-test on overall value (question 4)

Appendix C.4 Study 3: PROCESS Model 4 – Mediator Analysis

Model Summary

R	R-sq	MSE	F	df1	df2	p
.3248	.1055	18186.8775	10.4353	2.000	177.0000	.0001

Table 68 – Study 3: Summary of mediator analysis in PROCESS

Direct Effect of Group Framing (traditional or sustainable) on WTP

Effect	SE	t	p	LLCI	ULCI
-15.9486	20.1267	-,7924	.4292	-55.6678	23.7705

Table 69 – Study 3: PROCESS Model 4 Mediation Analysis –Direct effect(s) of group framing on WTP

Indirect Effect(s) of Group Framing (traditional or sustainable) on WTP

	Effect	BootSE	BootLLCI	BootULCI
Overall Value	3.8701	7.2333	-9.7473	19.4150

Table 70 – Study 3: PROCESS Model 4 Mediation Analysis – Indirect effect(s) of group framing on WTP

Appendix C.5 Study 3: Hierarchical Multiple Regression

Variables Entered/Removed[a]

Model	Variables Entered	Variables Removed	Method
1	Group (Control=0; Test=1)[b]	.	Enter
2	Q4[b]	.	Enter

a. Dependent Variable: Q1 (WTP)

b. All requested variables entered.

Table 71 – Study 3: Variables entered in hierarchical regression models

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.043[a]	.002	-.004	142.057	.002	.325	1	178	.569
2	.325[b]	.105	.095	134.859	.104	20.510	1	177	<.001

a. Predictors: (Constant), Group (Control=0; Test=1)

b. Predictors: (Constant), Group (Control=0; Test=1), Q4

Table 72 – Study 3: Model Summary for hierarchical regression

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	6561.878	1	6561.878	.325	.569[b]
	Residual	3592084.672	178	20180.251		
	Total	3598646.550	179			
2	Regression	379569.234	2	189784.617	10.435	<.001[c]
	Residual	3219077.316	177	18186.877		
	Total	3598646.550	179			

a. Dependent Variable: Q1

b. Predictors: (Constant), Group (Control=0; Test=1)

c. Predictors: (Constant), Group (Control=0; Test=1), Q4

Table 73 – Study 3: ANOVA results for hierarchical regression models on WTP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95,0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	277.022	14.810		18.704	<.001	247.795	306.248		
	Group (Control=0; Test=1)	-12.079	21.182	-.043	-.570	.569	-53.878	29.721	1.000	1.000
2	(Constant)	109.907	39.489		2.783	.006	31.978	187.836		
	Group (Control=0; Test=1)	-15.949	20.127	-.056	-.792	.429	-55.668	23.770	.998	1.002
	Q4	36.433	8.045	.322	4.529	<.001	20.557	52.308	.998	1.002

a. Dependent Variable: Q1

Table 74 – Study 3: Coefficients for hierarchical regression models on WTP

Appendix C.6 Study 3: Correlation

Correlations

			Q1	Q3	Q4
Spearman's rho	Question 1	Correlation Coefficient	1.000	.303**	.359**
		Sig. (2-tailed)	.	<.001	<.001
		N	180	180	180
	Question 3	Correlation Coefficient	.303**	1.000	.554**
		Sig. (2-tailed)	<.001	.	<,001
		N	180	180	180
	Question 4	Correlation Coefficient	.359**	.554**	1.000
		Sig. (2-tailed)	<.001	<.001	.
		N	180	180	180

**. Correlation is significant at the 0.01 level (2-tailed).

Table 75 – Study 3: Spearman's correlation analysis of key variables (WTP, Purchase Intent, and Perceived Value)

Confidence Intervals of Spearman's rho

	Spearman's rho	Significance(2-tailed)	95% Confidence Intervals (2-tailed)[a,b]	
			Lower	Upper
Q1 - Q3	.303	<.001	.160	.434
Q1 - Q4	.359	<.001	.221	.484
Q3 - Q4	.554	<.001	.441	.651

a. Estimation is based on Fisher's r-to-z transformation.

b. Estimation of standard error is based on the formula proposed by Fieller, Hartley, and Pearson.

Table 76 – Study 3: Confidence intervals for Spearman's correlation coefficients