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Old Clothes, New Cravings?
Exploring the Impact of
Materialism on Consumers'
Valuations of New versus
Second-hand Clothing

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Abstract

Title: Old Clothes, New Cravings?

Exploring the Impact of Materialism on Consumer's Valuations of New versus Second-hand Clothing

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This dissertation investigates how materialism influences consumers' valuations and purchasing behavior of new versus second-hand clothing, with a focus on sustainability. An experimental study tested the effect of clothing type (new vs. second-hand) on consumer's valuations (purchasing intention, willingness to pay, and perceived quality). The role of ethical behavior was also examined, with an emphasis on how ethical concerns, specifically sustainability, mediate the relationship between clothing type and consumers' valuations. Further, the study evaluated how materialism influences consumers' valuations and acts as a moderator in the relationship between clothing type and consumers' valuations. It also investigated materialism's impact on second-hand consumption motivations, such as overall willingness to consume, guilt-free, and cost savings consumption.

Findings show that second-hand clothing was perceived as having higher quality and generated greater purchase intentions than new clothing, though consumers were less willing to pay for second-hand items. Ethical behavior partially mediated the relationship between clothing type and willingness-to-pay, with ethical consumers more willing to pay a premium for second-hand clothes. However, neither quality perceptions nor purchase intention were impacted by ethical behavior. Materialism moderated the relationship between type of clothing and purchase intention, with higher degrees of materialism linked to higher purchase intention for second-hand clothing and lower intention for new clothing. No significant interaction between clothing type and materialism influenced consumers' quality perception or willingness to pay. Finally, materialism was associated with increased overall consumption, driven by motivations like guilt-free and low cost consumption.

Keywords: Second-hand Clothing, New Clothing, Materialism, Ethical behavior, Purchasing Intention, Willingness-to-pay, Perceived Quality, Secondhand Shopping Motivations, Guilt-Free Consumption, Low-Cost Consumption

Resumo

Título: Old Clothes, New Cravings?

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Esta dissertação analisa como o materialismo afeta as avaliações e o comportamento de compra dos consumidores em relação a roupas novas e de segunda mão, com ênfase na sustentabilidade. Um estudo experimental foi realizado para investigar o impacto do tipo de roupa (nova vs. segunda mão) nas avaliações dos consumidores (intenção de compra, disposição a pagar e qualidade percebida). Também foi analisado como os comportamentos éticos, particularmente a sustentabilidade, mediam essa relação. Além disso, o estudo explorou se o materialismo atua como moderador na relação entre o tipo de roupa e as avaliações dos consumidores. Também analisou o impacto do materialismo nas motivações para o consumo de segunda mão, como a disposição geral para consumir, a diminuição de culpa ao comprar e preços mais baixos.

Os resultados mostram que as roupas de segunda mão foram percebidas como de maior qualidade e geraram maior intenção de compra do que roupas novas, embora os consumidores estivessem menos dispostos a pagar por elas. O comportamento ético mediou parcialmente a relação entre o tipo de roupa e a disposição a pagar, com consumidores éticos mais dispostos a pagar um valor premium por roupas de segunda mão. No entanto, percepções de qualidade e intenções de compra não foram impactadas pelo comportamento ético. Por fim, o materialismo foi associado ao aumento do consumo geral, impulsionado por poupança de custos e consumo sem culpa, confirmando um efeito de rebound no qual consumidores materialistas compram mais ao optar por roupas usadas.

Palavras-chave: Roupas de Segunda Mão, Roupas Novas, Materialismo, Comportamento Ético, Intenção de Compra, Disposição a Pagar, Qualidade Percebida, Motivações para Compra de Segunda Mão, Consumo Sem Culpa, Consumo de Baixo Custo

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1. Introduction

1.1 Problem Definition and Relevance

The global fashion industry is the second-largest environmental polluter in the world (Bailey et al., 2022). Accounting for over 4% of global greenhouse gas emissions and contributing to 20% of global water waste (Sun et al., 2021), the fashion industry is still expected to show an approximately annual growth rate of 9% until 2029 (Statista, 2024a). According to the Ellen MacArthur Foundation (2021), from 2000 to 2015, clothing sales and production nearly doubled due to the fast fashion trend, while the utilization rate decreased to 36% (Ellen MacArthur Foundation, 2021). The two major problems of the fashion industry are end-of-life and waste (Ellen MacArthur Foundation, 2021). For example, in North America, 37kg of textiles are consumed per person annually (Adamkiewicz et al., 2021). Additionally, 73% of discarded clothing is either landfilled or incinerated, despite over 75% of these items still being wearable. This is mostly caused by the rapid increase in consumption, as over the past 15 years, clothing consumption per person has increased almost 50% (Ellen MacArthur Foundation, 2021). This problem is made worse by the fact that people use their clothes considerably less frequently, most clothes are only worn seven or eight times on average before being discarded (Soyer & Dittrich, 2021). Worldwide, clothing is worn half as much as they used to be and up to 40% of discarded items have never been worn (World Bank, 2019).

In response to the environmental damage, the fashion industry was forced to implement several changes towards more business models that are more sustainable and circular in nature (Caniato et al., 2012). Both researchers and practitioners are paying increased attention to environmental sustainability as they face the challenge of balancing environmental, societal, and business needs (Clarke & Clegg, 2000). At the same time, consumers became increasingly more conscious of the negative effect that unmeasured consumption may have on the planet and society (Belk, 2014). Approximately 62% of fashion consumers expect companies to take more responsibility for the environment and integrate sustainability, and fair employment in their business strategies (Barton et al., 2021). In response, new alternatives have emerged in the market, including collaborative consumption models (Belk, 2014).

Collaborative consumption (CC) models are seen as a powerful way to help reduce the environmental impact of the clothing industry (Park & Armstrong, 2019). The global market for shared clothing is projected to grow at a CAGR of 10.5% from 2019 to 2025, reaching a

value of \$7 billion by 2025 (Statista, 2020). Consequently, CC models are becoming increasingly significant in the fashion industry, making this trend impossible to overlook.

The second-hand business model is one form of CC model that increases environmental awareness by increasing the lifespan of clothes and garments with ownership distributing by reselling them (Ritter & Schanz, 2019). It is gaining significant popularity and experiencing rapid growth, with expectations to increase 77.8% by 2028 (Thomas & Thomas, 2024). It is projected to grow three times faster on average than the overall fashion market (Thomas & Thomas, 2024).

However, adopting second-hand shopping could offer both a challenge and an opportunity. It is generally a more environmentally friendly option than making new purchases because it reuses existing items (Ritter & Schanz, 2019). On the other hand, second-hand items' lower cost and environmental benefits could encourage materialistic consumers to shop even more than before (even if it is pre-owned clothes). Second-hand shopping could enable continued high consumption by offering materialistic consumers a justification for frequent purchases, framing it as a guilt-free and sustainable alternative without addressing the root cause of overconsumption. Materialism is defined as “a value that reflects a focus on wealth and owning material objects in contrast to a focus on spiritual, emotional, or intellectual well-being” (Workman & Lee, 2010, p.51). Materialistic people frequently develop an obsession with obtaining things, devoting their time and money to purchases in the hope that these acquisitions would be a source of quality of life, happiness, and social status (Richins & Dawson, 1992). Therefore, this behavior results in impulsive buying and the continuous accumulation of possessions, reinforcing overconsumption (Pupelis & Šeinauskienė, 2023).

Therefore, despite second-hand shopping being a positive aspect for the environment, it can also bring challenges: the relationship between materialism and the rise of second-hand shopping, particularly how it impacts purchasing intentions, willingness to pay, and overall consumption levels, with varying results reported across studies.

Specifically, this research examines the relationship between materialism and second-hand consumption behavior, with an emphasis on how second-hand shopping affects consumers' valuations like perceived quality, purchase intentions, and willingness to pay. It also investigates whether materialistic inclinations raise consumption levels generally for reasons such as guilt-reduction and affordability, pointing out possible rebound effects that could undermine the environmental benefits of second-hand shopping.

Based on the aforementioned reasoning, the following chapter addresses the research objectives, and questions.

1.2 Research Objective and Questions

Consumers need to adopt more environmentally friendly habits in the modern world, particularly when it comes to purchasing clothes. The rise in second-hand shopping offers a way to decrease the garment industry's environmental effect by extending the lifespan of clothing. Even though purchasing used goods has grown in popularity globally, much remains unknown about how it influences consumers' valuations, consumption habits, and views of various consumer types, which leads to the first research question:

RQ1: How does the type of clothing (new vs. second-hand) influence consumers' valuations, including purchasing intentions, willingness to pay (WTP), and perceived quality?

As consumers increasingly prioritize sustainability and ethical principles, these considerations may influence how they assess different types of clothing. Given the rising popularity of second-hand shopping as an alternative to fast fashion, it can be interesting to look into how ethical behavior affects consumers' valuations of new versus second-hand clothing. This leads to the second research question:

RQ2: How does ethical behavior influence consumers' valuations of new versus second-hand clothing, such as purchasing intentions, willingness to pay (WTP), and perceived quality?

Research on consumption behavior shows that personal values significantly influence purchasing decisions and preferences (Vinson et al., 1977). Some individuals, particularly those with high levels of materialism, prioritize acquiring and valuing possessions as a means to achieve happiness, status, and success (Richins & Dawson, 1992). This behavior often drives frequent purchases and a preference for new items. Given the rise of second-hand shopping as a sustainable alternative, it is important to evaluate if materialistic individuals would be willing to adopt this practice and how their materialistic inclinations affect their consumers' valuations. This consideration leads to the third research question:

RQ3: How does materialism affect consumers' valuations of new vs. second-hand clothes?

While second-hand shopping is often viewed as a sustainable alternative, its role among materialistic individuals remains unclear. It is important to understand whether materialistic consumers can replace new clothing purchases with second-hand alternatives or if they instead use second-hand shopping as an excuse to justify even more frequent purchases, ultimately increasing their overall consumption levels. These considerations lead to the fourth research question:

RQ4: Does the level of materialism lead individuals to increase second-hand consumption levels by purchasing second-hand clothing? If yes, what motivates this behavior?

Answering these research questions is crucial for fashion brands, marketers, and second-hand businesses to understand consumer behavior and motivations. This study explains how second-hand shopping and materialism influence consumers' valuations and behavior, supporting efforts to promote sustainable fashion practices and reduce overconsumption.

1.3 Thesis Structure

The first chapter introduced the underlying problem and defined the research questions. An overview of the existing scientific literature on the topics of sustainability, circular business models and materialism's role in consumption behavior is then provided. Furthermore, a set of hypotheses and conceptual Framework are proposed. Chapter four then describes the research methodology followed and data analysis section, along with the findings and analysis of the research. The conclusion synthesizes key insights, practical and theoretical implications, and recommendations for future research.

2 Academic Literature Review

2.1 The Fashion Industry

The fashion industry has become increasingly unsustainable because companies prioritize maximization of profits, resulting in several destructive practices that have seriously harmed the environment and caused societal problems (McNeill & Moore, 2015).

The so-called fast fashion is a production strategy designed to meet consumer demand for constantly updated and trendy items. For many consumers, fashion serves as a means of communicating and expressing personal identity, or, to put it another way, it is an extension of the self-concept (Belk, 1988). Therefore, being "fashionable" is given more weight, which has the potential to prevail over other considerations when making decisions. This kind of customer is drawn to fast fashion because it may satisfy their craving for new weekly designs. Additionally, this trend offers low prices, speedy deliveries, and a great number of promotional campaigns, encouraging a culture of impulse buying, particularly among young consumers (McNeill & Moore, 2015).

Slow fashion, also known as sustainable fashion, emerged in response to growing consumer awareness about the harmful effects of fast fashion. The aim of slow fashion is to reduce consumption rates and conserve resources by emphasizing quality over quantity (Fletcher, 2007). Slow fashion was defined by Fletcher (2007), as being a method that encourages ethical production methods, focusing on producing high-quality clothing through careful design and creating a deep bond between the environment and the people who make it (Fletcher, 2007). By using sustainable materials, transparent manufacturing, and prolonging product lifecycles, sustainable fashion seeks to reduce the amount of new material reproduction (Sun et al., 2021). However, consumers may find it difficult to embrace sustainable fashion due to lack of understanding and agreement regarding sustainable design practices (Hur & Cassidy, 2019).

Additionally, the decision-making process is further complicated by perceived trade-offs with important criteria like costs, aesthetics, and maintaining alignment with current fashion trends (Hur & Cassidy, 2019). The fashion industry has worked to promote sustainable fashion, which is increasingly significant today (Hur & Cassidy, 2019). As a result, new business models have emerged as alternatives to fast fashion, having a direct impact on factors related to consumer behavior and consumption patterns (Diddi et al, 2019). Circular business models have potential to reduce environmental harm and overconsumption, as described next.

2.2 Circular Business Models

The concept of circular economy gained increasing attention in recent years as a solution to the sustainability challenges inherent in the traditional linear system, such as material scarcity, climate change, depletion of natural resources, and waste production (Ki et al., 2020). Four core strategies that are essential to achieve circular economy are decreasing resource usage, extending the product lifespan, narrowing resource consumption, and closing the resource loops by reintegrating post-use materials into production (Bocken et al., 2016). Optimizing resource flows is essential to the circular economy because it guarantees that materials are continuously recycled inside a closed-loop system, reducing the need for virgin materials (Bocken et al., 2016). In the fashion industry, adopting a circular economy has become important, as it brings several benefits to the environment, such as reduced resource needs, carbon emissions, and water and energy use (Dissanayake & Weerasinghe, 2021). Circular fashion aims to produce sustainable and long-lasting products that can be recycled, repaired, or reused in repeat. Therefore, it is essential to advance these practices to guide the fashion industry toward sustainability (Schmidt et al., 2016).

A type of circular business model is collaborative consumption, which extends the lifecycle of fashion products by sharing access instead of ownership (Ellen MacArthur Foundation, 2021). This model allows for products to be used by more people without the need to produce new clothes. It can be achieved in three ways: recycling or repairing by increasing the frequency of use for each item; renting or reselling to increase users' benefit for each item; and digital fashion products designed for virtual use, in which no physical materials are consumed (Ellen MacArthur Foundation, 2021). These business models have the potential to expand from representing 3.5% of the global fashion market today to reaching 23% by 2030 (Ellen MacArthur Foundation, 2021).

According to previous research, sustainability may not have a big impact on customers' first purchases, but it does matter more when a product reaches the end of its useful life, as many consumers prioritize items that are easy to reuse or donate. This preference helps explain why second-hand clothing is becoming more and more popular (Albella et al., 2022). For instance, the second-hand business is described as the resale of preowned products, in which customers act as both buyers and sellers (Machado et al., 2019), which, in turn, restrains the purchase of new ones (Bianchi et al., 2020). However, second-hand clothing may also pose

challenges due to the motivations and incitement that may cause increased shopping behaviors that may cause more harm than good, as referred next.

2.3 Second-hand fashion business model

The evolution of second-hand consumption can be described in three parts: first, its growing and emerging trends in the 18th and 19th centuries, the decline and onset of stigma in the 20th century, and the emergence of stigma and a revival in popularity since the 2000s (Weinstein, 2014). Second-hand is growing due to the cost-of-living crisis, which makes second-hand purchases a more economical choice, and increasing sustainability concerns (Harsh, 2024). The most enthusiastic adopters of this shopping trend are younger generations, with 80% of Gen Z purchasing second-hand items (Howarth, 2024). According to a Boston Consulting Group (BCG) and resale website Vestiaire research report from 2022, this customer group is most likely to buy (31%) and sell (44%) used goods, with millennials following closely behind (Crumbie, 2024).

While purchasing second-hand fashion is frequently viewed as environmentally friendly, motivations beyond ecological concerns can drive these purchases (Machado et al., 2019). Some studies revealed four main motivators for participating in the second-hand fashion market: economic, critical, hedonic, and recreational (Guiot & Roux, 2010; Ferraro et al., 2016). The motives for economic motivations are the desire to search for a fair price and the gratifying role of price, enabling consumers to make non-essential purchases without financial strain. Consequently, second-hand shopping offers an opportunity for customers with limited funds to engage in sustainable fashion clothing purchases (Xu et al., 2014). Critical motivations in a way that people desire to avoid conventional retail channels and support ethical and ecological values like recycling and waste reduction. Hedonic and recreational motivations for second-hand shopping include seeking originality through unique items, valuing the nostalgia and history of used clothes, enjoying social interactions with sellers, and relishing the excitement of treasure hunting for items (Guiot & Roux, 2010).

On the other hand, some concerns exist regarding wearing used products. One of them is discomfort with wearing items previously owned by someone else (Chen & Tabata, 2024), such as hygiene aspects like contamination and germs (Xu et al., 2014) and the fear of the unknown due to not knowing the previous owner (Roux & Korchia, 2006). Another barrier is the need for status, as buying second-hand clothes can be associated with not being able to afford new clothes (Roux & Korchia, 2006). Concerns about quality, the perceived outdated

styles, and difficulties in access to second-hand online and offline stores are also some concerns consumers have on purchasing second-hand items (Chen & Tabata, 2024).

Given this, it's important to assess if these incentives overcome the obstacles and result in higher overall consumption, which could compromise the environmental advantages of secondhand clothing, which will be explored next.

2.4 Second-hand Consumption Behavior: Rebound Effect

Despite the growing popularity of second-hand fashion and its potential environmental benefits, it has been questioned if second-hand shopping actually lowers total consumption or if it can instead boost purchasing behavior. Studies have indicated that while second-hand shopping favors waste reduction, the rebound effect may offset these benefits (Piot, 2022). The latter occurs when, in contrast with theoretical predictions, the more efficient the resource usage is, the higher the resource consumption (Ciechelska et al., 2024). According to a study from Ciechelska et al. (2024), individuals who purchase second-hand clothing buy more items per month (2.28 on average) compared to those who only buy new clothes (1.86 items per month). Instead of simply replacing new clothing with second-hand, consumers buy second-hand in addition to what they would normally buy, increasing the total number of items they own. The rebound effect is responsible for this increased purchasing rate among second-hand shoppers (Ciechelska et al., 2024).

In other words, the rebound effect limits the beneficial environmental impacts of the circular economy because consuming second-hand clothes paradoxically increases the overall material footprint. Purchasing second-hand will only reduce the material footprint if it replaces buying new items (Ciechelska et al., 2024). The study further identified the primary causes linked to the increased consumption associated with second-hand shopping. It highlighted the price effect, which states that because used goods are less expensive than new ones, people are more likely to purchase them. Additionally, it found that moral licensing is important since it makes consumers feel good about making more purchases because they believe they are being ecologically conscious, which reduces the guilt that comes with increased consumption (Ciechelska et al., 2024). This dynamic is further heightened by the environment of second-hand platforms, which promote affordability and sustainability while fostering impulsive and emotionally driven purchasing habits (Parguel et al., 2017). These platforms encourage impulse buying and the desire to acquire things that might otherwise be considered unneeded by

creating a sense of urgency and excitement through exclusive, time-limited deals and continuously updated inventory (Parguel et al., 2017).

There is positive environmental impact when second-hand consumption replaces, at least partially, the consumption of new products rather than both consumption types occurring simultaneously (Iran & Schrader, 2017). However, even in such cases, it raises the question of what consumers do with the money saved by buying second-hand, as it could be spent on environmentally detrimental activities (Erdmann, 2011).

Since second-hand shopping has the potential to have both positive and negative effects on the environment, it is important to investigate how ethical behavior shapes consumers' buying decisions, especially how it affects their commitment to sustainable consumption practices, which will be covered in the next section.

2.5 Ethical Behavior

Ethical behavior significantly shapes purchasing decisions, especially among individuals committed to sustainability and waste reduction. Consumers who engage in ethical behavior, such as supporting fair labor practices or environmentally friendly production, are more inclined to pay more for goods that reflect their values (Shen et al., 2012). Purchasing second-hand products, for instance, is a practical way to lessen the impact on the environment and reduce the need for new production. Many people make this decision because they want to reduce waste and promote a circular economy, reinforcing their moral commitment to sustainable consumption (Auxtova et al., 2024).

However, even though some people claim to have strong ethical and environmental values, they do not purchase sustainable products (McNeill & Moore, 2015). The “attitude-behavior gap” is often seen in sustainable fashion consumption decisions. Consumers may perceive that the trade-offs they embrace when buying sustainable fashion are not worth it, although they are aware of the harm it can do to the environment and society (Eckhardt et al., 2010).

In summary, certain consumers, especially those who are very concerned about social and environmental issues, consider ethical behavior when purchasing sustainable and used apparel. However, for many others, the influence of ethical beliefs on their purchasing decisions is lessened by practical barriers and competing priorities (McNeill & Moore, 2015).

While ethical behavior encourages sustainable consumption, materialism can limit this shift, as it has a big impact on consumer habits and priorities (Pradhan et al., 2018). Studying this dynamic is then important which will be explored in the next section on materialism and its impact on consumption behavior.

2.6 Materialism

The literature is dominated by two conceptualizations of materialism (Belk, 1985; Richins & Dawson, 1992). According to Belk (1985), materialism can be identified with three distinct traits: possessiveness, nongenerosity, and envy. These subscales assess a person's tendencies to hold on to their possessions, be unyielding in sharing them with others, and to feel envious of people who possess relatively more. Later, Richins and Dawson (1992) concluded that several studies performed based on Belk's materialism criteria revealed low reliability. In contrast to Belk's view where attention is solely on specific attributes of materialism, the researchers define materialism as a broader personal value. They describe materialism as a value system characterized by three dimensions: happiness, success, and centrality. Materialistic individuals often believe that possessions will bring them happiness and contentment, seeing them as symbols of success and status. Acquiring goods is a way to impress others, with possessions occupying a central role in their lives and dominating their daily thoughts and priorities (Richins & Dawson, 1992).

Materialistic values often lead individuals to pursue hedonistic shopping experiences. This interplay between materialism and hedonism reinforces compulsive buying tendencies, as consumers are drawn to the short-term gratification of hedonistic shopping fueled by their materialistic orientation (Tarka & Harnish, 2023).

Materialism influences spending behavior, shaping consumption patterns, and contributing to impulsive and compulsive buying behaviors (Pradhan et al., 2018). Materialists often desire novelty and self-expression by acquiring new and branded goods (Shrum et al., 2013). Additionally, some of them are motivated to acquire possessions to signal their status to themselves and others (Eastman et al., 1999). There are two types of consumption behavior: self-signaling and other-signaling (Shrum et al., 2013). Fitzmaurice and Comegys (2006) suggested that other-signaling behavior is when materialistic consumers tend to prefer conspicuous consumption, purchasing goods that signal wealth and status to others. They prioritize publicly consumed goods, such as luxury goods, for their social recognition and

admiration, valuing validation from others over the functional utility of the products (Fitzmaurice & Comegys, 2006). In self-signaling behavior, they purchase products to affirm their own self-worth or achievements, like buying luxury items as a personal reward (Shrum et al., 2013).

While marketers are often criticized for promoting materialism and over-consumption, scholars have noted that materialism can have positive and negative consequences (Segev et al., 2015). Some authors have identified positive outcomes, including developing identity, collective experiences, and brand communities. On the other hand, the negative consequences are reductions in individual well-being, psychological functioning, life satisfaction, and environmentally responsible behavior (Segev et al., 2015).

Materialists often compare themselves to those of higher socioeconomic status and set unrealistically high standards, leading to dissatisfaction with life, depression, stress, anxiety, and lower self-esteem (Segev et al., 2015). This dissatisfaction drives materialists to seek happiness through material possessions, resulting in irrational financial decisions and avoidance of self-monitoring their finances, as awareness of their financial situation may discourage further consumption. Materialism leads to less money management (Donnelly et al., 2012). Moreover, materialism influences both the amount of time (Segev et al., 2015) and money spent shopping, particularly among women (Fitzmaurice & Comegys, 2006). Another crucial effect of materialism is on the environment, as will be explained below.

2.6.1 Materialism and Sustainability

Materialism is a key factor in driving environmental degradation due to its association with high consumption levels. The overconsumption and impulsive buying associated with it contribute to the accumulation of unnecessary or rarely used, driving the overexploitation of natural resources and increasing waste generation (Parguel et al., 2017). This cycle creates significant challenges in achieving environmental sustainability (Parguel et al., 2017). Besides this, materialism conflicts with environmentalism. That is, when individuals hold materialistic values, they will care little about environmentalism, and thus, they will be less likely to display pro-environmental behaviors (Wang et al., 2019). Consumers with high levels of materialism are likelier to adopt lifestyles with a high ecological footprint. That is, less likely to recycle household waste and tend to consume more energy in their daily lives (Wang et al., 2019).

Although materialism and environmental consciousness are frequently negatively associated, Pargue et al. (2017) point out that some customers exhibit both characteristics, leading to an internal struggle between their dedication to sustainability and their desire for material items. When the pursuit of material goods aligns with the values of environmental protection, a tension known as cognitive dissonance arises. Cognitive dissonance is known as the psychological discomfort that occurs when a person holds two or more contradictory beliefs, values, or attitudes simultaneously (Festinger, 1962). Even though materialistic consumers may feel guilty about the environmental impact of their consumption, they still have a strong desire to acquire things. This paradox highlights how challenging it is to tackle sustainability in consumer behavior (Parguel et al 2017). This dynamic is especially relevant when considering second-hand platforms offering a perceived eco-friendly setting, enabling consumers to justify indulgent purchases (Parguel et al., 2017).

2.7 Materialism in the context of Second-Hand Consumption

The relationship between materialism and secondhand shopping has been the focus of various studies, but the findings remain inconsistent. Evans et al. (2022) found no significant difference in secondhand shopping frequency based on levels of materialism (Evans et al., 2022). However, this does not align with previous research by Cervellon et al. (2012), and Zaman et al. (2019), who found that consumers with lower levels of materialism are more likely to engage in second-hand shopping behaviors, arguing that consumers who are less materialistic place less importance on obtaining new material goods and are satisfied with purchasing second-hand products instead (Zaman et al., 2019; Cervellon et al., 2012). In the same line of reasoning, Gupta et al. (2019) also found that individuals with higher levels of materialism may believe that material possessions symbolize success; therefore, used clothing may lack the symbolic value and newness associated with status and success, making it unappealing to this type of consumer (Gupta et al., 2019).

Alternatively, a study by Parguel et al. (2017) suggests that second-hand marketplaces appeal to materialistic buyers by providing them with what they consider to be an affordable and sustainable means of acquiring goods. These platforms' eco-friendly and zero-waste framing helps materialistic consumers justify their purchasing patterns, reducing the guilt of overconsumption. Because second-hand goods are affordable and have a positive reputation,

materialistic consumers are more prone to make more impulsive purchases on these platforms, frequently ending up purchasing more items than need (Parguel et al., 2017).

2.8 Consumers' Valuations of Second-hand

Purchase intention: Individual beliefs and shopping motivations significantly impact the intention to buy new or used clothing. While second-hand clothing appeals to customers looking for price and sustainability, new clothing is typically preferred for its ease and conformity to current design trends (Kawulur et al., 2022).

Willingness to pay: Affordability is a key motivator for purchasing second-hand clothing, indicating that consumers perceive second-hand fashion as a way to pay lower prices for still-intact clothes (Xu et al., 2014; Roux & Guiot, 2008).

Quality perception: New clothes are perceived as higher quality due to unworn condition and brand-new state. In contrast, second-hand clothes are considered of lower quality due to wear and damage (Sorensen & Jorgensen, 2019). However, some consumers believe that second-hand clothing is of high quality as they are viewed as strong, durable, and able to offer great value at a cheaper cost, often matching or surpassing the quality of new fast fashion items (Kawulur et al., 2022).

3 Conceptual Framework and Hypothesis

In alignment with the academic literature and previous studies on materialism, second-hand consumption, and consumer behavior, a set of hypotheses is proposed, accompanied by a conceptual framework. An experimental study is conducted to test the proposed hypotheses and their underlying premises empirically.

As previously noted, new clothing is often perceived as higher quality due to its unworn state, while second-hand items, though sometimes perceived as lower quality, are valued by some for their durability and cost-effectiveness (Sorensen & Jorgensen, 2019; Kawulur et al., 2022). Purchase intentions, therefore, may vary according to individual beliefs and shopping motivations (Kawulur et al., 2022). Additionally, according to previous literature in this domain, suggests that consumers are generally inclined to pay less for second-hand items than for new ones (Guiot and Roux, 2010). As such the first set of hypotheses is suggested as follows:

H1: The type of clothing (new vs second-hand) will have an impact on consumers' valuations (quality perception, purchase intention, and willingness to buy), so that:

H1a: There will be higher consumers' valuations for new clothes compared to second-hand clothes.

Prior research also indicates that ethical values have a significant impact on purchasing decisions, particularly among consumers dedicated to reducing waste and fostering sustainability. However, for other consumers, the effect of ethical beliefs on their buying decisions diminishes when faced with practical barriers and competing priorities (McNeill & Moore, 2015). the latter assumption indicates an indirect relationship between consumers' valuations and clothing types through ethical behavior. Therefore, the second hypothesis is proposed as follows:

H2: Ethical behavior will mediate the relationship between the type of clothing and consumers' valuations.

Further, to understand the effect of materialism on consumers' valuations for second-hand clothes, some contradictory results have been found in the literature. Some studies suggest that consumers with lower levels of materialism are more likely to engage in second-hand shopping behaviors and vice versa (Cervellon et al., 2012, Zaman et al., 2019, Gupta et al., 2019).

However, Parguel et al. (2017) study suggests that second-hand marketplaces appeal to materialistic buyers by offering what they perceive as an affordable and sustainable way to acquire goods. Given these differing results, it is crucial to revisit and update this area of research. Based on the latest evidence from the literature, the third set of hypotheses is formally suggested:

H3: Materialism will moderate the relationship between the type of clothing and consumers' valuations (quality perceptions, purchasing intention, and WTP), so that:

H3a: The higher (vs. lower) the level of materialism, the lower (vs. higher) the consumers' valuations for second-hand (vs. new) clothing.

Additionally, research suggests that second-hand clothing consumption can increase overall purchasing levels due to rebound effects, where affordability and perceived sustainability offset environmental benefits (Ciechelska et al., 2024). Second-hand shoppers are shown to purchase more items on average than those buying only new clothing, driven by a price reduction effect and moral licensing, where sustainability perceptions are suggested to reduce guilt and justify additional purchases (Ciechelska et al., 2024). In the context of materialism, it is important to assess whether a similar effect occurs for materialistic consumers, as platforms promoting eco-friendly second-hand items are likely to motivate them to alleviate the guilt associated with their possessions, raising concerns about overconsumption. Therefore, it is hypothesized that such an effect allows them to engage in impulsive purchases and, paradoxically, boost overall consumption. (Parguel et al., 2017). The fourth set of hypotheses is thus, formally proposed:

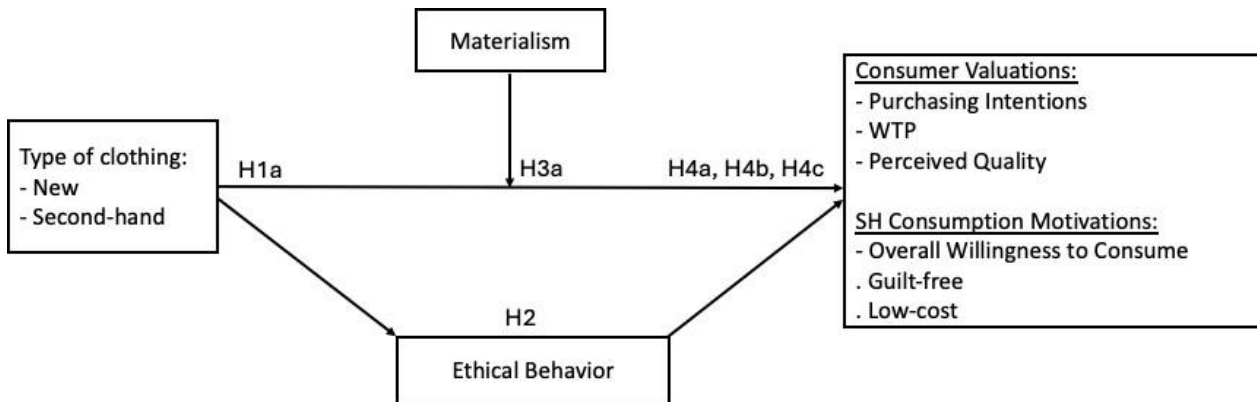
H4: Materialism will impact second-hand consumption motivations (willingness to consume, guilt-free, low-cost), so that:

H4a: The higher the level of materialism, the higher the second-hand consumption motivations due to overall willingness to consume motives.

H4b: The higher the level of materialism, the higher the second-hand consumption motivations due to decreased guilt motives.

H4c: The higher the level of materialism, the higher the second-hand consumption motivations due to low-cost motives.

Based on the four sets of hypotheses, a conceptual model is suggested below. Specifically, it is hypothesized that the type of clothing will impact consumers' valuations (purchasing intentions, WTP, perceived quality). Additionally, it is hypothesized that a consumer's ethical behavior will mediate the relationship between the type of clothing and consumers' valuations. Thirdly, it is hypothesized that materialism will moderate the relationship between the type of clothing and consumers' valuations. Lastly, the moderating role of materialism between the type of clothing and second-hand (SH) consumption motivations is also evaluated to understand, in greater detail, the drives behind consumers' intentions to purchase second-hand clothing.



4 Methodology and Data Collection

4.1 Research Method

To address the research objectives specified in the current dissertation and to complement the insights from the literature review, two studies were used to gather primary data. A pre-study and a main study were conducted using the online survey platform Qualtrics. This platform enables a sufficiently wide number of participants to be reached via a link, easily accessible in various locations and in a cost-effective way (Evans & Mathur, 2005). Online surveys increase the likelihood of responses by allowing participants to complete questionnaires whenever it is more convenient for them, regardless of time or place. Also, anonymity reduces the social desirability bias which can occur when individuals respond to questions revolving around ethical standards and expectations (Grimm, 2010). Qualtrics also improves reliability by enabling randomized scenario distribution and streamlines data collection and cleaning, with results easily exportable to SPSS for analysis.

4.2 Sampling

Given the nature of this dissertation and the need to to gather data effectively in a short amount of time, the non-probability convenience sampling method was used. This method was considered suitable due to its ability to collect responses in a timely and economical manner, using the author's network to access participants. Surveys were distributed via WhatsApp, LinkedIn, and Instagram, ensuring a wide audience while depending on participants' availability and desire to participate. This approach aligns with the dissertation's requirements and facilitates the collection of a sufficient sample size in a practical and resource-efficient manner.

4.3 Research Instruments

Accordingly, two experimental studies (pilot and main study) were developed through the previously mentioned online platform Qualtrics. A description of the processes implemented in the pre-test and in the main study will be provided below, as well as the description of the variables used in the conceptual framework presented before.

4.3.1 Pilot Study

A pilot study was conducted before launching the main study, which aimed to verify if the scenarios and manipulations developed were clearly understood by the participants. The pilot study accounted for a total of 22 participants, 11 of whom were in the new clothing scenario, and 11 were in second-hand clothing. Participants were exposed to two different scenarios regarding the type of clothing (new clothing vs. second-hand clothing). To evaluate the assessment of the stimuli of the respondents, one manipulation check was developed with two sentences, one regarding the fashion goods and the other more specific to the pair of jeans.

A one-way analysis of variance (ANOVA) was performed to evaluate the manipulation check. The results concluded that there was a significant difference between the means in both cases. Regarding the fashion goods in general: $M_{\text{New Clothing}} = 5.09$ vs. $M_{\text{second-hand clothes}} = 1.82$, with $p < .001$ (see table 1), and the pair of jeans: $M_{\text{New Clothing}} = 5.09$ vs. $M_{\text{second-hand clothes}} = 2.27$, with $p < .01$ (see table 2). Therefore, it can be concluded that the participants accurately perceived the manipulation.

Table 1: Manipulation Check – type of clothing - Fashion goods

	Fashion goods		
	Mean	SD	F-test
New Clothing	5.09	2.3	15.805***
Second-hand Clothing	1.82	1.471	

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

Table 2: Manipulation Check – type of clothing – Pair of Jeans

	Pair of Jeans		
	Mean	SD	F-test
New Clothing	5.09	2.468	8.817**
Second-hand Clothing	2.27	1.954	

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

4.3.2 Main Study

The main study was launched between November 20th and 27th, 2024, and 181 responses were recorded, of which 129 were completed entirely. The high fluctuation and dropout rate is typical for experimental studies conducted outside a controlled laboratory environment. With over 50 participants in each of the two experimental conditions (type of clothing: new vs. second-hand), the sample size meets the minimum requirements for conducting a randomized experimental design study (Molnar, 2019).

The aim of the study was to measure consumers' valuations of the two different type of clothing (new and second-hand), including quality perception, purchase intention, and willingness to pay and the increased overall consumption and its motivators with materialism as a moderator and ethical behavior as a mediator.

4.4 Design and Procedure

The study followed a 2 (Type of Clothing: new, second-hand) between-within subject design with materialism and ethical behavior measured as continuous, moderator, and mediator variables, respectively. The survey began with a short introduction explaining the purpose of the research, ensuring participants' anonymity and confidentiality, and encouraging honest and spontaneous responses. After, participants were randomly exposed to a condition in which they were asked to imagine they were shopping for a pair of jeans at PureStyle, an online fictional marketplace that either offered brand-new clothes or second-hand clothes.

Each participant was exposed to two manipulation check questions with a 7-point Likert scale, measuring their perception of whether the fashion goods in general and the pair of jeans were new or second-hand to ensure they correctly understood the condition presented. Then, participants were asked to evaluate the jeans based on their purchase intention, perceived quality, and willingness to pay. Additional questions assessed ethical attitudes, materialism, and how second-hand shopping influenced their overall buying behavior. Finally, demographic information was collected, and participants were thanked and reminded not to share the study details to preserve its integrity (Appendix 2).

4.5 Stimuli Development

All manipulations were pre-tested in the pilot study to ensure that these were well-perceived and as simple as possible. The stimuli for the study were carefully designed to create realistic and engaging scenarios that accurately represented online shopping experiences for both new and second-hand clothing. Participants were exposed to two distinct scenarios on a fictional marketplace, PureStyle, one featuring brand-new clothing and the other highlighting second-hand clothing. The decision to use jeans as the focal product was intentional, as jeans are a neutral and universally relatable item that appeals to both genders and is unlikely to introduce biases based on personal preferences or fashion trends.

In the New Clothing Scenario, the interface highlighted the PureStyle New Collection, with jeans described by objective details like size, fit, and colors, mimicking mainstream fashion websites. In the Second-Hand Clothing Scenario, inspired by platforms like Vinted, the jeans were depicted as pre-loved, with details such as item condition, views, upload time, and options like “Make an Offer” or “Message Seller.”

Using the same product ensured differences in perception were solely due to its condition, creating meaningful insights into attitudes toward new and second-hand clothing. (Appendix 1)

4.6 Variables Description

4.6.1 Manipulation Checks

After being exposed to the randomized conditions, participants were asked to answer two manipulation check questions, regarding the perception of the type of clothes shown in the scenarios. It was used a 7-point Likert scale (1- Strongly disagree to 7 - Strongly agree) of two sentences: “the fashion goods presented in this platform are new” and “the pair of jeans in the picture is new”. The two questions were designed to ensure participants correctly perceived both the overall nature of the platform (new or second-hand) and the specific product presented in the scenario.

4.6.2 Independent Variable

Type of clothing – manipulated, this variable was divided into two groups: new clothes and second-hand clothes.

4.6.3 Dependent Variables

Consumer Valuations

Quality perception: measured how participants perceived the quality of the product presented, on a 7-point Likert scale (1 - Very low quality to 7 - Very high quality) with one item: “How do you perceive the quality of the pair of jeans presented before?”, adapted from

Purchase intention: To identify whether the participants had the intention of purchasing one product of the marketplace and more specifically the pair of jeans, they were asked to state their level of agreement on their purchase intention (“I would purchase from this online marketplace.” and “I would purchase these pair of jeans.”) on a 7-point Likert scale (1 – Strongly disagree to 7 – Strongly agree).

Willingness to pay (WTP): To measure participants’ WTP, they were asked how much they would be willing to pay for the pair of jeans on a scale from 0 to 50 euros.

Second-Hand (SH) Consumption Motivations

Overall Willingness to Consume: To measure whether participants increased their overall consumption by buying second-hand items, they were asked to indicate their level of agreement on a 7-point Likert scale using the following statements: “Shopping second-hand has increased the total number of items I buy each year.”

Guilt-free motivations: “I feel less guilty about buying second-hand clothing compared to new clothing,”

Low-cost motivations: “The low cost of second-hand items encourages me to buy things I wouldn’t purchase at a higher price.”

The scale was adapted from the article by Ciechelska et al (2024). For consumers who had never purchased second-hand clothes, the instruction “(If you never bought second-hand clothes, answer '4 - neither disagree nor agree' for every sentence)” was included to ensure accurate responses. This avoided inaccuracies that could arise if participants without experience in second-hand shopping attempted to answer questions based on assumptions rather than actual behavior.

4.6.4 Moderators

Materialism: was assessed to determine consumer's level of materialism, using 7 items from a 7-point Likert scale (1 – Strongly disagree to 7 – Strongly agree) adapted from Material Values Scale (MVS), Richins & Dawson (1992): “I usually buy only the things I need.*”, “I try to keep my life simple, as far as possessions are concerned.*”, “The things I own aren't all that important to me.*”, “I enjoy spending money on things that aren't practical.”, “Buying things gives me a lot of pleasure.”, “I like a lot of luxury in my life.”, and “I put less emphasis on material things than most people I know.*”. The statements marked with an asterisk (*) were reverse-coded, as their meaning is opposed to materialism. Reverse coding was applied during the analysis in SPSS.

4.6.5 Mediator

Ethical Behavior: Assessed participants' ethically minded consumer behavior using 5 items on a 7-point Likert scale (1 – Strongly disagree to 7 – Strongly agree) adapted from Ethically minded consumer behavior (EMCB), Sudbury-Riley & Kohlbacher (2016): “When there is a choice, I always choose the product that contributes to the least environmental damage.”, “I have switched products for environmental reasons.”, “I will not buy a product if I know that the company that sells it is socially irresponsible.”, “I have paid more for sustainable products when there is a cheaper alternative.” and “If I understand the potential damage to the environment that some products can cause, I do not purchase those products.”.

5 Analysis and Results

5.1 Sample Characterization

To have a clear understanding of the studied data and the type of sample being analyzed, participants were asked to respond to demographic questions (Appendix 3). Of the 129 respondents, 72.09% are female, while 27.91% are male. 80.62% of the respondents are between 18 and 34 years old (43.41% between 18–24 years and 37.21% between 25–34 years), while smaller groups were aged 45–54 years (7.75%), 35–44 years (4.65%), 55–64 years (3.10%), and 65 years and older (2.33%). Only 1.55% of the respondents were under the age of 18. Mainly employed individuals responded to the survey (62.02%), followed by university students (22.48%) and working students (6.98%). Most respondents are from Portugal (75.19%), followed by Germany and Italy (4.65%), United Kingdom (3.1%), France, Belgium and Spain (1.55%). Other nationalities with small proportions included Angola, Australia, Belgium, Brazil, Canada, France, Greece, Italy, Mexico, Norway and Spain. In terms of education, more than half of the participants had achieved a Master's Degree (50.39%), with 37.98% holding a Bachelor's Degree. Fewer respondents had completed High School (8.53%), a Doctoral Degree (2.33%), or a Professional Degree (0.78%). In terms of annual income, 17.83% of respondents have lower than 10,000€, followed closely by 17.05% having between 30,000€ and 40,000€ and 14.73% having between 10,000€ and 20,000€ or between 20,000€ and 30,000€.

5.2 Scale Reliability and Factor Analysis

Most variables used in this research have been adapted from existing literature. However, it is still important to check whether these scales are reliable in the context of this study to attain accurate results.

Therefore, a bivariate correlation test was conducted to study the correlation between the 2 items used to measure purchase intentions. The Pearson correlation value (r) indicates the strength of the relationship between the two variables. A correlation of -1 indicates a perfect negative correlation, a correlation of 0 indicates no relationship at all and a correlation of 1.0 indicates a perfect positive correlation (Ahlgren et al., 2003). The Pearson correlation is .483 and is significant with $p < .001$. According to Cohen (1988), since $.3 < r < .49$ means a medium positive correlation, very close to large between both items.

To study the scales of the variables that were measured through 3 or more items (Materialism, Motivations, and Ethical behavior) a factor analysis procedure with a principal component analysis and varimax rotation was conducted. Only one component was extracted for ethical behavior (items loading between .7 and .83); however, three components were extracted for the other two variables.

Regarding materialism (see Table 3), items 4, 5, 6, and 7 were grouped based on their highest values on Component 2. A factor analysis on these four items resulted in a single extracted factor, with loadings ranging from .53 to .77. It was named Materialism (*Hedonism dimension*) as it reflects attitudes and behaviors focused on seeking pleasure, enjoyment, and indulgence, often associated with material possessions and luxury, which aligns with the concept of deriving satisfaction from pleasurable experiences. The study did not consider other factors since the research focused on the hedonic aspect of materialism.

Table 3 - Materialism Factor Analysis

Materialism items	Component		
	1	2	3
1 I usually buy only the things I need. *	.908	.154	-.040
2 I try to keep my life simple, as far as possessions are concerned. *	.889	.142	.225
3 The things I own aren't all that important to me. *	-.016	-.093	.912
4 I enjoy spending money on things that aren't practical.	-.034	.814	-.105
5 Buying things gives me a lot of pleasure.	.191	.721	.159
6 I like a lot of luxury in my life.	.392	.653	.104
7 I put less emphasis on material things than most people I know. *	.260	.330	.525

*reversed items

For the scales with three or more items (Hedonism and Ethical Behavior), Cronbach's alpha was calculated to assess reliability. The Cronbach's alpha for Hedonism was 0.636, and for Ethical Behavior, it was 0.832. No items were removed from either scale, as deleting any item would not significantly improve Cronbach's alpha values.

5.3 Manipulation Check Results

The result concluded that there was a marginally significant difference between the means in both cases. Regarding the fashion goods in general: $M_{\text{New Clothing}} = 5.21$ vs. $M_{\text{second-hand clothes}} = 2.41$, with $p < .001$ (see Table 4), and the pair of jeans: $M_{\text{New Clothing}} = 5.40$ vs. $M_{\text{second-hand clothes}} = 2.39$, with $p < .001$ (see Table 5). Therefore, it can be concluded that the participants accurately perceived the manipulation in the main study (see tables 4 and 5).

Table 4: Manipulation Check – Type of clothing - Fashion goods

	Fashion goods		
	Mean	SD	F-test
New Clothing	5.21	2.015	71.80***
Second-hand Clothing	2.41	.208	

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

Table 5: Manipulation Check – Type of clothing – Pair of jeans

	Pair of Jeans		
	Mean	SD	F-test
New Clothing	5.40	1.776	96.967**
Second-hand Clothing	2.39	1.677	

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

5.4 Main Results

5.4.1 Main Effect of Type of Clothing on Consumers' Valuations

H1: The type of clothing (new vs second-hand) will have an impact on consumers' valuations (purchase intention, willingness to buy, and quality perception), so that:

H1a: There will be higher consumers' valuations for new clothes compared to second-hand clothes.

To evaluate the first hypothesis, a one-way multivariate analysis of variance (MANOVA) was conducted to test the impact of type of second-hand clothing on the dependent variables.

Results show a significant main effect of type of clothes on all the dependent variables, namely on purchase intention ($M_{\text{new}} = 4.16$ vs. $M_{\text{second-hand}} = 4.8$; $F(1, 128) = 6.37$, $p < .05$), on willingness to pay ($M_{\text{new}} = 28.31$ vs. $M_{\text{second-hand}} = 15.35$; $F(1, 128) = 58.08$, $p < .001$), and on quality perception ($M_{\text{new}} = 4.16$ vs. $M_{\text{second-hand}} = 4.51$; $F(1, 128) = 4.95$, $p < .05$) (see Table 6). Interestingly, results highlight that participants were more willing to pay for new than second-hand clothes. Yet, they showed greater purchase intentions, and perceived second-hand clothes to be higher quality than new ones, thus partially validating hypothesis 1. This is an interesting result as it suggests that new clothing, often linked to fast fashion, unlike second-hand items, is associated with concerns about durability and production quality. Consequently, these effects seem to impact purchase intentions (see Table 6).

Table 6 - Type of clothes - main effect (One-way MANOVA)

	New		Second-hand		F-test
	Mean	SD	Mean	SD	
Quality perception	4.16	.914	4.51	.876	4.95*
Purchase intention	4.16	1.44	4.8	1.28	6.37*
WTP	28.31	11.57	15.35	7.64	58.08***

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

This partially validates hypothesis 1.

5.4.2 Mediating Effects of Ethical Behavior

H2: Ethical behavior will mediate the relationship between the type of clothing and consumers' valuations.

To test the second hypothesis, a mediation analysis was conducted using Haye's PROCESS macro (2013, 2015; model 4). Using bootstrap analysis, results indicate that a non-significant mediating effect is observed if the confidence intervals comprise zero (Hayes, 2013, 2015). Mediation can either be full or partial. Full mediation occurs when the main effect disappears, i.e., if the direct effect is no longer significant; and a partial mediation occurs if this relationship is significantly reduced (Hofmann et al., 2020).

Willingness to pay: The impact of type of clothing on ethical behavior was found to be significant but negative ($b = -.49$, $SE = .23$, $p < .05$, $95\% CI = [-.96, -.03]$), while the effect of ethical behavior on WTP was positive ($b = 2$, $SE = .62$, $p < .01$, $95\% CI = [.78, 3.23]$). Despite a negative but significant indirect effect (indirect effect: $b = -.99$, $SE = .69$; $95\% CI = [-2.65, -.02]$), results show that the direct effect between type of clothing and WTP remained significant (direct effect: $b = -11.97$, $SE = 1.67$, $p < .001$, $95\% CI = [-15.28, -8.67]$), indicating therefore, partial mediation of ethical behavior between type of clothing and WTP (see Table 7).

Regarding the direct effect, it indicates that participants were willing to pay €11.97 less for second-hand clothing compared to new clothing, independent of ethical behavior. The negative indirect effect indicates that considering second-hand clothing (as opposed to new clothing) reduces ethical behavior, which in turn lowers willingness to pay (WTP) by an average of €0.99. While consumers with higher ethical standards typically show greater WTP, second-hand clothing slightly diminishes this ethical behavior, weakening its positive impact on WTP.

Table 7 - The mediating effect of ethical behavior between type of clothing and WTP

Outcome	Indirect Effects Path	Indirect effect	Lower CI	Upper CI
1.	Type of clothes -> ethical behavior	-.49*	-.96	-.03
2.	Ethical behavior -> WTP	2.00**	.78	3.23
3.	Type of clothes -> ethical behavior -> WTP	-.99	-2.65	-.02
Direct Effect Path		Direct Effect	Lower CI	Upper CI
4.	Type of clothes -> WTP	-11.97***	-15.28	-8.67

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

Purchase intention: The impact of the type of clothing on ethical behavior was again found to be significant but negative ($b = -.49$, $SE = .23$, $p < .05$, $95\% CI = [-.96, -.03]$). However, no significant indirect effect of ethical behavior on the relationship between type of clothing and purchase intention was verified. This is evidenced by the confidence interval of the indirect impact, which includes zero ($b = -.04$, $SE = .05$, $95\% CI = [-.17, .04]$). Therefore, only a significant positive direct effect of type of clothes on purchase intention ($b = .64$, $SE = .24$,

$p < .01$, 95% CI = [.16, 1.13]) was verified, suggesting that the relationship is largely direct rather than mediated by ethical behavior (see Table 8).

Table 8 - The mediating effect of ethical behavior between type of clothing and purchase intention

Outcome	Indirect Effects Path	Indirect effect	Lower CI	Upper CI
1.	Type of clothes -> ethical behavior	-.49*	-.96	-.03
2.	Ethical behavior -> purchase intention	.08	-.1	.26
3.	Type of clothes -> ethical behavior -> purchase intention	-.04	-.17	.04
	Direct Effect Path	Direct Effect	Lower CI	Upper CI
4.	Type of clothes -> purchase intention	.64**	.16	1.13

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

Perceived quality: Again, the impact of the type of clothing on ethical behavior was found to be significant but negative ($b = -.49$, $SE = .23$, $p < .05$, 95% CI = [-.96, -.03]). However, there was no significant effect of ethical behavior mediating the relationship of type of clothing and perceived quality since the confidence interval of the indirect effect contains zero ($b = -.01$, $SE = .03$, 95% CI = [-.07, .06]). Therefore, only a positive significant direct effect of type of clothes on perceived quality was verified ($b = .36$, $SE = .16$, $p < .05$, 95% CI = [.04, .68]), suggesting that the relationship is largely direct rather than mediated by ethical behavior (see Table 9).

Table 9 - The mediating effect of ethical behavior between type of clothing and perceived quality

Outcome	Indirect Effects Path	Indirect effect	Lower CI	Upper CI
1.	Type of clothes -> ethical behavior	-.49*	-.96	-.03
2.	Ethical behavior -> perceived quality	.01	-.11	.13

3.	Type of clothes -> ethical behavior -> perceived quality	-.01	-.07	.06
	Direct Effect Path	Direct Effect	Lower CI	Upper CI
4.	Type of clothes -> perceived quality	.36*	.04	.68

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

Overall, it can be concluded that the type of clothing significantly impacts willingness to pay through ethical behavior, favoring second-hand clothing. However, no mediating effects were observed on purchase intention or perceived quality, partially validating hypothesis 2.

5.4.3 The Moderation of Materialism

H3. Materialism will moderate the relationship between the type of clothing and consumers' valuations (quality perceptions, purchasing intention, and WTP), so that:

H3a: The higher (vs. lower) the level of materialism, the lower (vs. higher) the consumer's valuations for second-hand (vs. new) clothing.

To analyze the third hypothesis, a 2 (type of clothing: new and second-hand) x materialism interaction was tested on purchasing intention, willingness-to-pay, and perceived quality. To test or moderation, Hays's (2013; 2015) Process Macro software for SPSS was used to perform a multiple regression, using Model 1.

Findings show a significant and positive main effect of type of clothing was found on purchasing intention ($b = .65$, $SE = .24$, $t(125) = 2.71$, $p < .01$, 95% CI [.17, 1.12]), a significant and negative on WTP ($b = -12.96$, $SE = 1.72$, $t(125) = -7.52$, $p < .001$, 95% CI [-16.37, -9.55]), and a significant and positive on perceived quality ($b = .36$, $SE = .16$, $t(125) = 2.23$, $p < .05$, 95% CI [.04, .68]). Further, a significant and negative main effect of materialism (hedonism) was found on purchasing intention ($b = -.41$, $SE = .18$, $t(125) = -2.25$, $p < .05$, 95% CI [-.77, -.05]), but not for WTP ($b = -.67$, $SE = 1.32$, $t(125) = -.51$, $p = .61$, 95% CI [-3.27, 1.93]), nor for Quality perception ($b = -.05$, $SE = .12$, $t(125) = -.39$, $p = .69$, 95% CI [-.29, .19]).

Most importantly, a significant type of clothing x materialism (hedonism) interaction effect was found on purchase intention ($b = .57$, $SE = .23$, $t(125) = 2.44$, $p < .05$, 95% CI = [.11, 1.04]).

However, results show that no significant type of clothing x hedonism interaction effects were obtained for quality perception ($b = .05$, $SE = .16$, $t(125) = .32$, $p = .75$, 95% CI [-.26, .36]) nor for WTP ($b = 1.47$, $SE = 1.69$, $t(125) = .87$, $p = .39$, 95% CI [-1.88, 4.83]) (see Table 10).

Table 10 - The interaction effect of type of clothing x hedonism on the dependent variables

Outcome	Interaction effect	SE	Lower CI	Upper CI
Purchase intention	.5726*	.2342	.1091	1.0361
WTP	1.4725	1.6942	-1.8806	4.8255
Quality perception	.0505	.1580	-.2621	.3631

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

To further understand the effect of the type of clothing x materialism (hedonism) on purchase intention, slope analysis (Aiken & West, 1991; Fitzsimons, 2008) was conducted to examine the conditional effects of type of clothing and materialism at a $\pm 1SD$ from the mean. Slope analysis revealed that for purchase intention, differences between new and second-hand clothing emerged at medium ($b = .65$, $SE = .24$, $t(125) = 2.71$, $p < .01$, 95% CI = [.17, 1.12]) and high (+1SD) ($b = 1.24$, $SE = .35$, $t(125) = 3.57$, $p < .001$, 95% CI = [.55, 1.93]) levels of materialism (hedonism). At a low (-1SD) level of hedonism, the differences in general purchase intention between new and second-hand clothing were not significant (see Figure 1 and Table 11).

Figure 1 - The interaction effect of type of clothing x hedonism on purchase intention

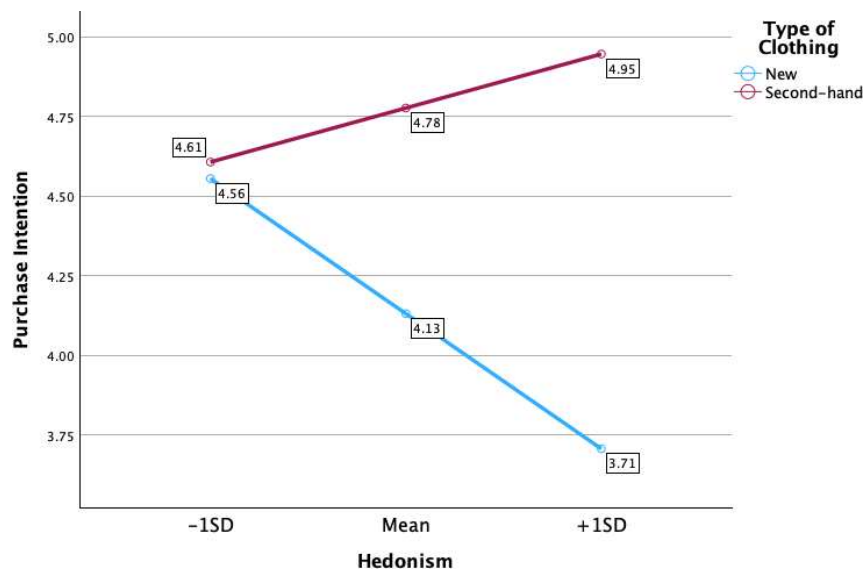


Table 11 - Conditional Effects of type of clothing x hedonism on purchase intention

	Condition Effect	SE	Lower CI	Upper CI
Purchase intention				
Low Hedonism (-1SD)	.05	.33	-.61	.71
Mean	.65**	.24	.17	1.12
High Hedonism (+1SD)	1.24***	.35	.55	1.93

Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$

This partially validates the third hypothesis. However, the results reveal a significant finding; they indicate that increases in materialism related to hedonism decrease the intention to purchase new clothing but increase the intention to buy second-hand items. This opens a new research avenue to better understand the motivations behind such behaviors, as evaluated next.

5.4.4 Effect of Materialism on Increased Consumption

H4: Materialism will impact second-hand consumption motivations (willingness to consume, guilt-free, low-cost), so that:

H4a: The higher the level of materialism, the higher the second-hand consumption motivations due to overall willingness to consume motives.

H4b: The higher the level of materialism, the higher the second-hand consumption motivations due to decreased guilt motives.

H4c: The higher the level of materialism, the higher the second-hand consumption motivations due to low-cost motives.

To test the fourth hypothesis, a simple linear regression was used to assess the relationship between materialism (hedonism) and increased consumption and its motivators.

A statistically positive and significant effect of materialism (hedonism) on second-hand consumption motivations consumption was found. A correlation of .30 was found, suggesting that materialism in the form of hedonism moderately enhanced second-hand consumption. The coefficient is 1.84, suggesting that for every one-unit increase in a consumer's level of materialism, their increased consumption rises by 1.84 units, assuming all other factors remain

constant. Additionally, this effect accounts for 11.7% of the variance in consumers' increased consumption (see Table 12).

Table 12 - Direct effect of hedonism on increased consumption

	Coefficient	SE	Correlation	R²
Willingness to consume	1.84***	.525	.30	.117

*Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$*

Further, two more linear regressions were conducted regarding the second-hand consumption motivations, namely on guilt-free and low-cost motives. A statistically positive and significant effect of materialism (hedonism) was found on guilt-free motives. A correlation of .30 was obtained, suggesting that hedonism moderately impacts guilt-free motives. The coefficient is 0.50, indicating that for every one-unit increase in a consumer's level of materialism, their guilt-free motivation rises by half a unit, assuming all other factors remain constant. Additionally, this effect accounts for 8.8% of the variance in guilt-free motivation (see Table 13).

Table 13 - Direct effect of hedonism on guilt-free motivator

	Coefficient	SE	Correlation	R²
Guilt-free	.498***	.143	.30	.088

*Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$*

A statistically positive and significant materialism (hedonism) effect was found regarding the low-cost motive. A correlation of .19, suggests that hedonism weakly impacts low-cost motives. The coefficient is .30, suggesting that for every one-unit increase in a consumer's level of materialism, their low-cost motive rises by 0.30 units, assuming all other factors remain constant. Additionally, this effect accounts for 3.6% of the variance in low-cost motive (see Table 14).

Table 14 - Direct effect of hedonism on low-cost motivator

	Coefficient	SE	Correlation	R²
Cost	.302*	.138	.191	.036

*Note: *** $p < .001$, ** $p < .01$, * $p < .05$, + $p \leq .1$*

Overall, findings suggest that higher levels of materialism are associated with increased second-hand consumption motivations, driven by reduced guilt and the lower cost of second-hand clothing compared to new items, fully validating hypothesis 4.

6 Discussion

The study highlights key insights into consumer behavior regarding second-hand clothing. In hypothesis 1 it was concluded that second-hand items were perceived as higher quality and elicited greater purchase intentions compared to new clothing, yet consumers were less willing to pay for them.

Exploring hypothesis 2, ethical behavior was found to partially mediate the relationship between clothing type and willingness to pay, although this effect was not significant for purchase intention or quality perceptions.

The level of materialism showed interesting interaction effects in hypothesis 3: significant differences for purchase intention appear at medium and high levels of materialism between new and second-hand clothes. Consumers with higher materialistic values exhibit greater intentions to purchase second-hand clothes and lower intentions to purchase new clothes.

Lastly, supporting hypothesis 4, findings revealed that increased materialism was associated with higher overall consumption. Compared to those with lower materialistic values, consumers with higher materialistic values feel less guilty about purchasing second-hand clothing instead of new clothing. The low cost of second-hand items also leads them to buy products they might otherwise avoid at higher prices.

7 Conclusion and Implications

The study aimed to answer three research questions. First, it examined whether the type of clothing (new and second-hand) influenced consumers' valuations, including perceived quality, purchase intention, and willingness to pay. Second, it explored how materialism influences this relationship and affects consumers' valuation of new and second-hand clothing. Finally, whether materialism drives individuals to increase overall consumption through second-hand shopping and, if so, the motivations underlying this behavior. An experimental study investigated these research questions and the underlying hypotheses.

RQ1: How does the type of clothing (new vs. second-hand) influence consumers' valuations, including purchasing intentions, willingness to pay (WTP), and perceived quality?

Regarding the first research question, it was found that consumers have higher purchase intentions and perceived quality and lower willingness to pay for second-hand clothes compared to new clothes and less willingness. This results partially align with the literature. For purchase intention, no specific findings exist in the literature; instead, it is noted that purchase intention depends on individual beliefs and shopping motivations (Kawulur et al., 2022). Regarding the willingness to pay, it is line with the literature that affordability is a motivator for purchasing second-hand clothes. For quality perception, the results challenge earlier studies suggesting new clothes are perceived as higher quality due to their unworn condition and brand-new state (Sorensen & Jorgensen, 2019). Instead, the findings align with recent literature (Kawulur et al., 2022), which shows that second-hand clothing is often seen as strong, durable, and offering great value, potentially matching or surpassing the quality of new fast fashion items.

RQ2: How does ethical behavior influence consumers' valuations of new versus second-hand clothing, such as purchasing intentions, willingness to pay (WTP), and perceived quality?

Regarding the second research question, it was checked if the level of ethical behavior of consumers influenced the relationship between type of clothing and consumers' valuations. For perceived quality and purchase intention, ethical behavior does not act as a significant mediator, that is, these relationships are direct. For willingness to pay, ethical behavior exhibits a partial mediating effect, indicating that consumers' ethical considerations somewhat influence their willingness to pay for second-hand clothing. This is consistent with the literature as it says that those who have ethical behavior and care about the environment are more willing to pay a premium price for products align with these values (Shen et al., 2012).

RQ3: How does materialism affect consumers' valuations of new vs. second-hand clothes?

In addressing the third research question, no significant interaction between clothing type and materialism influenced consumers' quality perception or willingness to pay; however, it did impact purchase intentions only. Materialism showed to moderate the relationship between the type of clothing and purchase intention. There was a statistically significant difference in purchase intention for medium and high levels of materialism. As materialism increased, purchase intentions for new clothing declined significantly, while purchase intentions for second-hand clothing rose sharply. The findings suggest a shift in consumer behavior, where individuals with higher materialistic values favor second-hand clothing, a research contribution to the literature in line with Parguel et al. (2017), unlike the other stream of research (Zaman et al., 2019; Cervellon et al., 2012, Gupta et al., 2019). Furthermore, this study confirmed that materialists have intentions to purchase second-hand clothing and revealed that these intentions are even higher than their intentions to buy new clothing.

RQ4: Does the level of materialism lead individuals to increase overall consumption levels by purchasing second-hand clothing? If yes, what motivates this behavior?

The fourth research question evaluated whether materialists consume more second-hand clothing and less new clothing or if they simply increase their overall consumption by purchasing second-hand clothes. If that is the case, it also explores their motivations. The research suggests that higher levels of materialism lead to increased overall consumption, with guilt-free and low-cost options serving as strong motivators for engaging in second-hand purchases. This confirms the presence of a rebound effect among materialistic individuals. This aligns with the study by Parguel et al. (2017), which states that second-hand marketplaces attract materialistic buyers by offering affordable goods, alleviating guilt with the argument that it is sustainable, and encouraging impulsive overconsumption.

7.1 Theoretical Implication

This work is relevant because it tackles one of the biggest problems in contemporary society: combating the resource depletion caused by fast fashion and traditional fashion production (Bailey et al., 2022).

This study makes significant contributions to the field of second-hand fashion consumption by exploring the direct and indirect effects of clothing type (new vs. second-hand) on consumers'

valuations. It complements existing studies on this topic (Sorensen & Jorgensen, 2019; Kawulur et al., 2022; Xu et al., 2014; Roux & Guiot, 2008) while integrating the roles of ethical behavior and materialism. It builds upon and addresses gaps in existing literature to offer a more comprehensive understanding of consumer behavior in the context of second-hand fashion.

Regarding ethical behavior, it complements earlier studies by providing additional insights into how ethical considerations influence sustainable purchasing decisions, specifically concerning consumers' valuations for second-hand clothing. It concludes that these factors affect the willingness to pay for second-hand clothes, as a previous study suggested (Shen et al 2012).

Furthermore, the study examines the significance of materialism in shaping consumers' valuations of clothing types, providing an updated perspective on a topic that has produced mixed results in the literature. The study found that materialism indeed affects consumers' valuations of second-hand versus new clothes, with individuals displaying higher levels of materialism preferring second-hand clothing more strongly. This offers a fresh perspective compared to earlier studies, many of which reported conflicting findings (Evans et al., 2022; Zaman et al., 2019; Cervellon et al., 2012; Gupta et al., 2019; Parguel et al 2017).

Additionally, this dissertation further explores materialistic consumption behavior, particularly whether purchasing second-hand clothing decreases new purchases or amplifies overall consumption. It supports earlier findings that materialistic consumers are prompted to overbuy affordable second-hand goods (Parguel et al., 2017). Thus, this study contributes to a research gap in understanding further how materialists justify overconsumption within the second-hand fashion market.

7.2 Managerial Implications

To begin with, this study shows a growing interest in second-hand fashion clothing, which is a great opportunity for fashion brands to incorporate second-hand business models into their value chains. The high purchase intention for second-hand clothing highlights the potential for brands to take advantage of this trend, which is the case of Zara, that have established second-hand platforms to resell their products (Pymnts, 2024; Hvass, 2015). However, willingness to pay (WTP) for second-hand clothing was found to be lower than for new clothing, reflecting

the perception of second-hand fashion being a more affordable option that enables consumers to get high-quality clothes at a reduced cost (Xu et al., 2014; Roux & Guiot, 2008). This finding suggests that brands should emphasize the sustainability and worth of second-hand products while carefully balancing their price tactics.

Also, the perceived quality of second-hand clothes was higher than for new clothes, allowing fashion brands to reposition used goods as high-quality, sustainable options rather than just "budget-friendly" substitutes. Marketing messages that emphasize the durability, quality, and uniqueness of used goods may draw in customers who are concerned about sustainability and those who value quality.

The study highlights the moderating role of materialism in shaping willingness to pay for second-hand clothes. Fashion businesses must thus target this group with customized marketing efforts that highlight affordability and sustainability while creating a feeling of exclusivity and novelty that appeals to materialistic values.

Regarding the increase in overall material consumption, this poses a challenge to the environmental objectives of second-hand fashion. Therefore, to reduce the rebound effect, brands and policymakers must collaborate to integrate instructional content on avoiding overconsumption or to provide incentives for consumers to recycle or trade in items.

8 Limitations and Future Research

The online questionnaire for this study was distributed through social media platforms such as Instagram, LinkedIn, and WhatsApp, making it challenging to control factors like respondent focus, time spent on the survey, honesty, and potential environmental distractions. As a result, the study's internal validity may be lower compared to controlled laboratory experiments where such variables can be managed effectively (Wiersma, 2013). Additionally, while the survey was designed to elicit honest responses, participants may still respond to ethical or sensitive questions that align with societal expectations rather than their actual behavior, a phenomenon known as social desirability bias (Grimm, 2010).

In addition, the participants' demographics offer potential biases, as almost half of the respondents were in the 18-25 age group, three-quarters of the sample were Portuguese. These aspects have likely influenced the results as they do not fully represent the population (sample biases). Therefore, future research should focus on a broader sample of participants of different generations and nationalities.

A key limitation of this study is the difference in the number of participants between the two scenarios, there were 13 more responses in the new clothes condition than in the second-hand clothing condition. This imbalance might have affected the comparability of results, as different sample sizes can reduce reliability and potentially introduce biases in the findings (Rusticus & Lovato, 2014).

Future research should further investigate the connection between materialism, clothing preferences for new versus second-hand items, and consumption behavior. Additionally, examining whether materialistic consumers sell on second-hand platforms alongside buying, could provide valuable insights into their overall consumption patterns. While this study found that materialists increase overall consumption through second-hand purchases, understanding their selling behavior could clarify whether these platforms encourage circular consumption or contribute to over-accumulation. If materialists do sell, it may indicate a shift toward more sustainable practices, even if accompanied by increased buying.

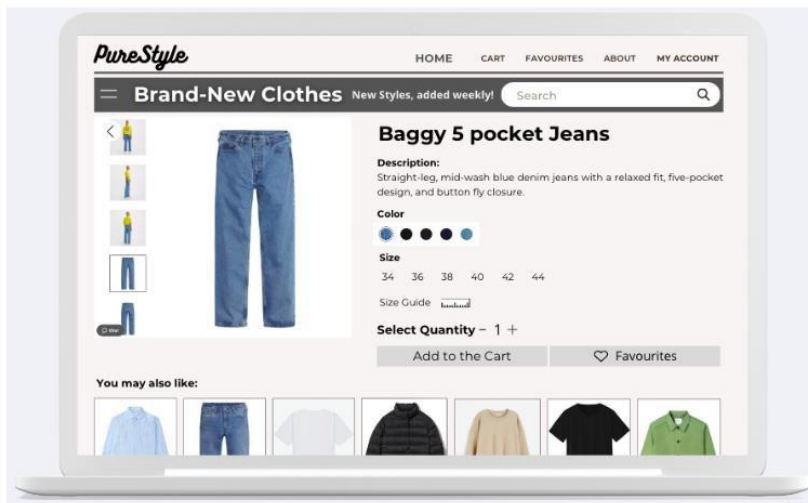
9 Appendices

Appendix 1: Pilot study

Randomized Scenario 1:

Imagine shopping for jeans at PureStyle, an online marketplace featuring brand-new clothing from the latest collections of popular fashion brands. With new styles added every week, there's always something fresh to discover.

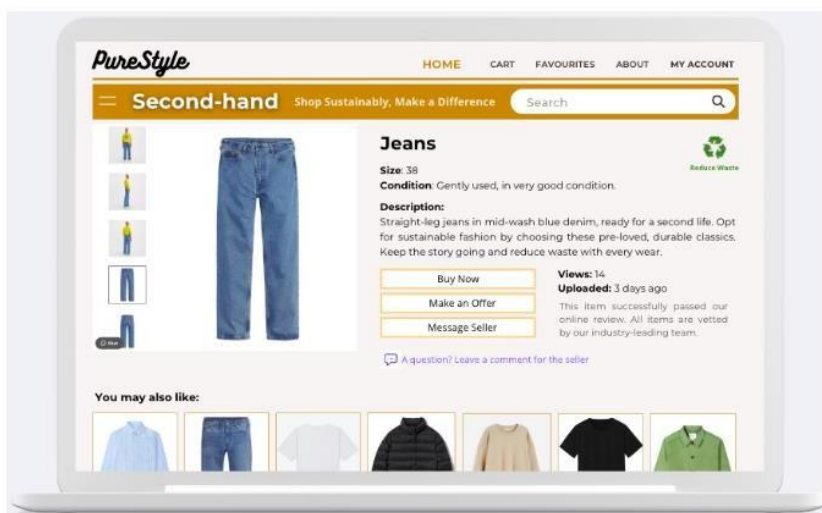
Below is an example of a **brand-new pair of jeans**, along with a detailed description.



Randomized Scenario 2:

Imagine shopping for jeans at PureStyle, an online marketplace for unique, pre-loved clothing from popular fashion brands. You'll discover second-hand pieces that undergoes a thorough quality inspection to ensure it is in good condition.

Below is an example of a **second-hand pair of jeans**, along with its description.



Manipulation Check:

Based on the description of the above marketplace, please rate your level of agreement with the following statements:

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
The fashion goods presented in this platform are new.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The pair of jeans in the picture is new.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q1 – Willingness to Pay:

Independent from your financial situation, how much would you be **willing to pay** for the pair of jeans shown before?

0 5 10 15 20 25 30 35 40 45 50

Euros



Q7 – Q12 Demographics:

You have pretty much made it! Just some more questions about yourself and you will be done!

What is your gender?

Male

Female

What is your age?

Under 18 years

18 to 24 years

25 to 34 years

35 to 44 years

45 to 54 years

55 to 64 years

65 years and over

What is your occupation?

High School Student

University Student

Employed

Working Student

Unemployed

Retired

What is the highest level of education you have completed?

Less than High School

High School

Bachelor Degree

Master Degree

Doctoral Degree

Professional Degree

Where do you come from?

What is your current annual income in Euros?

- Under €10,000
- €10,000 - €19,999
- €20,000 - €29,999
- €30,000 - €39,999
- €40,000 - €49,999
- €50,000 - €74,999
- €75,000 - €99,999
- €100,000 - €150,000
- Over €150,000
- Don't know.

What is your current annual income in Euros?

Under €10,000
€10,000 - €19,999
€20,000 - €29,999
€30,000 - €39,999
€40,000 - €49,999
€50,000 - €74,999
€75,000 - €99,999
€100,000 - €150,000
Over €150,000
Don't know.

Appendix 2: Main Study

Introduction:

Dear participants,
Welcome and thank you for taking the time to complete this survey.

The survey is part of my **master thesis** in its final stage. Your participation is **very important** and contributes to its completion.

This survey takes approximately **5 minutes** to complete.

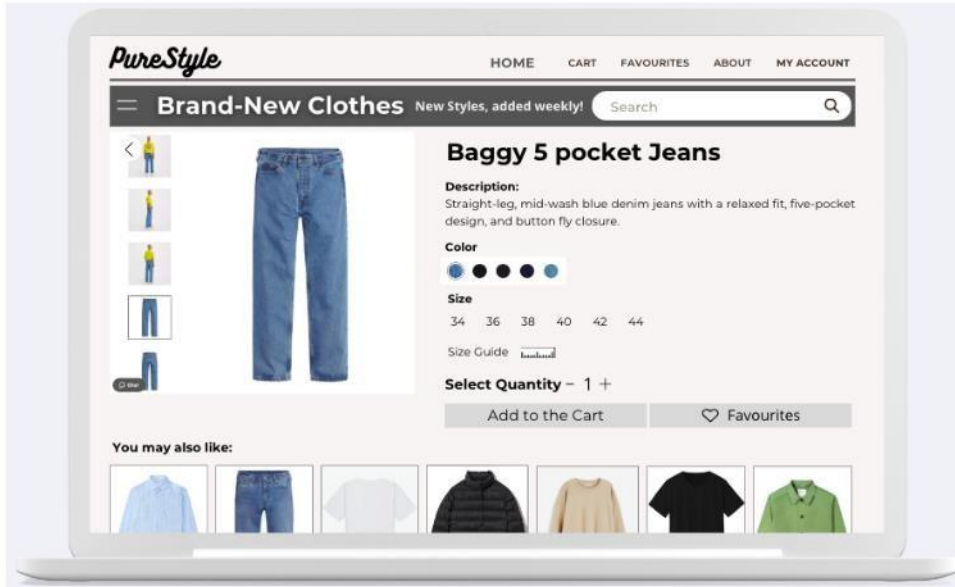
All data obtained will be used anonymous and confidential.
Therefore, I ask you to answer honestly and spontaneously.

Thank you in advance,
Mafalda Amaro

Randomized Scenario 1:

Imagine shopping for jeans at PureStyle, an online marketplace featuring brand-new clothing from the latest collections of popular fashion brands. With new styles added every week, there's always something fresh to discover.

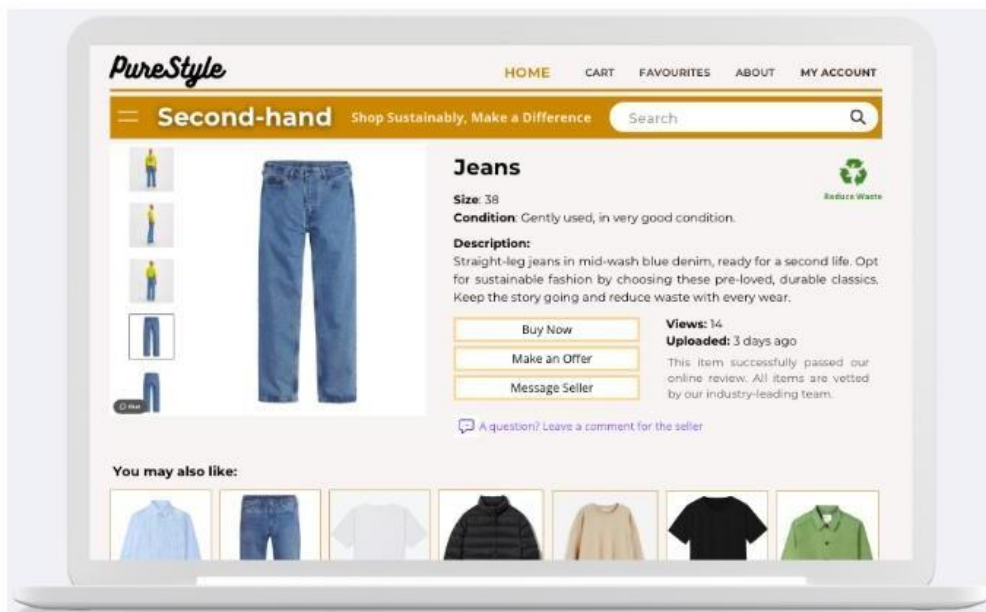
Below is an example of a **brand-new pair of jeans**, along with a detailed description.



Randomized Scenario 2:

Imagine shopping for jeans at PureStyle, an online marketplace for unique, pre-loved clothing from popular fashion brands. You'll discover second-hand pieces that undergoes a thorough quality inspection to ensure it is in good condition.

Below is an example of a **second-hand pair of jeans**, along with its description.



Manipulation Check:

Based on the description of the above marketplace, please rate your level of agreement with the following statements:

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
The fashion goods presented in this platform are new.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The pair of jeans in the picture is new.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q1 - Purchase Intention:

Please rate your level of agreement with the following statements:

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I would purchase from this online marketplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would purchase these pair of jeans.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 – Willingness to Pay:

Independent from your financial situation, how much would you be **willing to pay** for the pair of jeans shown before?

0 5 10 15 20 25 30 35 40 45 50

Euros

Q3 – Perceived Quality:

How do you **perceive the quality** of the pair of jeans presented before?

1 - Very low quality	2 - Low quality	3 - Somewhat low quality	4 - Neutral	5 - Somewhat high quality	6 - High quality	7 - Very high quality
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Please continue, you are almost done!!

Q4 – Ethical Behavior:

You are almost done with the survey! Please answer a couple of questions more next please :)

Please rate your level of agreement with the following statements:

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
When there is a choice, I always choose the product that contributes to the least environmental damage.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have switched products for environmental reasons.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I will not buy a product if I know that the company that sells it is socially irresponsible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have paid more for sustainable products when there is a cheaper alternative.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If I understand the potential damage to the environment that some products can cause, I do not purchase those products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q5 – Materialism:

Please rate your level of agreement with the following statements:

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I usually buy only the things I need.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to keep my life simple, as far as possessions are concerned.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The things I own aren't all that important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I enjoy spending money on things that aren't practical.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Buying things gives me a lot of pleasure.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like a lot of luxury in my life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I put less emphasis on material things than most people I know.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q6 – SH Consumption Motivations:

Please rate your level of agreement with the following statements:
(If you **never bought second-hand clothes** answer "4 - neither disagree nor agree" in every sentence)

	1 - Strongly disagree	2 - Disagree	3 - Somewhat disagree	4 - Neither disagree nor agree	5 - Somewhat agree	6 - Agree	7 - Strongly agree
I feel less guilty about buying second-hand clothing compared to new clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The low cost of second-hand items makes me buy things I wouldn't buy at a higher price.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Shopping second-hand has increased the total number of items I buy each year.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q7 – Q12 Demographics:

You have pretty much made it! Just some more questions about yourself and you will be done!

What is your gender?

Male

Female

What is your age?

Under 18 years

18 to 24 years

25 to 34 years

35 to 44 years

45 to 54 years

55 to 64 years

65 years and over

What is your occupation?

High School Student

University Student

Employed

Working Student

Unemployed

Retired

What is the highest level of education you have completed?

Less than High School

High School

Bachelor Degree

Master Degree

Doctoral Degree

Professional Degree

Where do you come from?

What is your current annual income in Euros?

Under €10,000

€10,000 - €19,999

€20,000 - €29,999

€30,000 - €39,999

€40,000 - €49,999

€50,000 - €74,999

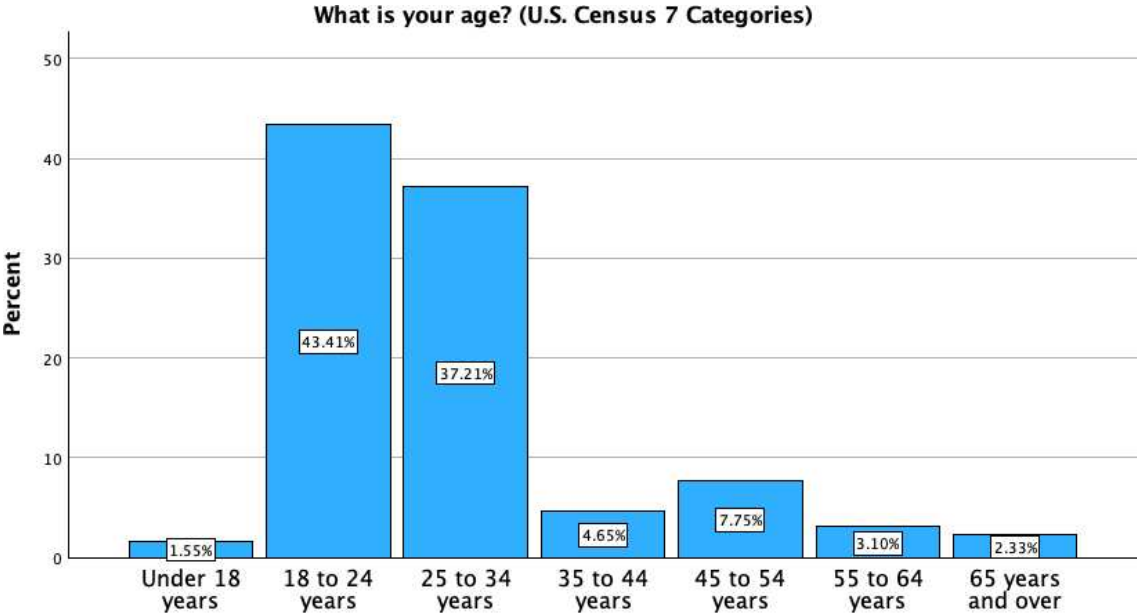
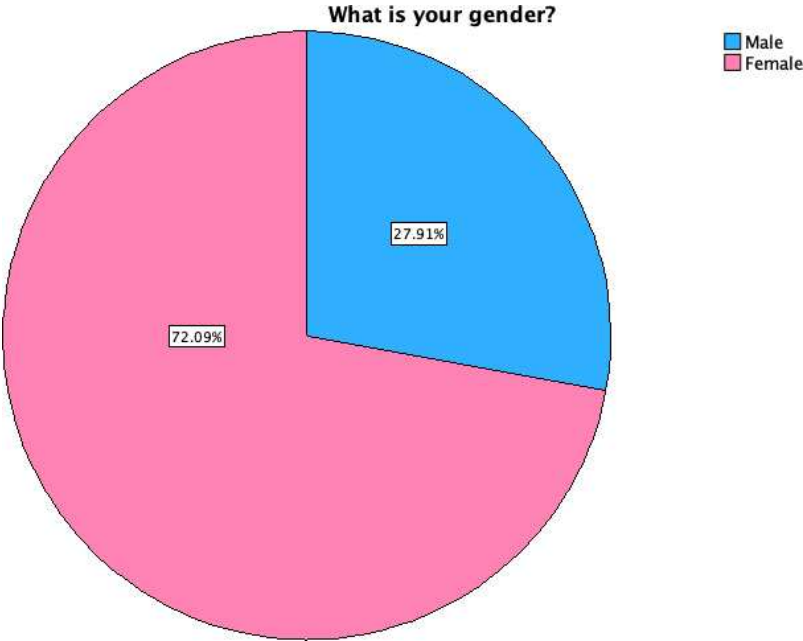
€75,000 - €99,999

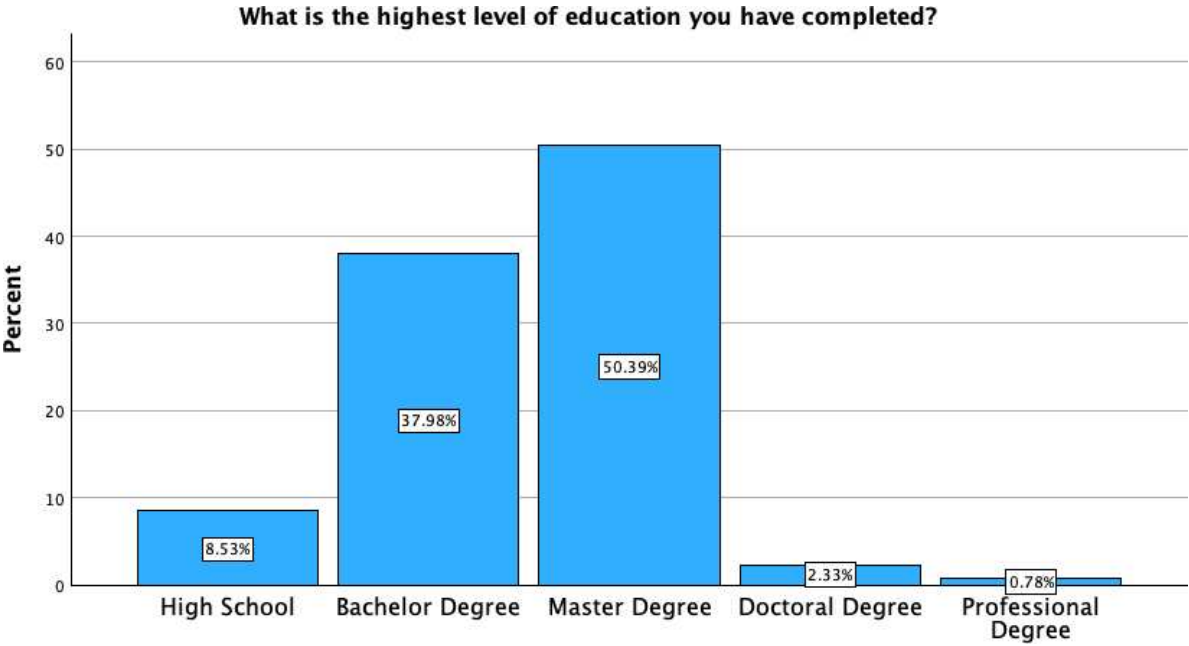
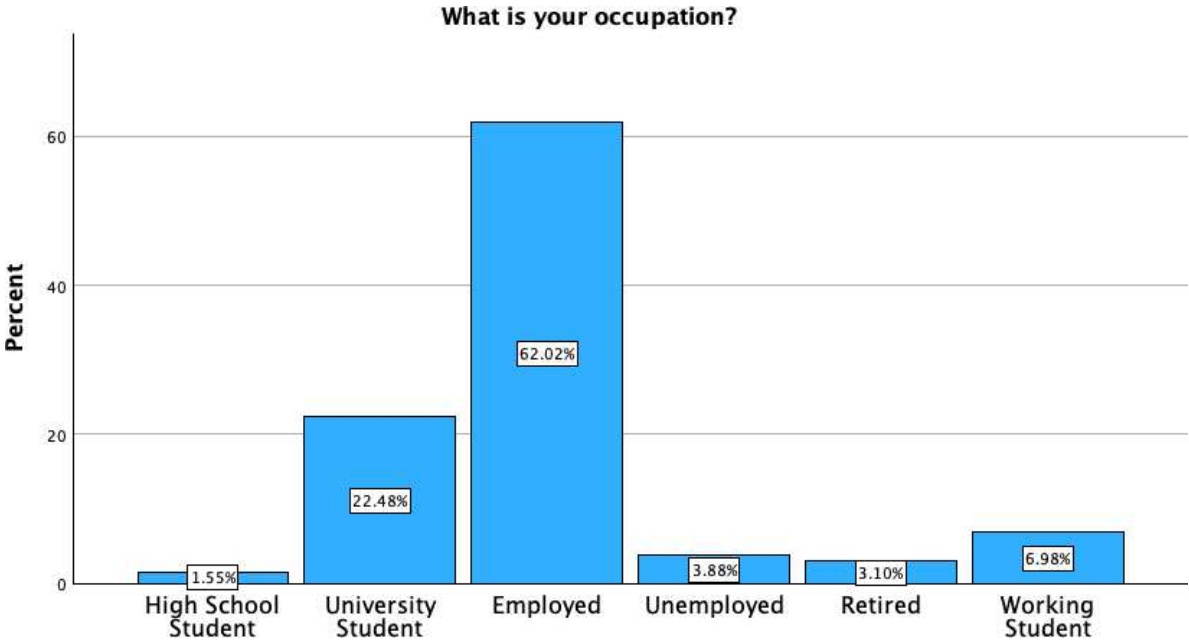
€100,000 - €150,000

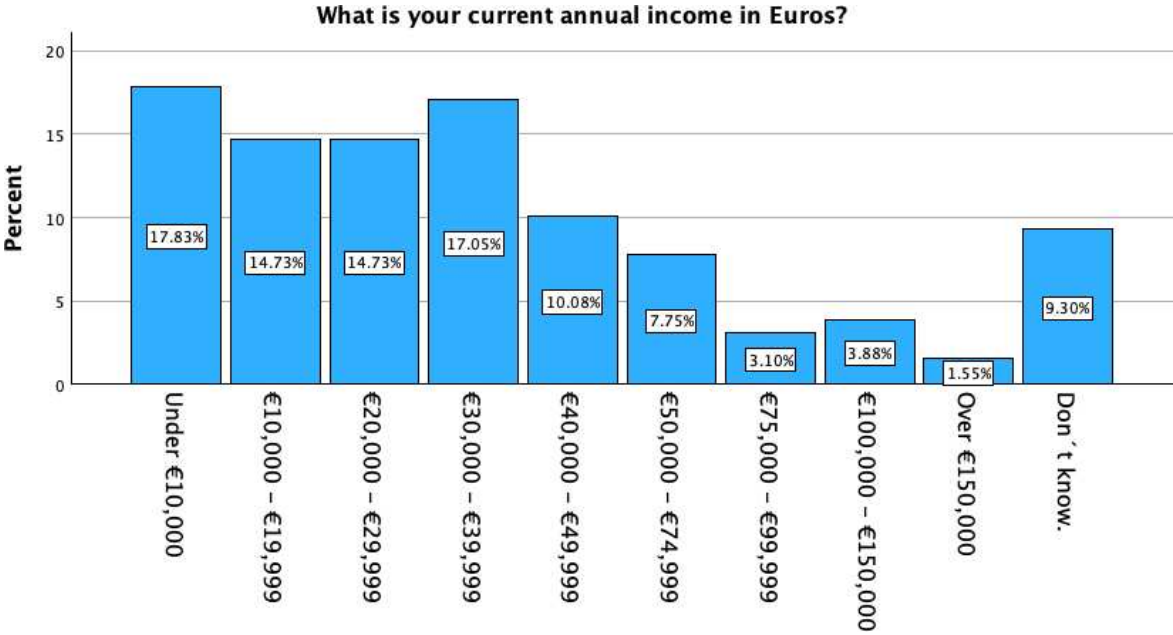
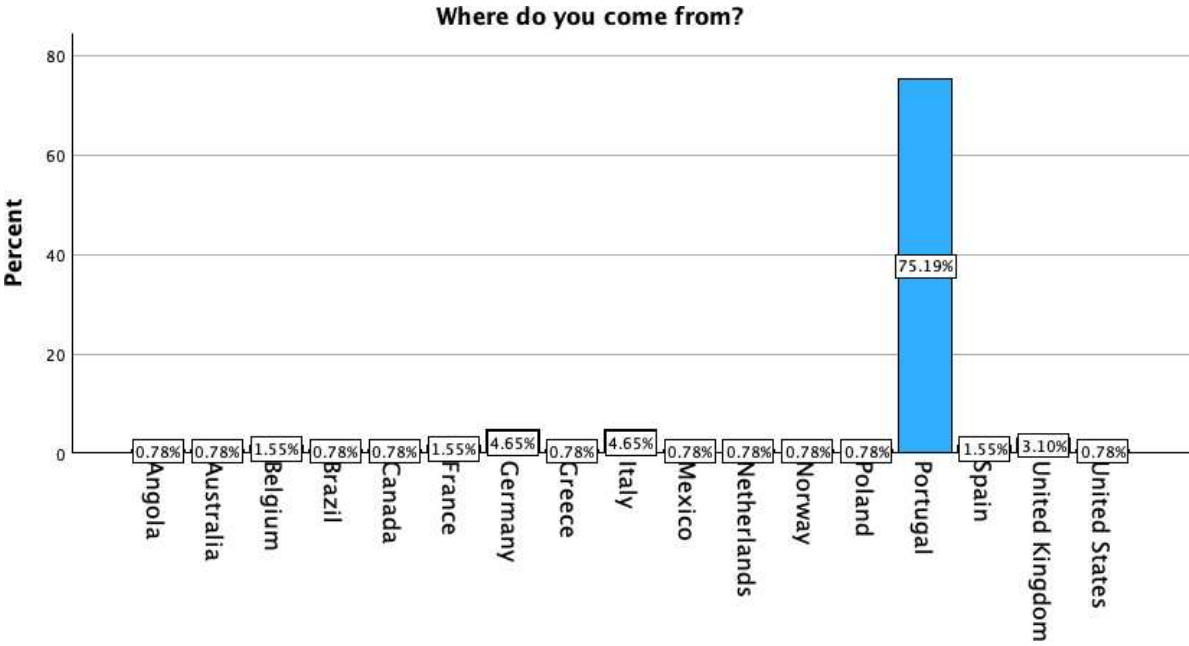
Over €150,000

Don't know.

Appendix 3: Sample Characteristics







10 References

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