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SECOND, BUT NOT LEAST: THE POTENTIAL OF THE GROWING SECOND-HAND APPAREL MARKET IN PORTUGAL, EXPLORATORY RESEARCH

MARIA DA CONCEIÇÃO SOVERAL VARELA DE LIMA MAYER, 43448

Work project carried out under the supervision of:

Professor João Lopes de Castro

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Table of Contents

Table of Figures

Abstract

From garage sales to peer-to-peer globally inter-connected digital marketplaces — the consumption of previously worn apparel items is becoming a worldwide trend. However, the Portuguese second-hand fashion market appears to be rather fragmented. To understand the potential of this market in Portugal, the present Work Project explores the attitude of the Portuguese consumer towards the selling and purchasing of pre-used apparel. Moreover, this study further accesses if this manner differs according to gender and generation. In this sense, qualitative and quantitative analysis were conducted on consumers aiming to thoroughly comprehend their behavior, drivers, triggers, and obstacles. The results show evidence of growing interest from the Portuguese consumer which, in contrast with the overall market, is profiled differently — differing in sustainable motivations and price sensitivity, as well as differing in terms of channels, impediments, and stimuli.

Keywords: Apparel; Second-hand; Portugal; Consumer.

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Part 1. Introduction

Research Context

"As consumers become more engaged with sustainability issues, circularity will be the key that unlocks the door to a more sustainable future" (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, Pen, 2021).

According to a *McKinsey* research, in 2018 alone, the global 1.5 trillion U.S. dollar fashion market was accountable for around 2,1 billion metric tons of greenhouse-gas emissions, which figure is prone to raise by a 2,7% growth rate every year, until 2030 (Berg, Granskog, Lee, and Magnus, 2020). On the other hand, following a 2017 *Ellen MacArthur Foundation* report, 87% of 53 million tons of clothing manufactured every year are either being destroyed or thrown in landfills (Chua, 2018). In addition to CO2 emissions and rampant littering, frantic water consumption and microplastic sea pollution are also coming at great earth cost when it comes to the fashion production-consumption synergy (McFall-Johnsen, 2019).

The idea that fashion consumption should follow a linear model of buying, using, and disposing, is slowly emerging as obsolete and efforts are being made for a circular-regenerative model to take place (Harris 2020).

"The second-hand market is one of the fastest-growing economic sectors within the fashion industry (…)" (Reuters, 2020) and, according to the *ThredUp 2021 Resale Report*, in 2020 its global market value was estimated to be worth around 27 billion U.S. dollars (Appendix 1), and it is expected to grow to 77 billion U.S. dollars by 2025 (Thredup, 2021).

The purchasing of previously owned apparel goods has been seeing an unprecedented increase in sales in the last years driven predominately by the younger generations of consumers who have sustainable agendas to meet (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, and Pen, 2021).

Problem Definition

As a fashion enthusiast and owner of a small online second-hand shop that fully works through social media, it only seemed fair to understand the potential of the resale of the pre-worn apparel market in Portugal — what drives the consumer; what obstacles do they encounter; what concerns do they have; what motivates fashion purchases and what consumption patterns do they follow.

Research Questions

To best frame this research, three major questions need to be addressed. Primarily, 1) What is the potential of the Portuguese second-hand apparel market from the perspective of the user? Secondly, 2) What are the main drivers of this behavior? And lastly, 3) What is the affinity of these drivers with the different generations and different genders?

Part 2. Contextual Background/ Literature Review

The Second-hand Apparel Market

The purchasing of second-hand garments has been around since the 1300s, in numerous European cities, when shopping for tailor-made and new pieces was overly pricey for the average consumer (Han, 2013). Because this type of clothing had been previously worn by other people, issues regarding the value and lack of hygiene were brought up (Han, 2013).

Currently, the second-hand shopping of clothing, footwear, and accessories has evolved its role in society and comes to fill the gap for a good treasure hunt (Bloomberg, 2019). That being: uniqueness and exclusivity; the opportunity to follow social media trends; good deals excluding their full price; or more environmentally conscious consumption patterns (Willersdorf, Krueger, Estripeau, Gasc, and Mardon, 2021).

Through time, this habit has also expanded from physical points of sale only — as are flea markets, garage sales, vintage shops, brick-and-mortar boutiques, and thrift establishments —

to take advantage of the possibility of global interconnectivity of the internet, allowing peer-to-peer resale in e-commerce marketplaces, personal websites or even in social media (Han, 2013). The online bit becoming increasingly more common amongst younger generations with its never-ending offer, ease of access, and digital/ logistics' solutions (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, Pen, 2021).

Nowadays, how we consume clothes is particularly characterized by a linear approach, where the products are usually used for a short period and then disposed, thus limiting their use to just one individual (Stihl, Vilimaa, 2019). Additionally, the predominant business model for the apparel industry is based on the conception of "fast fashion", where brands produce at a quick pace for the sake of responding to fashion trends and market demand for overconsumption — thus encouraging a brief product life span (Stihl, Vilimaa, 2019).

Circularity in Fashion

The concept behind fashion circularity falls upon the idea of circularity in general, an economic system that seeks the eradication of waste through the constant use of the same resources — by minimizing the use of new raw materials thus producing less waste (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, Pen, 2021). This model aims at creating better products, that are expected to last longer, and are made to be reused into other products, whilst focusing on innovative solutions and the production people's rights (Ellen MacArthur Foundation, 2020). In the fashion universe, the model usually refers to the 6 R's which are: reducing the use of new resources and waste in the production of new apparel; recycling the materials to create new products; refurbishing deadstock into new products; reselling pre-worn and pre-used; renting to other people through subscriptions models or one-off rental; and, repairing damaged products, professionally or amateurishly, without throwing away or changing their owner (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, and Pen, 2021).

Online Players

Due to the digitalization of our civilization, online business models are becoming more and more suitable, even for thrifting. *Poshmark* is the leading social marketplace for selling and purchasing both new and second-hand goods for women, men, kids, pets, and home. It was founded in 2011, by Manish Chandra, and it counts over 70 million users across the United States, Canada, and Australia. Its proposition falls upon the selling of the no longer used goods its users have (Gebel, 2021). *Depop* is another business best practice, it was co-founded by *PIG Magazine* and Simon Becker, owner of the eyewear brand *Retrosuperfuture*. In 2021, it is a global apparel marketplace connecting over 30 million users worldwide. The platform allows them to sell second-hand apparel, footwear, and accessories as well as buy from other users — strangers, friends, family, or from KOL's and influencers (Depop, 2021). Digital platforms as *Depop* have allowed fluidity in matters such as consumption and production, entertainment, and entrepreneurship, making the users both the creators and the consumers (Levato, and Colacchio, 2020).

Like these, there are multiple other success cases that focus on other, more specific, branches of the second-hand apparel universe. For instance, *Vestiare Collective*, founded in 2009, is, in 2021, the leading online peer-to-peer marketplace to purchase and sell authenticated second-hand luxury fashion goods, and has over new 550.000 listings every month (Vestiaire Collective, 2021). Like this, *The RealReal* is also an online marketplace of luxury consignment goods, with the main difference being that it owns 14 brick-and-mortar stores in select cities in the United States (Leighton, 2020).

Lastly, *StockX*, founded in 2015, focuses on "the current culture" merchandising, curating its marketplace with the most coveted pieces of streetwear, limited-edition sneakers, trading cards, accessories, and, more recently, tapping into the electronics' goods (StockX, 2021). In 2019, the platform was the first of its kind to reach the 1 billion U.S. dollar company valuation, achieving the *unicorn* status (The Business of Fashion, 2019).

Sustainability Versus Fast and Ultra-Fast Fashion

The phenomenon of creating and marketing inexpensive, seasonally thus disposable clothing is ordinarily referred to as fast fashion (Anguelov, 2020). This phenomenon comes to feed the ever-growing consumer demand by accelerating the supply chain's process (Camargo, 2018). The Spanish brand *Zara*, from the *Inditex group*, is the leading performer in the industry, known for its capabilities of translating high fashion runway looks into affordable apparel in just about a few weeks (Baskin, 2021).

More recently, a new concept has emerged: ultra-fast fashion. It focuses on the hyper-efficiency of the production-delivery congruence, as it can shorten the supply chain's period as a whole, from a couple of weeks to just a few days (Camargo, 2018). China-based company *Shein* is the ultimate gauge of ultra-fast fashion, considering its aptitude to launch over 4.000 new pieces a day — thus democratizing trends in fashion to all, on a global level, at a very affordable price point (Hall, 2021).

As *Farfetch* founder and Chief Executive, José Neves, said in July 2020 on *The Business of Fashion Podcast*, "(…) *the industry has an oversupply problem, which is an environmental problem as well*" (Amed, Berg, Balchandani, Hedrich, Rolkens, Young, Jensen, and Pen, 2021). The apparel industry became one of the biggest, most globalized, and most fundamental of the industries in the modern era (Camargo, 2018). Due to societal progress and growth, technological development, and overall change in wealth and expenditure, the production of clothing and therefore its consumption patterns, come to a great environmental cost (Camargo, 2018). From fast to ultra-fast fashion, and all the players that represent these, sustainability at its core became their antipode (Hall, 2021).

Even though sustainability is prone to become the prevalent premise of the fashion industry in the next years, the fact that there is no commonplace to define it, makes its vagueness a hazard for both the brand and the planet (Berg, Hedrich, Ibanez, Kappelmark and Magnus, 2019).
Sustainability in fashion became an unclear term of the past years to describe the ethic-environmental agenda which brands need to communicate to remain relevant to their conscious consumers (Fernandez, 2021). But "*sustainability as an aesthetic*" is not enough if consumers are growing savvier on the issue of transparency of information regarding all matters related to brands' attempts to be more sustainable. Therefore, falling into the greenwashing trap becomes easy if there is no common ground to what concerns sustainable vocabulary and if brands' marketing messages don't comply with actual efforts (Mondalek, 2020).

Slow fashion

Fast fashion made fashionable clothing accessible to almost everyone, but that came with the price of devaluation of resources and labor (Misciagna, 2020). Unlike the fast fashion business model and the absolute antithesis of the ultra-fast, there's the concept of "slow fashion". This business model focuses on quality, rather than quantity, conscious consumption rather than trend consumption, and overall transparency in the supply chain, fair trade, and local production (Schrewentigges, 2018). The values of sustainability on which slow fashion relies on, encourage the consumer to be more mindful about their apparel purchases, and to seek and invest more in timeless ethical items rather than avidly overconsuming them, at cheap prices, and then disposing them (Schrewentigges, 2018). As consumers became more aware of the negative environmental and social impact of the fashion industry, slow fashion emerged as a responsible consumption alternative (Rodrigues, 2020).
Patagonia is a brand that is thriving when paving its way into slow fashion. At the very core of its business model, *Patagonia* "*manufactures, repairs and recycles*" its products so they can last a lifetime (Hoang, 2017).

The Declutter Phenomenon

Around 2019, inspired by Marie Kondo's bestseller *The life-changing Magic of Tidying Up*, and *Netflix* series *Tidying Up with Marie Kondo*, millions of people decluttered their closets from pieces that failed to "*spark joy*" to them (Marjorie, 2021). Unbridled fashion consumption goes to households around the world, but where do unbridled donations end up? (Silva, 2021). Not all pieces of clothing convey the trendy purchase, in fact, it is common knowledge that the vast majority of fashion surplus ends up being exported to countries in developing economies with the facade of a "*charity donation*" (Silva, 2021).

According to the *Observatory of Economic Complexity*'s (OEC) report *Used Clothing*, in 2019 the United States and the United Kingdom were the two top exporters of second-hand clothing (Observatory of Economic Complexity, 2021). Ghana, on the other hand, is amongst the top importers of these previously worn garments (Observatory of Economic Complexity, 2021). It is estimated that the main Ghanaian second-hand market in Accra, Kantamano, welcomes over 15 million different new pieces every week which the local community is unable to fully consume (Ricketts, 2019). It is estimated that 40% of these weekly deliveries have open-air landfills as an immediate end (Ricketts, 2019). What happens every week in Accra is just a modest illustration of the obstacles of managing the ever-growing fashion excess (Ricketts, 2019). These people are hardly flourishing because of these over donations, they're most likely burying themselves in them (Misciagna, 2020).

The Second-hand Apparel Consumer

Depending on different demographics as well as different second-hand fashion segments, the second-hand apparel consumer profile is going to change. They will have different motivations, buying capabilities, and ethical triggers.

Following a *Thredup* study, the Boomer generation is the least likely to buy second-hand (Thredup, 2021). For the older generations, the adoption of second-hand may need more education and encouragement since the shopping of pre-worn clothing and footwear may raise the obstacle of it being hygienic (McKinsey & Company, 2021. On the other hand, for the average Generation Z and Millennial consumer, the idea of circularity of fashion comes more naturally to them as they have a revolutionary mindset around clothing consumption when compared to the previous generations (Thredup, 2021). The perpetuity capability of a garment, rather than its trendiness, both in quality and multiple ownership, are factors considered before the actual purchase of a product (Thredup, 2021). In addition to this, a *Depop and Bain* study demonstrates that second to conscious consumption reasons, affordability and uniqueness are the next two most relevant drivers (Levato, and Colacchio, 2020). However, as reported by a *Vogue Business* study, for second-hand luxury goods' consumers, sustainability is the least significant driver, when compared to affordability or the "*rare-factor*" (Vogue Business, 2021). According to Olivier Abtan, managing director at *Boston Consulting Group*, the buyers in the second-hand luxury market are usually people who can't afford the full price of new luxury items (Biodi, 2019).

The Second-hand Apparel market in Portugal

The real total consumer spending — referring to private households and non-profit institutions — on apparel, including both clothing and footwear, is projected to reach almost 9 billion U.S. dollars by the end of 2021, and the forecast is set to reach around 11 billion U.S. dollars by 2025 (Appendix 2) (Statista, 2021). Due to lack of public information, it is impossible to measure how much of this is a percentage spent on second-hand apparel but, according to an *Eurostat* study, the industry revenue of retail sale of second-hand goods in stores in Portugal is forecasted to reach around 135 million U.S. dollars in 2021, and is expected to grow every year at a steady pace (Appendix 3) — that excluding all revenue generated through online peer-to-peer marketplaces (Statista, 2021). As reported in a *Forbes* study of 2020, between 2019 and

2020, the growth rate of the apparel sale market online was 69% whereas thrift shopping in brick-and-mortar sites was 2% (Appendix 4) (Statista, 2020).

Charity

In Portugal, the tendency to donate pre-worn clothing to charity or to giveaway to family and friends, rather than resell it, is still quite impactful (Correia, 2021). *Humana Portugal*, an independent member of the *Federation Humana People to People*, is a non-profit organization that promotes the circularity of fashion. Through a network of street containers, *Humana Portugal* seeks to make the most out of the Portuguese citizens' clothing donations, by upcycling the textile waste into fresh garments (Humana Portugal, 2021). These are then sold through the *Humana second-hand* stores and the purpose of the generated funds is to help finance solidarity projects in developing countries in Africa (Humana Portugal, 2021).

Distribution Channels

In Lisbon, *Feira da Ladra* is the top-of-mind physical destination for second-hand shopping. An open-air medieval market from the XII century known for the trade of antiques, pre-worn objects and garments, and craftwork (Rodrigues, 2009). Recently it became part of the tourist itinerary and is visited by multiple foreigners (Rodrigues, 2009). In Oporto, *Feira da Pulga* is a hub of exchanging and selling all sorts of used items and welcomes over 8.000 people per edition (Costa, 2019). Other physical channels are the local boutiques spread all around the country as is example *A Outra Face da Lua*, a small family business that specializes in the selling of vintage clothing with the premise of a more conscious fashion consumption solution (A Outra Face da Lua, 2021).

As the trend expands fueled by digitalization, in recent years multiple online platforms were born in the national territory all having sustainable consumption as the main proposition (Peixoto, 2020). For instance, *MyCloma, Retry,* and *Ecoa Circular* — the three having a similar business model. Sellers that would like to sell their pre-worn fashion products can 1) select a few of their pieces that fulfill the selling requirements; 2) submit a seller's form with the necessary information; 3) ship the garments/ have them being picked up by the entity. The platforms then take charge of pricing, content creation, client support, and shipping. These platform's revenue derives from a percentage applied on every piece that is sold on the platform thus working on commissions (Ecoa Circular, 2021; Retry, 2021; My Cloma, 2021). *Maudde Prelovedluxury* comprises the same purpose except it focuses on the reselling of pre-worn luxury fashion products (Gonçalves, 2019). Moreover, *Micolet* is a Spanish company that uses the same business model as the above mentioned with the difference that it has grown its user base to around 800.000 sellers and buyers and has expanded to multiple European countries currently operating — besides the country of origin — in Portugal, the United Kingdom, France, Italy, and Germany (Ecommerce News, 2018).

Another online second-hand business model that is commonly resorted to in Portugal is the peer-to-peer marketplaces which are free for the users to market their products but, for an extra fee, posts can be highlighted in featured listings and ads within the platform (Makkonen, 2015). *OLX Portugal*, acquired and operated by *FixeAds* in 2012, is an online marketplace for classified ads (Abreu, 2014). Although there is no specific focus on the reselling of apparel, on the platform, users can post their products within 12 categories: animals; sports; fashion; furniture; house and garden; technology; cell phones and tablets; leisure; cars; motorcycles and boats; housing; jobs; services, and others (Abreu, 2014). The *Facebook Marketplace* is a similar solution to *OLX Portugal* and the payments in the two are processed outside the platforms, neither focus specifically on the reselling of pre-worn clothing (Pimentel, 2017).

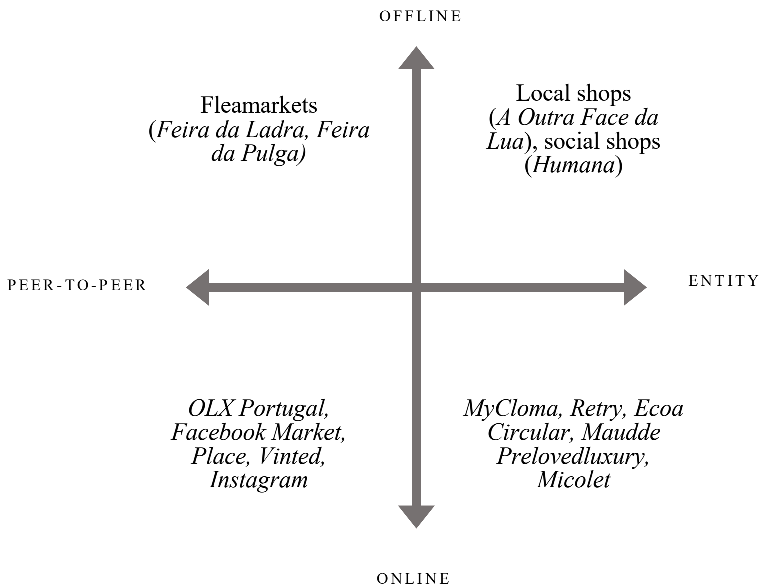
More recently, a second-hand fashion marketplace entered the Portuguese market, and it is called *Vinted*. The platform has the same peer-to-peer marketplace model as *OLX Portugal* and

Facebook Marketplace, with the main difference being that it focuses solely on the exchange and selling of fashion items (Eco, 2021).

Subsequent to the established second-hand fashion platforms previously mentioned, sales through social media [e.g., *Instagram*] have also proved to be efficient and constitute an ever-growing portion of the global pre-worn fashion market (Chen, 2021). That being the direct trade from an individual's account or secondary account, created for that sole purpose (Salgueiro, 2021). A quick *Instagram* search will provide us hundreds of these aspiring entrepreneurs' resale accounts.

Some small boutiques have also made their way through these reselling accounts, "*Awoke Vintage', a chain of three second-hand stores in Brooklyn, generated about 20% of its sales via Instagram stories last year, up from about 10% in 2019*" (Chen, 2021). In Portugal, *Mia Luxury Vintage* and *Du Chic à Vendre* work both through their Instagram accounts and own websites.

1. Second-hand Distribution in Portugal as Per Channel.



Source 1. Work Project's Author.

Part 3. Work Project

Methodology

For the purpose of this present work project and having understood the current relevancy and growth of the second-hand market, from a global perspective, as well as its apparently small adoption in Portugal, it becomes rather pertinent to further understand the potential of this market from the consumer's standpoint. Considering the high penetration of first-hand apparel consumption in Portugal, what gap is the second-hand fashion consumption going to fulfill, is there potential for it?

Given this, research was conducted to understand the second-hand market potential in Portugal, considering the different elements of the market. This exploratory research carried out, followed four different phases, namely, i. secondary data, in which multiple sources of information were used to better frame the theme — from public articles to academic papers, and books; ii. primary data, gathered through three diverse methods thereupon, providing a more thorough analysis regarding the subject in analysis: an interview with an industry expert, qualitative analysis, and finally, quantitative analysis.

Sample Population

The primary data was collected through three different approaches: firstly, an informal open-ended interview with an industry expert. The main goal of this interview was to understand the obstacles the second-hand apparel market had to overcome for its penetration in Portugal to increase — fundamental information on consumer behavior from the point of view of a business (refer to Appendix 5 for a detailed transcript of the interview).

Secondly, considering the little information regarding the subject, qualitative research was conducted with the means of intimately understanding the second-hand apparel market's consumer in Portugal. In-depth one-to-one interviews were conducted with 30 individuals following a semi-structured guide. The only pre-recruiting filter applied was a) if the person was Portuguese and currently living in Portugal; b) if the person had purchased any fashion item for themselves in the past two months. For the purpose of statistical relevance, the final sample was composed of thirty Portuguese consumers — 25 females and 5 males — of different ages — the age average was 28 years old (refer to Appendix 6 for the interview guide and key insights of the interviews).

Finally, a quantitative instrument was designed and applied to a total sample of 1,288 Portuguese consumers, mainly Millennials and Gen Z's. Having inferred the present Portuguese market's scene and comprehended the potential consumers through the preliminary results of the in-depth interviews, an online quantitative survey was conducted to strengthen the statistical relevance of this study. As in the interviews, the same criteria were applied as a pre-screening filter, thereby allowing congruence. Moreover, to understand the consumers and how they differ from one another, the questions covered in the survey were primarily premised on the key insights from the in-depth one-to-one interviews.

Given the purpose of wanting to obtain the most reliable data possible, the questionnaire did not allow participants to quit in the middle of the questionnaire, so all surveys had to be 100% completed. Additionally, the questions were designed considering the qualitative results and were mainly single/ multiple-choice questions. These characteristics ensured the robustness of the results.

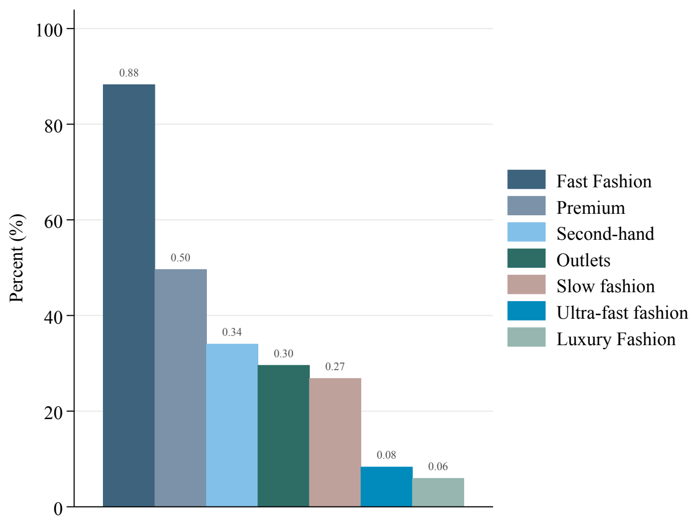
Primary Data Analysis

Out of the 1,288 people that answered the survey, only 1,058 were eligible for the study — Portuguese people, currently living in Portugal that had bought an apparel item in the last 2 months. The sample was composed of 964 women — 91% of the entire sample — and 94 men. The majority of the sample has achieved a bachelor's degree or a higher diploma (80%) and 45% was employed while 39% were students (refer to Appendix 7 for sample characteristics, and Appendix 8 for detailed questionnaire)

Purchasing habits

Most of the participants, 88%, declare that they buy apparel at fast fashion establishments (*Zara, Mango, H&M*, ...) or premium stores, 50% (*Massimo Dutti, Bimba Y Lola, Maje*, ...). Only 34% mention buying apparel at second-hand stores or platforms (*Instagram*, Flea Markets, *OLX, Micolet*, ...).

2. Where do you usually buy your apparel?



Source 2. Work Project's Author.

However, there are differences when we compare the results by gender and age groups. While 91% of female participants mention that they buy clothes from fast fashion stores, only 59% of male participants buy clothes from these brands. Additionally, only 22% of male participants mention buying clothes from second-hand stores or platforms compared to 35% of women (Appendix 9).

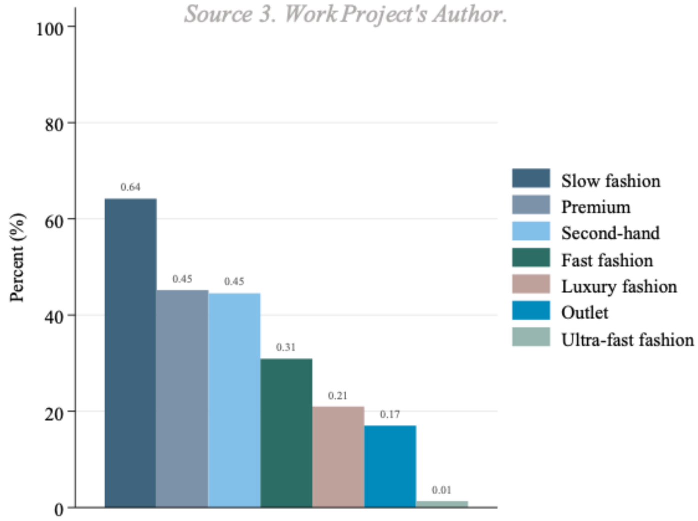
When comparing across age groups, both Gen Z's and Millennials mention they usually buy clothing from fast fashion stores, 91%, and 86%, respectively, the same way both shop second-hand, 35% and 36%. However, whilst 33% of Millennials mention they usually resort to slow fashion brands, only 23% of Gen Z's say they do. This difference could be caused by the higher costs associated with the slow fashion movement (Appendix 10).

When it comes to spending habits, the survey enquired 1) where participants would want to spend more money in the next five years and 2) where participants would want to spend less money in the next five years. Overall, 64% of participants mentioned that in the next 5 years they would like to spend more money on slow fashion, 45% mentioned premium brands, and 45% on second-hand stores or platforms. Similarly, when asked where they would want to spend less money, the majority of participants mentioned Fast fashion (61%).

However, there are differences when we compare the results by gender and age groups. While 66% of female participants mention that they plan to spend more money on slow fashion (the first choice for female participants), this number decreases to 45% for male participants (the most chosen option being premium brands, 50%). On the other hand, female participants intend

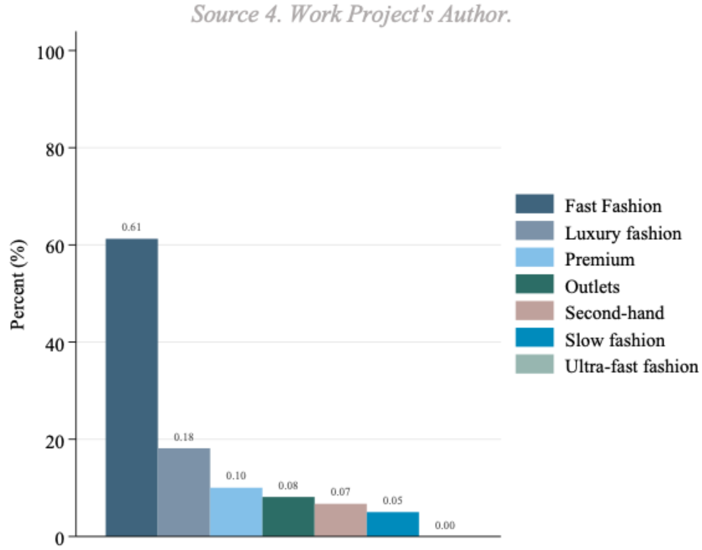
3. In the next 5 years, where do you plan to spend more money?

Source 3. Work Project's Author.



4. In the next 5 years, where do you plan to spend less money?

Source 4. Work Project's Author.



to spend more money in the next 5 years on second-hand brands or platforms than men (46% versus 32% respectively) (Appendix 11, Appendix 12).

On the other hand, male participants mention they want to spend less money in the next 5 years on luxury brands (50%) and fast fashion (45%), while women mention fast fashion as the most important decrease in spending (66%) and premium as the second (46%).

When it comes to age groups, the distribution of answers for the questions "In the next 5 years, where do you plan to spend more money?" and "In the next 5 years, where do you plan to spend less money" are similar for Gen Z's and Millennials. However, an important difference can be observed. While Millennials place second-hand apparel items in third place on intentions to spend more money (42%), this category appears in second place for the Gen Z participants (47%). These results are also coherent with a smaller preference for slow fashion in the next 5 years (64% for Gen Z's and 69% for Millennials) (Appendix 13, Appendix 14).

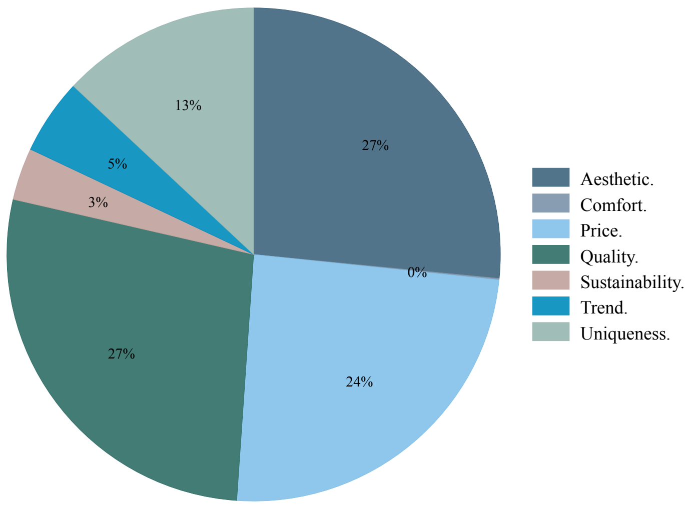
Major Purchasing Drivers

For 31% of participants, a brand's transparency regarding its sustainable practices was influencing their apparel purchasing habits and for 18% of participants, transparency was extremely influential (Appendix 15).

Regardless, according to the data, when asked what factors play the biggest role in apparel purchase decisions, participants mentioned quality (27%), aesthetic (27%), and price (24%). Uniqueness and sustainability are the least mentioned by participants (0% and 3% respectively). Male participants value quality more than female participants (35% compared to 27% respectively) and give less importance to aesthetics (24% compared to 27%).

As for the differences between age groups, there is no particular preference for sustainability, Gen Z's value price (27%) as the most important factor in apparel purchases decisions, followed by aesthetic (26%) and quality (22%), compared with Millennials that value quality (30%) as the most important factor. An interesting difference between Gen Z's and Millennials is their valuation of uniqueness. 16% of Gen Z participants mention that uniqueness plays a big role in apparel purchases, compared to 10% for Millennials (Appendix 16, Appendix 17).

5.What factor plays the biggest role in your apparel purchases decisions?



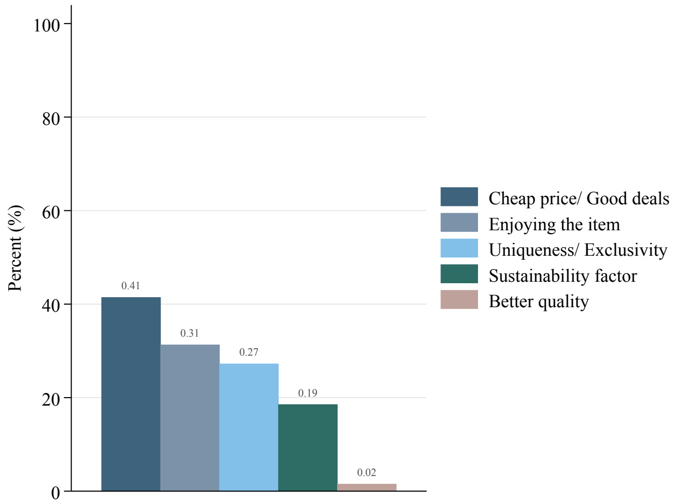
Source 5. Work Project's Author.

Second-hand Shopping

Although the majority of participants have at least once shopped for second-hand apparel (68%), there are great differences across genders (Appendix 18). As the regression analysis show, women shop at second-hand apparel stores and platforms more often than men (refer to Appendix 19 to see detailed regression analysis). While 70% of female participants have shopped for second-hand apparel, only 47% of male participants have done so. In addition to this, 13% of female participants and 19% of male participants would like to try shopping at second-hand stores and platforms, and similarly, Gen Z participants are more interested in trying to buy second-hand than Millennials (15% versus 11%) (Appendix 20, Appendix 21).

When it comes to drivers of second-hand apparel purchases, the most mentioned driver is the price (41% of participants mention "Cheap price/good deals"). 31% mention enjoying the item, 27% mention uniqueness, and only 19% mention sustainability as an important driver in second-hand apparel purchases.

6. What drives most of your second-hand apparel purchases?



Source 6. Work Project's Author.

These drivers do not change in priority between genders, price is the most important driver for female and male participants (42% and 31% respectively). Nevertheless, we can see that female participants are more driven by sustainability than men, as the regression analysis shows. Women mention sustainability more often than male participants (20% versus 6% respectively). There is no substantial difference for different age groups (Appendix 22, Appendix 23).

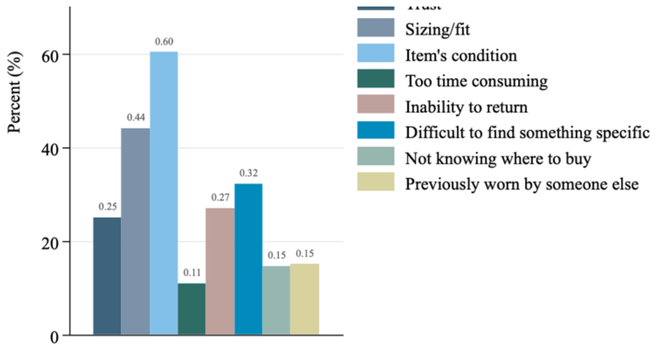
When asked about the frequency of second-hand apparel purchases, 31% of participants mentioned these were not often (1 - 3 in the last year), 29% participants mentioned they've never done it and 24% of participants didn't do it often but were interested in doing so (Appendix 24).

According to channels, 39% of participants rather buy in local second-hand shops, then from social media (37%), and finally in flea markets (34%). On the other hand, 7% of participants said they wouldn't know where to shop second-hand (Appendix 25).

For 60% of participants the condition of the items is the main obstacle for second-hand apparel shopping, followed by the way the item's fit (44%), and the difficulty of finding specific products (32%). This obstacle holds as the most mentioned either for male and female participants, as well as for Millennials and Gen Z participants. It can be pinpointed as one of the biggest challenges for the potential of the second-hand market in Portugal (Appendix 26, Appendix 27).

7. What do you consider to be the main obstacles when shopping for second-hand apparel?

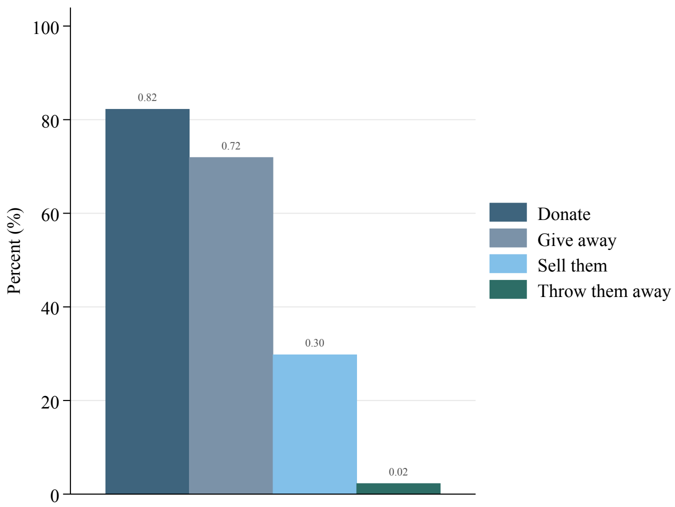
Source 7. Work Project's Author.



When asked "What do you usually do with the apparel items you no longer wear?", 82% of participants mention that they donate it, 72% mention that they give it away, and 30% mention that they sell it. There are no significant differences between genders or age groups (Appendix 28, Appendix 29).

8. What do you usually do with the apparel items you no longer wear?

Source 8. Work Project's Author.



For 46% of participants, the main driver behind their apparel reselling is to retrieve their money, whilst 21% is not interested in reselling, and only 16% mentioned they were trying to promote the circularity of fashion (Appendix 30).

Moreover, 40% and 36% of participants strongly agreed and agreed, respectively, with the statement "the second-hand apparel market in Portugal is not fully developed yet — it lacks offer." Similarly, 39% and 30% of participants strongly agreed and agreed, respectively, that Portugal didn’t have enough physical points of sale of second-hand apparel.

Lastly, when asked if they would ever consider quitting completely shopping first-hand, although the majority (55%) said they wouldn’t, 36% of participants said they were willing to try despite the challenges and 9% said they definitely would (Appendix 31, Appendix 32).

Furthermore, 40% of participants mentioned they would consider renting a specific apparel item for a period of time, whilst 32% said they would maybe consider doing so (Appendix 33, Appendix 34).

Part 4. Work Project Discussion

The purpose of this research was to explore the potential of the Portuguese second-hand apparel market, from the perspective of the consumer. A shift in mindset is required for this market to unleash its full potential, focusing more on value-in-use rather than value-in exchange. (Stihl, Vilimaa, 2019).

There is evidence that supports that the Portuguese consumer is, to the day, still quite accustomed to picking fast fashion chains to shop for their apparel items, with the vast majority of participants (88%) mentioning they usually shop from brands like this. We can infer that this could be further supported because Portugal relies amongst the poorer countries in Europe, where the wages are low, and the costs of living are growing higher every day. As evidenced in this research, besides aesthetic (27%) and quality (27%), price (22%) is amongst the main decision factors for purchasing apparel.

The Portuguese second-hand apparel market is still rather fragmented, with lots of disentangled ends and thus less resorted to — participants in this study feel like the market is yet to be fully developed, as it lacks offer and physical points of sale. However, the quantitative survey shed some light on the trends of the Portuguese consumer regarding their relationship with the second-hand apparel. 34% of participants mentioned that they buy apparel items at second-hand stores or platforms, showing that there is a clear presence of the second-hand apparel market in Portugal. 31% of these mentioned they didn't do it often, but 24% would want to make it a more recurrent practice. This is further confirmed by the self-reported spending intentions of participants, with 45% mentioning that in the next five years they would like to spend more money on second-hand stores or platforms (only surpassed by intention to buy slow fashion, 64%). Additionally, there is a clear difference by age group. While Millennials value the second-hand market and plan on spending more money on these brands and platforms in the next 5 years, the trend is more noticeable amongst Gen Z's. This could be due to less purchasing power as the main reason for Gen Z's to shop second-hand is "cheap prices/ good deals".

The motivations beyond the choice of second-hand shopping in Portugal are not predominantly driven by sustainability values. Participants (41%) mention price as the number one reason for choosing to buy second-hand, followed by enjoying the item (31%). Sustainability appears as the fourth driver for second-hand buying.

Although 38% of participants in this study associate the fashion industry with "(…) mass production, environmental waste, and social inequality" (Appendix 35), we could infer the concerns they might have probably won't translate into behavior nor will they keep the consumers from buying some apparel item they really enjoy. It might also be associated with a lack of real knowledge or lack of urgency for the matter of negative environmental and social impact that the fashion industry is responsible for. In the interview with the industry expert, Martim de Mello, he mentioned *"(…) we did have a couple of environmental enthusiasts* [in their research] *who we call 'second-hand Suzanne' and those are very concerned about the bad impact of their clothing purchases, and they are indeed looking for a way to reduce their environmental impact, but they do not represent the overall consumer and they are still a very special case."*

Furthermore, evidence reveals that the slow fashion market is expected to grow more than the second-hand one, we can argue that even though the Portuguese consumer may appear to be worried about a more conscious consumption, which might lead them to think it will have a better impact in the world, consumers are still clinging to their consumerist ways through choosing to shop first-hand.

Lastly, the results show that there are some statistically significant differences between the preferences of men and women when it comes to second-hand shopping. Women are more driven to buy second-hand items and have stronger sustainability motives. Despite some interesting differences between Gen Z's and Millennials, these differences are not statistically significant, so we can't infer conclusions from them.

While it is not possible to quantify the size of the Portuguese second-hand apparel market, because there is an incalculable number of small social media players, physical spots, flea markets, in addition to e-commerce platforms that focus (e.g., Retry) or not (e.g., OLX Portugal, in the subject of selling pre-worn fashion, evidence proves (Appendix 36) a clear interest from the consumer's side and potential in this market to grow.

We could imply that the market is not exactly undeveloped, as there is a multitude of online platforms and physical sites from which consumers could buy. One of the big issues could be a lack of fluidity in communication. In fact, one of the main insights from the in-depth one-to-one interviews mentioned by 13 individuals, was that the market lacked awareness — if there was a place for them to shop, they did not know about it. This is further evidenced in the quantitative research, while 76% of participants recognized *Vinted* and 62% recognized *Micolet*

— and we could infer that this is caused by both platforms having either TV ads on prime time (*Vinted*) or associating themselves with Portuguese KOL's and influencers — only a few recognized the Portuguese platforms. 29% of participants recognized *MyCloma*, followed by 13% not recognizing any of the platforms, only 6% recognizing *Retry,* and finally, only 5% of participants recognizing *Ecoa Circular.*

To enable the growth of the second-hand apparel market in Portugal comes great effort into educating the consumer on the subject of fashion's circularity.

Part 5. Main Limitations

This overall dissertation was subject to some theoretical and methodological limitations. First and foremost, considering the lack of prior studies on the Portuguese second-hand market and its consumer, there was a small basis foundation upon which to build the research.

Thereafter, with means of creating such a basis, a preliminary step was taken which was on interviewing thirty individuals. Despite the statistical relevance, due to biases in gender, location of residence, income level, level of education, and employment status, the sample utilized may not fully reflect all Portuguese consumers.

Similarly, the quantitative questionnaire, though significantly more robust, hence more representative of all the Portuguese consumers, was not evenly distributed amongst gender nor was it equally distributed amongst generations. This may be explained since the majority of respondents were sorted from an Instagram account which audience is 80,7% female, and which 73,1% are between the ages of 18 to 34 years old. Generation-wise, the distribution is biased to the Gen Z's (10 – 24 years old) and the Millennials (25 – 37 years old), where Generation X (38 – 55 years old) and the Boomer (56 upwards) lack representation — neither being statistically relevant (27 and 20 respondents, respectively). Generation Alpha (9 years old or younger), for logistic reasons, doesn't have representation at all as it was impossible to sort.

Even though worldwide the second-hand apparel market is expected to grow exponentially in the next years, the market is still to become top-of-mind in Portugal. Consequently, the main perceptions and insights from this dissertation contemplate some speculation. Regardless, the present Work Project may assist academics and researchers in developing more studies on the issue of the Portuguese second-hand apparel market. Because this research was constrained to a specific time frame and restricted data resources, the analysis may be further developed and elaborated.

Part 6. Directions for Additional Research

An interesting research path to deeply understand the Portuguese second-hand apparel market landscape and its consumer's motivations could be to further investigate the issue from a business point of view. In this sense: interview current players of the market, their interactions with the users, deeply research their business models and strategies and infer possible innovations and recommendations.

Furthermore, and since multiple interviewees mentioned that the second-hand stores in Portugal could be more divided into genres and styles, it could be interesting to better understand the different segments within the apparel second-hand market — luxury, hype streetwear, vintage, y2k, etc.… — and grasp their demand in Portugal.

Lastly, and on the other side of the second-hand apparel market's coin and based on the demand evidenced in the data collected, another interesting research would be to focus on the to be explored fashion renting business (Appendix 37).

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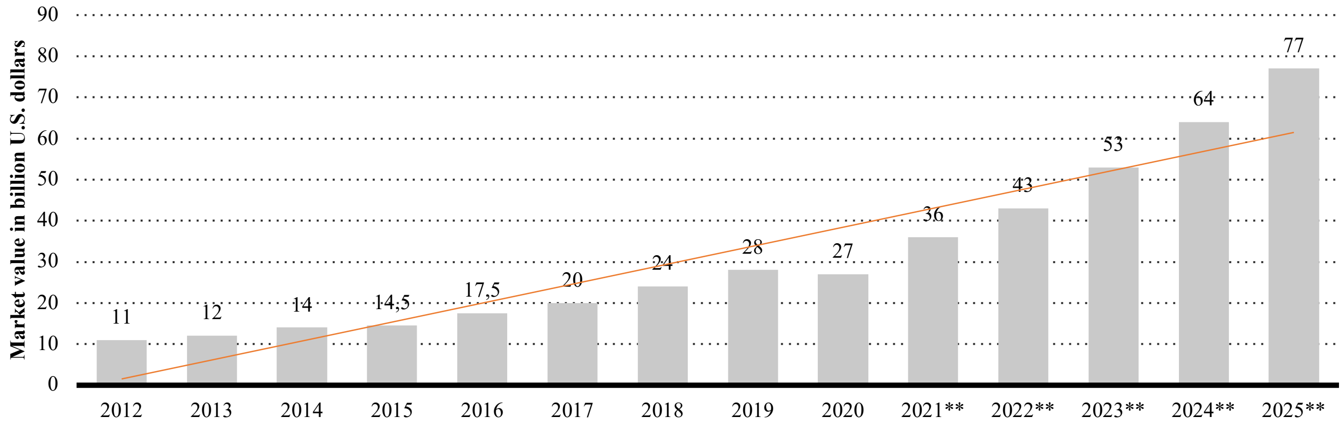
Appendix

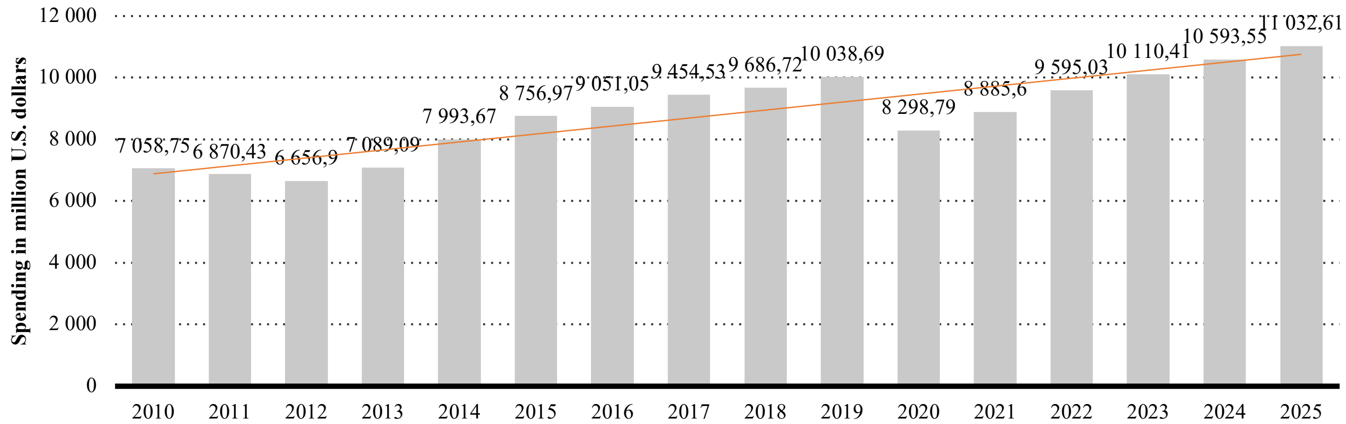
Appendix 1. Second-hand apparel market value worldwide from 2012 to 2025 (in billion U.S. dollars)

Source: Statista



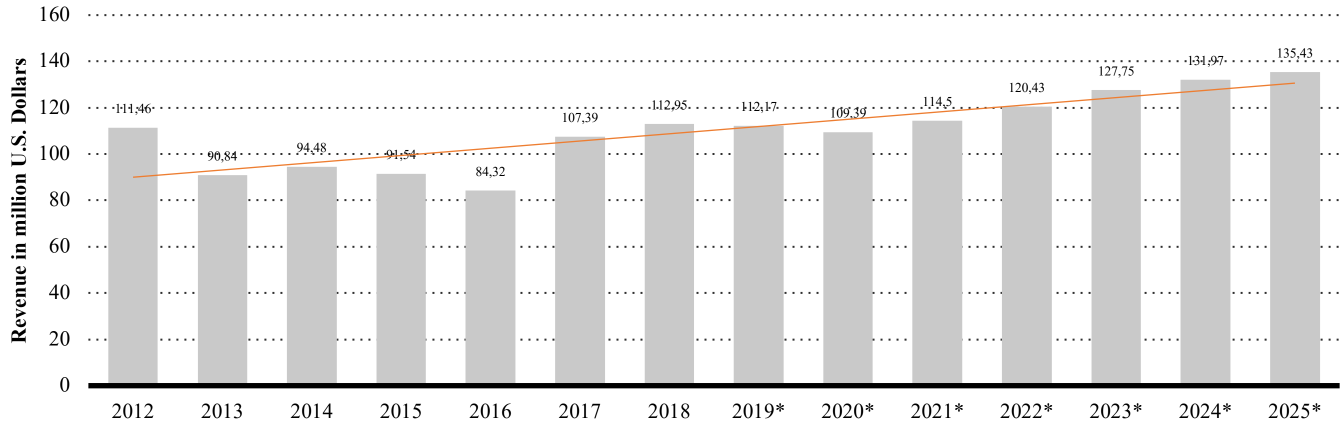
Appendix 2. Forecast of the real total consumer spending on clothing & footwear in Portugal from 2010 to 2025 (in million U.S. dollars)

Source: Statista



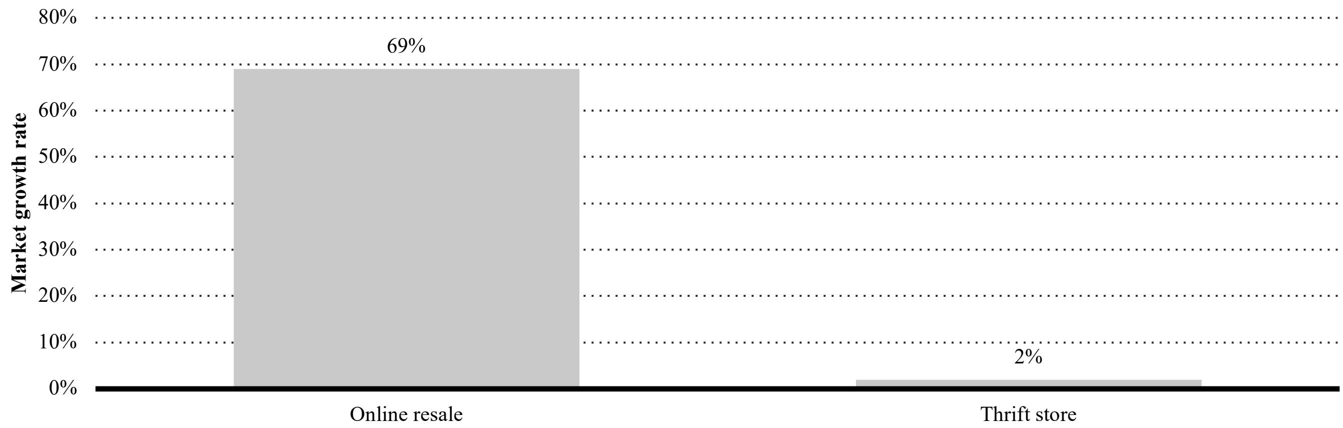
Appendix 3. Industry revenue of "retail sale of second-hand goods in stores" in Portugal from 2012 to 2025 (in million U.S. Dollars)

Source: Statista



Appendix 4. Apparel resale market growth rate worldwide between 2019 and 2021, by retail channel

Source: Statista



Appendix 5. Interview transcript with industry expert performed on July 24th, 2021

Source: Work Project's Author.

Martim de Mello, CEO and Co-Founder of *The Changing Room.*

Q1: What was the starting point for The Changing Room?

We all know the fashion industry has really big environmental impact, we know because we're sick of hearing everywhere. We know production-wise it takes up a lot of water, resource-wise is very wasteful, air pollution wise we hear it produces around 12% of CO2 emissions. But, this is the internet talking, although we know it's impactful, what first triggered us was: how real are these numbers? Are we sure it's not even worst? Our research started from there because we were using these statistics that didn't feel 100% accurate.

We, later on, understood that the global emissions were actually around 4% rather than the 12% whatever numbers sometimes are just floating around the Internet. This shows that, if you're trying to take an "activist" stand around such as important issue, it is important to get the numbers straight. We have so much information on the internet these days, a lot of times just exaggerated information, and that might lead people astray. That leads obviously to a problem. We feel like when we're trying to solve such complex problems as global warming we need to know our numbers very well.

The impact is indeed very big, and it's even bigger. There's a lot of aspects to it not only environmental but also, and especially, social that are related to it. These aspects involved, in my opinion, are equally or even more important than the environment. The social impact of the fashion industry such as unfair labor practices that in 2021 still goes on, all the things that happened in Egypt and Indonesia, Russia, etc.… still need to be deeply revolutionized.

Q2: What was is about the numbers triggered you? I had never thought about the realness of them, I always just knew it was impactful and just assumed the numbers were bad, but never untrustworthy.

I think the importance of more in-depth research such as the one Business of Fashion and McKinsey are doing is major to shape this new era where the environmental impact of the various industries, and specifically the fashion industry, are borderline. To bring more transparency to the public is to bring more realism to the problem because if you don't know what the problem is you're going to go in the wrong direction.

And also, you know what? When people say "the fashion industry is the most polluting industry in the world" what does that even mean? The fashion industry depends on other industries for the production of clothing and the transportation and the packaging etc.… yes it is of course very polluting but there's a lot of double counting in some initial studies that maybe happened some years ago. We need to be more realistic about how dangerous the problem is.

Q3: I understand what you mean and it's accurate. Can I ask, from a business perspective, how much do you think the "sustainable" — and I'm putting air quotes on it because I feel like this is just a very vague term and it could mean anything — plays a big role in influencing the consumer? From the primary data I've gathered so far, here in Portugal, people are not quick to associate fashion with something with big environmental impact nor do people mentioned that they try to buy second-hand because it's more sustainable and because it promotes the idea of circularity of fashion. So, what drives the consumer from your business experience?

I think it's a good question, we did 100 interviews with potential consumers here in New York City, and our primary research and also secondary research shows evidence that people's habits are changing but are yet to be 100% accomplished when it comes to second-hand fashion buying. You can ask a lot of questions but if you look into people's actual buying behavior you will see that they are still very used to buying fast fashion items and there's also still a lot of following trends. I think the second-hand trend because in my opinion buying second-hand is a trend for itself, is still very independent from its environmental aspect. I think people are starting to get aware and having some concern with the environmental impact of their clothing purchases although I don't think that buying second-hand is driven from a conscious purchase POV. I Think trends like vintage are still driving a lot of consumers to buy second-hand, I also think that price is driving a lot of consumers to buy more second-hand because they get to find very good deals and a lot of particular opportunities. But right now, I can say with a lot of confidence that what drives a consumer to buy second-hand it's not its environmental impact. In our primary research, we created a couple of personas to understand our consumers and we did have a couple of environmental enthusiasts who we call "second-hand Suzanne" and those are very concerned about the bad impact of their clothing purchases, and they are indeed looking *for a way to reduce their environmental impact, but they do not represent the overall consumer and they are still a very special case.*

Our "Fast Fashion Fiona's" for example, just want to follow trends and just want to look good and just want to buy new clothes. We saw in our research if we ask people if they are concerned about the planet, of course, they're going to say they are concerned about the planet. That it's not even the question. We expect people to be concerned about the planet. But is that going to translate into behavior? Is that going to move people from buying first-hand to second-hand? When you see the actual trends and how people behave you see they are still trying to figure it out, but for the most part, they will keep their current behavior.

Q4: Do you think it is a need to educate the consumer? On matters such as environmental impact, social impact, overconsumption of trends? Or do you think that it is enough to try and make second-hand shopping sexier/ trendy?

I think there will always be the baseline second-hand consumer who enjoys thrifting, they are by nature people who are it's more "hardcore" second-hand buyers, and that consumer is stable. It might increase a bit, but that's like they are the base of the pyramid.

Then you have this number of people who are more into trends which will increase for sure. They will start buying second-hand fashion because it is trendy, excluding obviously the environmental bit to it, but because they only follow trends, they might go away, and they are not a stable consumer. Education, for sure, is imperative at this point. We are at a critical state where if we don't act then we're going to have a serious problem due to climate-related issues and extreme weather patterns. Real communication about the problem is crucial. Brands communicating this problem is crucial. We found out that big companies like H&M are starting to innovate their business models, embracing more circularity initiatives. For example, the production of a recycled piece. And that is very interesting because it changes the whole paradigm. To see fast fashion problems, which were initially part of the problem, trying to fit in the solution.

Q5: I see your point, but one company is not enough. I mean, naturally, the whole system will not change from night to day but for initiatives like that to have an actual environmental impact, we need the whole system to change. Don't you agree?

I see what you mean, to have an impact, the whole system needs to be revolutionized. But, if you think about it, what we need is for all companies to try, to innovate their business models introducing recyclability of their products within the supply chain, research less impactful production ways, reduce the use of raw materials, etc. The right way is to make everyone push and try. The whole system needs to change, yes, but the whole system needs to change in a way they can.

I discovered a Portuguese brand called "ISTO", where I started consuming, and although it is first-hand, it is the way we call "slow fashion". It promotes transparency within the supply chain, high-quality items — which last for longer, materials that comply with sustainable requirements, etc.

So, the point I'm trying to make is, companies will start changing. Some will adopt the "slow fashion" movement, bigger brands will try to find business models which promote circularity, some will try to do both. And some will just improve their supply chains but probably will remain as they are, with a first-hand premise while trying to better their practices towards more sustainable practices. And that is ok if that happens. As long as everyone moves in the same direction. If a company has 0 CO2 emissions and circularly sorts its water, that is not a big issue. Every brand needs to change, but they will change in a different way and with different rhythms. All this to say, in my opinion, will end up benefitting the second-hand movement. Because it is an overall trend or because of rising concerns on sustainable consumption.

Q6: Although your POV will always be biased to the NYC consumer, I think it is still insightful to understand what do you think are the main barriers to the penetration of second-hand movement in the market?

When the thing that we've seen that drives the "fast fashion Fiona", who isn't generally used to buying second-hand, is that they are ed about the quality of things. They care about quality, and they are worried it will not be as expected. The fact that the second-hand option has been used before, might have some flaws, might lack its original quality, might be "disgusting" and not being taken care of. The hygiene factor plays a big toll. I think it is a "mental" challenge which will eventually be overcome, because in practical terms, at least in the platforms they sell second-hand they do quality control, they wash the pieces, they make sure the condition of the product complies with a scale provided (never worn with tag, never worn, very good condition, etc.) Thank kind of transparency should ensure the consumer about some misconception they might have *regarding hygiene. Nevertheless, there is still a lot of education we need to do to make it a more common and resorted practice.*

This brings to another issue, which doesn't have to do with penetration, it has to do with the concept of second-hand: in these e-commerce places, the "never worn with tag" is not a second-hand piece. It's a pre-worn piece. It has been previously purchased by someone else and if that person does not use it and it is in good (in this case perfect) condition to return to the market, then it should. People shouldn't think of just throwing it away or put it in a bin. Naturally. My main issue here is that what if big companies understand the potential of this market and just start mass-producing to sell on these platforms? I mean, produce first-hand garments, and sell them branded as second-hand? To try and manipulate the consumer. That is a concern and challenge we have. I do not the solution for this situation, I'm just putting it out there because it is not impossible this could happen.

Q7: What is it about the Changing Room that you think is going to help the circularity of fashion and second-hand movement? In what ways do you believe it can maybe destroy some stigmas or even just make it more appealing to the public?

Initially, the main purpose of our startup was to help people find more sustainable options for their purchases (fashion-wise I mean). We created a tool we called the impact tool where people would upload the item they were wanting to buy, and the platform would 1) return an impact score regarding the purchase 2) return an alternative more sustainable option similar to that specific item.

Q8: Would that work with an algorithm? How did people react?

We developed the algorithm ourselves we are now working to increase our databases so that the ratings are automatic and the alternatives too. The alternative can be both first-hand, but more sustainable — like ISTO as I mentioned before. Or they can be second-hand.

But we saw a gap. When people uploaded the link to get the impact and the alternatives, they were looking for something specific. So, most of the time, they would not go after the sustainable option.

Our two main personas, the "Second-hand Suzanne's" and the "Fast Fashion Fiona's", are triggered by different things. The second-hand people love to go on a hunt, they love to go through stuff, and they love to find that one specific item, a hidden gem. The whole experience of thrifting is important to them.

On the other hand, the people who are wanting to buy a first-hand object, want that one specific thing. They have fallen in love with that one specific Zara shirt, or dress, or pattern. They want the new thing; they want the trend. So, most times if they even try the tool, they will not care for an alternative. They are used to the every-week drop. And that is a big challenge that second-hand faces: conversion of the "Fast Fashion Fiona's" into second-hand shoppers.

The conversations we have with platforms like "Depop" are us trying to make them see the potential in first-hand shoppers into second-hand shoppers, by giving them access to these second-hand alternatives when they upload the item they want to buy on our platform. We try to help out in the second-hand penetration in this sense, although the conversion rate is still pretty low — because, then again, these people want that one thing. So, we're currently adjusting our communication so we can make these people see the actual impact of their purchases, to see that both the environmental and the social impact are real, both are suffering.

We're still using this tool, but it is not the centerpiece of Changing Room. The centerpiece of Changing Room is "game" an app that works like a Tamagotchi — a gamified experience. Basically, on the app, you have a planet and according to your fashion purchases, the planet will either grow and be happy or the opposite. We're eventually growing to impact your purchases in another sector although we're starting with clothing. It will give you weekly challenges like "donate 5 pieces of clothing to a charity of your choice" and if you comply, you will get rewards: 1) the planet will evolve and get "happier" 2a as time goes by, as your planet grows forests and rivers, we will put you in contact with NGO which are doing good in the ground and you can then help them directly like, adopt a coral, support workers, plant a tree. Currently, we have, a mockup of the project and we're raising money to create the app, so no pilot just yet, but we're working on it.

Q9: One last question, are there any insights you can share regarding the Portuguese consumer?

I feel like the Portuguese consumer is yet to care about sustainability and environmental/ social concerns. We see how, even in a globalized world, Portugal is still pretty slow to adopt major trends and, to add, as a poor country, price is a big factor and plays a very big role in the purchasing decisions. So, more "sustainable options", which are priced accordingly will be less captivating because the consumer has a couple of barriers to understanding the value and will probably end up resorting to the closest cheapest solution.

Regarding overall second-hand adoption, I think we're a country that still faces some social stratification where appearance and status are still so important. In that sense, adding the stigma of second-hand being less quality, less hygienic and to some extent to the "poor", overall adoption by everyone as a common practice can be particularly challenging.

Appendix 6. Guide to open-ended interviews and Key Insights.

Source: Work Project's Author.

Have you bought a fashion item in the past 2 months?

Where do you usually buy your fashion garments?

What are your preferred channels? [Online or Offline] Why?

What is the first thing that comes to your mind when you think about the fashion industry?

What drives you to buy new pieces of clothing?

What concerns do you have? If any?

Have you ever bought second-hand?

How many times or how often? Where from?

What motivated you? or not?

Are there any obstacles you could think of when buying pre-worn?

Is there anything you would not buy?

What are the main characteristics a second-hand online fashion platform should have that you appreciate?

What do you usually do with the clothes pilling up your closet?

Have you ever sold second-hand?

How many times or how often? If so, Where at?

What motivated you? Or not?

What do you know about fast and ultra-fast fashion?

Would you ever consider quitting completely shopping first-hand? Please explain.

In what aspects could the second-hand market improve that would interest you in buying more or solely second-hand?

Did your relationship with fashion change because of the pandemic? If so, please describe.

Key insights:

Average age	28
Gender	5 male 25 female
Nationality	30 — Portuguese (living in Portugal)
Have you bought a fashion item in the past 2 months?	30 — Yes
Where do you usually buy your fashion garments?	24 — Usually buy from Inditex group brands (Zara was mentioned 23 times) 9 — Second-hand
What are your preferred channels? [Online or Offline]	18 — Rather buy In-store 11 — Rather buy online 1 — Enjoys both equally
Why?	Offline: 13 — Enjoy the ability to see, try on and feel the quality of the products Online: 13 — Feel like it is easier, more practical, and more convenient 7 — Mentioned the ease of returning online shopping 1 — Enjoys immediate purchase 2 — Mentioned more offers and size availability

What is the first thing that comes to your mind when you think about the fashion industry?	3 — Money 2 — Fast fashion 3 — Consumerism 5 — Clothing 4 — Luxury 2 — Inequality 2 — Lack of work conditions 2 — Shallow industry 5 — Nothing in particular 4 — Environmental waste 1 — Mass production 1 — Textile surplus
What drives you to buy new pieces of clothing?	4 — Like 12 — Need 3 — Special occasions 1 — Sales/ good deals 5 — Trends 10 — Enthusiasm of "I want new things"
What concerns do you have? If any?	7 — I don't have any particular concerns 14 — Price and personal budgeting 3 — Sizing/ fitting (when shopping online) 6 — Quality 2 —price-quality relationship/ worth it? 1 — Environmental 2 — Avoid trends 2 — My concerns are not environmental

	2 — My environmental concert doesn't translate into behavior nor do it doesn't keep me from buying
Have you ever bought second-hand?	2 people didn't buy second-hand clothing 28 people bought second-hand clothing
How many times or how often?	1 — Would like for it to be more often 2 — Never 16 — Not often 3 — Sometimes 6 — Often 3 — Very often
Where from?	4 — E-commerce platforms (OLX, Vinted, Vestiaire Co, Facebook Marketplace) 7 — Flea markets (Feira da Ladra, Cascais, Carcavelos) 4 — Abroad (London, Netherlands) — more common practice, more offer 14 — Instagram Accounts 5 — From people I know 10 — Local second-hand shops (Humana, Outra face da Lua) 1 — I don't know where to buy

What motivated you? or not?	16 — Cheap price/ good deals 6 — Aesthetic 8 — Quality 7 — Uniqueness/ exclusivity 8 — Conscious purchase (environmental impact, circularity of fashion, recycling resources) 1 — Bought second-hand because the product was sold-out, would rather have bought it first-hand 1 — I would buy if the products were in good condition 2 — I don't enjoy the idea of buying second-hand (would only consider particularly expensive pieces, and the price would compensate)
Are there any obstacles you could think of when buying pre-owned?	11 — Condition/ quality/ flawed products/ too worn out/ not corresponding to reality 3 — Product depreciation 2 — Lack of trust 4 — Time-consuming through a lot of garbage before wanting to buy something" 2 — Sizing/ fit 9 — Hygiene issues (only buy from people I know and trust) 2 — Accessibility 2 — Inability to try-on (online) 1 — Inability to return 3 — Difficult to get something specific 1 — No particular obstacles 2 — Inflation (buying second-hand has become a trend) 2 — Undeveloped market in Portugal

	1 — I don't know where to buy 1 — Prefer to pay first-hand, full price, best condition
Is there anything you would definitely not buy?	29 — Would not buy intimate clothing (underwear, socks, swimwear) 1 person was ok buying everything 6 — Shoes
What are the main characteristics a second-hand online fashion platform should have that you appreciate?	12 — Good aesthetic of content (details, angles) 9 — Content of people dressed with the products (to understand fit) 6 — Through descriptions and information about the products (sizing, fabric, condition, transparency) 1 — Ability to return 6 — User-friendly platforms —3 mentioning Zara as the best practice 2 — Trust

What do you usually do with the clothes piling up in your closet?	26 — Donate to charity, street containers, church 15 — Giveaway to people I know (family members and friends) 6 — Sell
Have you ever sold second-hand?	14 — Sold online 15 — Didn't sell online 1 — No but would like to
How many times or how often?	9 — Often 5 — Not often
Whereat	11 — Instagram (personal account or specific for that purpose) 4 — Online marketplace (OLX, Depop) 3 — Flea Markets 1 — Second-hand stores 2 — To people I know directly 1 — I don't know where I could do it
What motivated you? or not?	8 — I'm too lazy, it takes a lot of work, I don't have the time nor the patience 5 — Clothes are not good enough to sell 134 — The products were in good condition, I could get some money back (or they are too expensive to give away) 2 — Never thought about it/ don't care for it 2 — Try to promote the circularity of fashion

What do you know about fast and ultra-fast fashion?	2 — Mass production 2 — Lack of quality 10 — Not much/ nothing at all/ don't know the difference 8 — Brands: Zara, H&M 8 — Trends 5 — Consumption 5 — Never heard about "ultra-fast fashion" 12 — Bad environmental— greenwashing, marketing, / social impact — human toll, fair trade (lack of transparency)
Would you ever consider quitting completely shopping first-hand?	7 — Yes 5 — I would consider (but it would not be easy) 18 — No
Please explain.	10 — System in Portugal is not ready yet, not enough offer, or I don't know about it) 2 — Not enough physical points of sale 1 — Nowadays I think it is starting to be possible as there is more offer 9 — I like to stay up to date, shop first,-hand (new), and follow trends 4 — If you need something specific you will need to buy first-hand 4 — I'm trying to quit buying first-hand from big brands, but I would still buy from local small brands
In what aspects could the second-hand market improve that would interest you in buying more or solely second-hand?	6 — More offer 4 — More physical stores 3 — Ability to return/ try on (online) 13 — More communication/ awareness (If there are any stores, I don't know about them) 8 — Educate the consumer on sustainability, making it cool, more

	aesthetic — abolition of stigmas 7 — More structured platforms (promote trust, ease, pleasure, curation of content) 4 — Make the stores categorized (too difficult to sort through)
Did your relationship with fashion change because of the pandemic?	23 — Yes 7 — No
If so, please describe.	16 — Started buying more online 3 — Started buying more second-hand because I had more free time 4 — Quit shopping as much in general 1 — Started buying more locally

Appendix 7. Sample Characteristics.

Source: Work Project's Author.

Variables	Frequency
Gender	
Female	91%
Age	
10 – 24 years old	57%
25 – 27 years old	39%
38 – 55 years old	2%
56 years or older	2%
Education	
Less than High school diploma	2%
High School diploma	18%
Bachelor's degree	42%
Master's degree	37%
Doctorate or professional degree	1%
Employment	
Students	39%
Employed part-time	3%
Employed full-time	46%
Self-employed	6%
Unemployed	5%
Retired	1%

Appendix 8. Detailed questionnaire.

Source: Work Project's Author.

With what gender do you identify the most? *

- Male
- Female
- Prefer not to say

What is your age: *

- 9 or younger
- 10 - 24
- 25 - 37
- 38 - 55
- 56 or older

What is your current employment *

- Employed full time
- Employed part time
- Self-employed
- Unemployed
- Student
- Retired
- Prefer not to say

Are you Portuguese and currently living in *

- Yes
- No

Have you bought any apparel item — clothing, footwear, or accessories — in the past *

- Yes
- No

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Section 2 of 6

i. Apparel Consumption

I kindly ask you to be as honest as you can when replying to the following questions.

Where do you usually buy your apparel? Please check all boxes *

- [ ] Second-hand (Instagram, Flea Markets, OLX, Micolet, ...)
- [ ] Slow fashion (Isto, Conscious the Label, ...)
- [ ] Ultra-fast fashion (Shein, Alli Express, ...)
- [ ] Fast fashion (Zara, Mango, H&M, ...)
- [ ] Premium (Massimo Dutti, Bimba Y Lola, Maje, ...)
- [ ] Outlets/ Off-price (Freeport, Showroomprive, Strada, ...)
- [ ] Luxury brands (Gucci, Louis Vuitton, ...)
- [ ] Other...

In the next 5 years, where do you plan to spend more money? Please check all boxes *

- [ ] Second-hand (Instagram, Flea Markets, OLX, Micolet, ...)
- [ ] Slow fashion (Isto, Conscious the Label, ...)
- [ ] Ultra-fast fashion (Shein, Alli Express, ...)
- [ ] Fast fashion (Zara, Mango, H&M, ...)
- [ ] Premium (Massimo Dutti, Bimba Y Lola, Maje, ...)
- [ ] Outlets/ Off-price (Freeport, Showroomprive, Strada, ...)
- [ ] Luxury brands (Gucci, Louis Vuitton, ...)
- [ ] Other...

In the next 5 years, where do you plan to spend less money? Please check all boxes *

- [ ] Second-hand (Instagram, Flea Markets, OLX, Micolet, ...)
- [ ] Slow fashion (Isto, Conscious the Label, ...)
- [ ] Ultra-fast Fashion (Shein, Alli Express, ...)
- [ ] Fast-fashion (Zara, Mango, H&M, ...)
- [ ] Premium (Massimo Dutti, Bimba Y Lola, Maje, ...)
- [ ] Outlets/ Off-price (Freeport, Showroomprive, Strada, ...)
- [ ] Luxury brands (Gucci, Louis Vuitton, ...)
- [ ] Other...

On a scale of 1 to 5, how much do you agree with this statement: "I prefer to shop fashion in-store because I enjoy the ability to see, try on and feel the quality of the *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

On a scale of 1 to 5, how much do you agree with this statement: "I prefer to shop online because I enjoy how easy, practical, and convenient it is ." *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

When you think about the fashion industry, with what statement do you identify *

- ○ "The fashion industry reminds me of billionaire global market."
- ○ "The fashion industry reminds me of trends, luxury, clothing and social media."
- ○ "The fashion industry reminds me of mass production, environmental waste and s...
- ○ I don't identify with any of the above mentioned.

"In my closet, I feel like ..." (complete this sentence with the option that applies *

- "(...) there is nothing for me to wear."
- "(...) there are items that are yet to be used for the first time."
- "(...) there are items with with tag that I am never going to wear."
- "(...) there are too many things."
- "(...) I own just enough."
- Other...

What motivates most of your apparel purchases? Please check one (1) or two (2) boxes that apply. *

- [ ] Need.
- [ ] Special occasions.
- [ ] Impulse.
- [ ] Sales/ Good deals.
- [ ] Enjoyment of buying new.
- [ ] Trends/ Wanting to be up-to-date.
- [ ] "I'm trying to shop less."
- [ ] Other...

Do you have any particular concerns when you shop apparel? Please check one (1) or two (2) boxes that apply. *

- [ ] "I don't have any particular concerns."
- [ ] "I have quality concerns."
- [ ] "I have sizing/ fitting concerns."
- [ ] "I have my own budgeting (price) concerns."
- [ ] "I have sustainability (environmental and social) concerns."
- [ ] "I do have concerns, but they usually don't keep me from purchasing anything."
- [ ] Other...

On a scale of 1 to 5, how much is a brand's transparency in sustainable practices influencing your apparel purchasing habits? *

	1	2	3	4	5	
Not influencing at all	○	○	○	○	○	Influencing a lot

On a scale of 1 to 5, how familiar are you with the concept of "greenwashing" *

	1	2	3	4	5	
Not familiar	○	○	○	○	○	Very familiar

What factor plays the biggest role in your apparel purchases *

- ○ Trend.
- ○ Price.
- ○ Quality.
- ○ Uniqueness.
- ○ Sustainability.
- ○ Aesthetic.
- ○ Other...

What inspires you to shop new apparel? Please check all boxes *

- ☐ TV.
- ☐ Social media.
- ☐ Magazines.
- ☐ Google ads.
- ☐ Friends & Family.
- ☐ Influencers & Celebrities.
- ☐ Traditional media (billboards, radio)
- ☐ Other...

Section 3 of 6

ii. Second-hand Consumption

I kindly ask you to be as honest as you can when replying to the following questions.

Do you recognize any of the following platforms? Please check all boxes *

- [ ] a) ECOA circular
- [ ] b) Mycloma
- [ ] c) Retry
- [ ] d) Vinted
- [ ] e) micolet
- [ ] I don't know any of these.

Have you ever shopped second-hand *

- ○ Yes.
- ○ No.
- ○ No, but I would like to.

Y

How often do you shop second-hand *

- ◯ Never did.
- ◯ Not often (1 - 3 times in the last year)
- ◯ Not often (but I would like it to be more often)
- ◯ Often (4 - 8 times in the last year)
- ◯ Very often (more than 1 time per month in the last year)

Where from? Please check all boxes that *

- ☐ E-commerce platforms (OLX, Facebook Marketplace, Depop ...)
- ☐ Flea Markets (Feira da Ladra, Feiras das Almas, ...)
- ☐ Abroad (USA, UK, Spain ...)
- ☐ Social media (Instagram)
- ☐ Local second-hand shops (Humana, A Outra Face da Lua, ...)
- ☐ From people I know.
- ☐ I would not know where to buy.
- ☐ "I'm not interested in shopping second-hand apparel."
- ☐ Other...

What drives most of your second-hand apparel purchases? Please check one (1) or two (2) boxes that apply. *

- ☐ Cheap price/ Good deals.
- ☐ Enjoying the item.
- ☐ Uniqueness/ Exclusivity.
- ☐ Sustainability factor.
- ☐ Better quality.
- ☐ "I'm not interested in shopping second-hand apparel."
- ☐ Other...

What do you consider to be the main obstacles when shopping for second-hand apparel? Please check all boxes that apply. *

- [ ] Trust.
- [ ] Sizing/ Fit.
- [ ] Item's condition.
- [ ] Too time consuming.
- [ ] Inability to return.
- [ ] Difficult to find something specific.
- [ ] Not knowing where to buy.
- [ ] The fact that is was previously worn by someone else.
- [ ] "I prefer to buy first-hand, and pay full price for the best condition possible."
- [ ] Other...

What apparel items wouldn't you definitely purchase second-hand? Please check all boxes that apply. *

- [ ] Clothing (jeans, t-shirts, sweatshirts, jackets, ...)
- [ ] Footwear (boots, sneakers, high heels, ...)
- [ ] Accessories (handbags, jewellery, scarves, ...)
- [ ] Intimate wear (bathing suits, underwear, socks, ...)
- [ ] I would buy anything depending on the condition.
- [ ] I would not buy anything second-hand.

Section 4 of 6

iii. Resale

I kindly ask you to be as honest as you can when replying to the following questions.

What do you usually do with the apparel items you no longer wear? Please check all boxes that apply. *

- [ ] Donate (local church, charity bins, associations/ foundations ...)
- [ ] Give away (family, friends, people I know ...)
- [ ] Throw them away.
- [ ] Sell them.
- [ ] Other...

If you have indeed donated the apparel items you no longer wore, please refer to the following question.

Description (optional)

On a scale of 1 to 5, how familiar are you with the final destination of your apparel

	1	2	3	4	5	
Not aware	○	○	○	○	○	Fully aware

Have you ever sold the apparel items you no longer *

- ○ Yes.
- ○ No.
- ○ No, but I would like to.

Where? Please check all boxes that *

- ☐ E-commerce platforms (OLX, Micolet, ...)
- ☐ Flea Markets (Feira da Ladra, Feiras das Almas, ...)
- ☐ Social media (Instagram)
- ☐ Local second-hand shops.
- ☐ Directly to people I know.
- ☐ "I'm interested, but I don't know where I could do it."
- ☐ Not applicable.
- ☐ Other...

What drives you the most to resell your apparel? *

- ○ "I could get some money back."
- ○ "My items were too good to just give them away."
- ○ "I'm trying to promote the circularity of fashion."
- ○ "I'm not interested in selling the apparel items I no longer wear."
- ○ Other...

If you don't resell the apparel items you no longer wear, please refer to the following

Description (optional)

"I don't resell the apparel items I no longer wear because ..." (complete this sentence with the option that applies.)

- ○ "... it takes a lot of work."
- ○ "... it's too time consuming."
- ○ "... it does not interest me."
- ○ "... I don't know where I could do it."
- ○ Other...

Section 5 of 6

iv. Final Remarks

I kindly ask you to be as honest as you can when replying to the following questions.

On a scale of 1 to 5, how much do you agree with this statement: "The second-hand apparel market in Portugal is not fully developed yet — it lacks offer." *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

"There are not enough physical second-hand apparel points of sale in Portugal." On a scale of 1 to 5, how much do you agree with this statement? *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

On a scale of 1 to 5, how much do you agree with this statement: "I like to stay up-to-date and follow fashion trends." *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

On a scale of 1 to 5, how much do you agree with this statement: "If you need to buy something specific, you will always need to buy first-hand." *

	1	2	3	4	5	
Strongly disagree	○	○	○	○	○	Strongly agree

Would you ever consider quitting completely shopping *

- ○ Yes.
- ○ No.
- ○ Despite the challenges, I would consider.

Would you ever consider renting a specific apparel item for a short *

- Yes.
- No.
- Maybe.

After section 5 Continue to next section

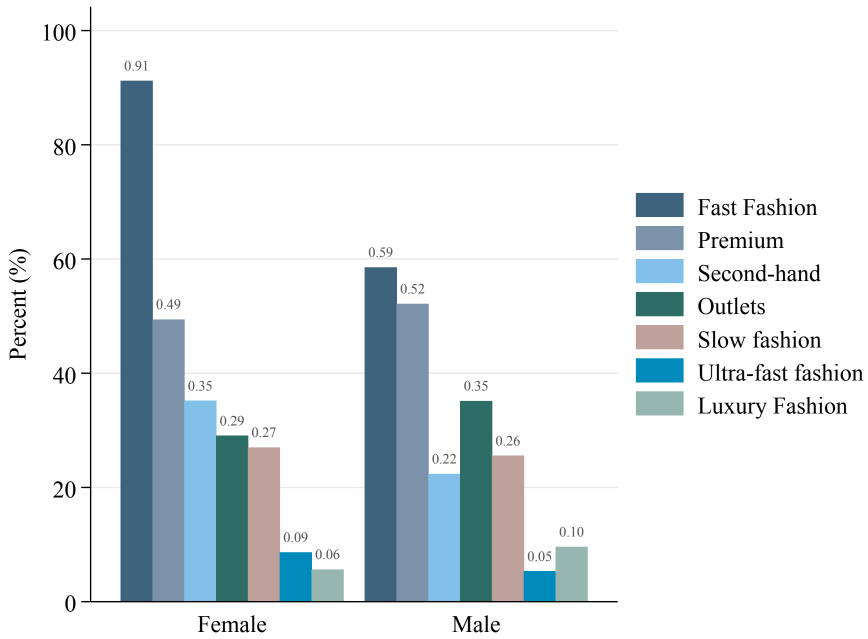
Section 6 of 6

Thank you for your time.

Your contribution to this research is very valuable.

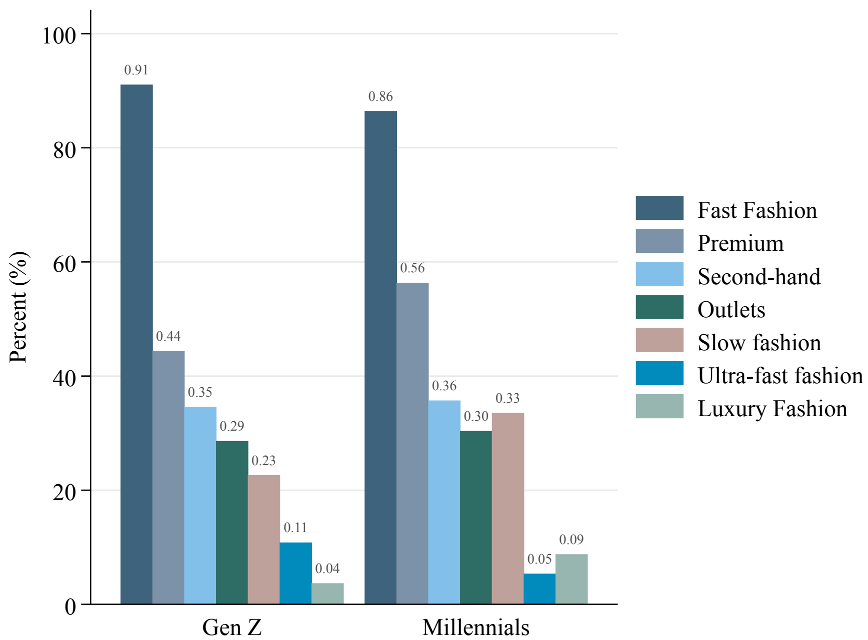
Appendix 9. Where do you usually buy your apparel? Comparison by gender

Source: Work Project's Author.



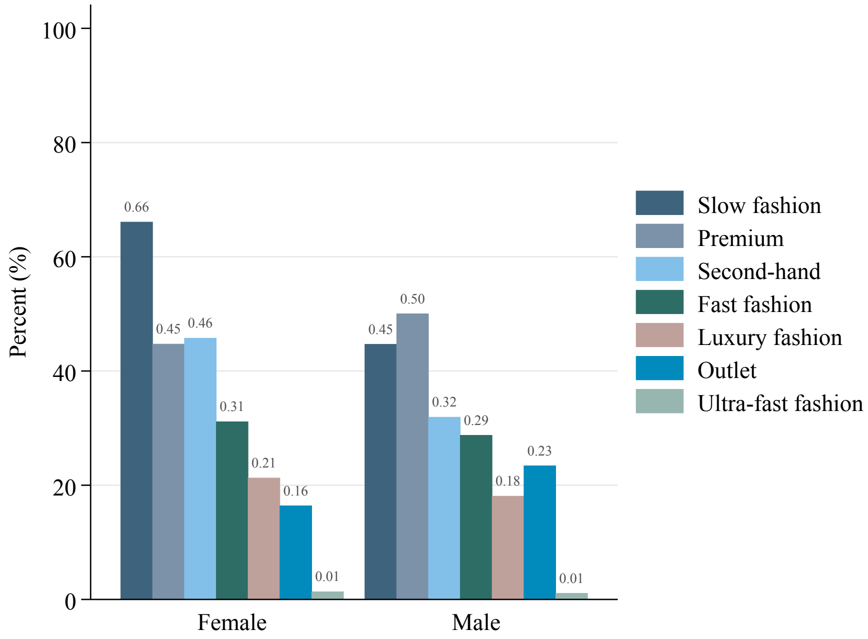
Appendix 10. Where do you usually buy your apparel? Comparison by age group

Source: Work Project's Author.



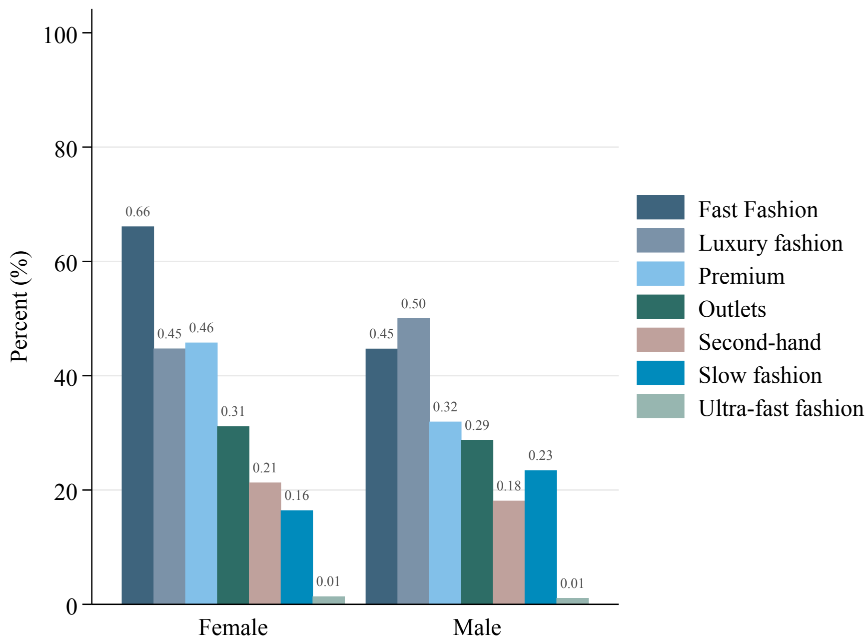
Appendix 11. In the next 5 years, where do you plan to spend more money? Comparison by gender

Source: Work Project's Author.



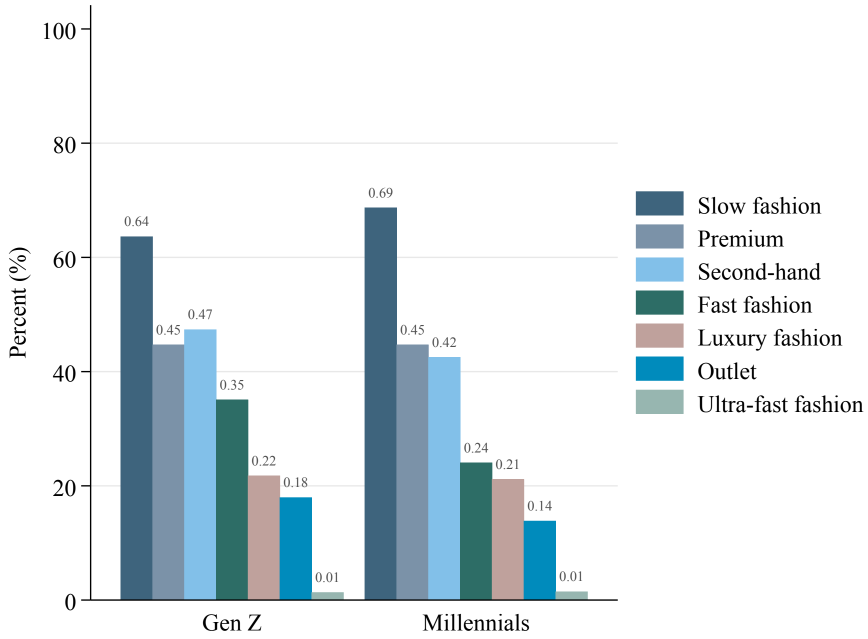
Appendix 12. In the next 5 years, where do you plan to spend less money? Comparison by gender

Source: Work Project's Author.



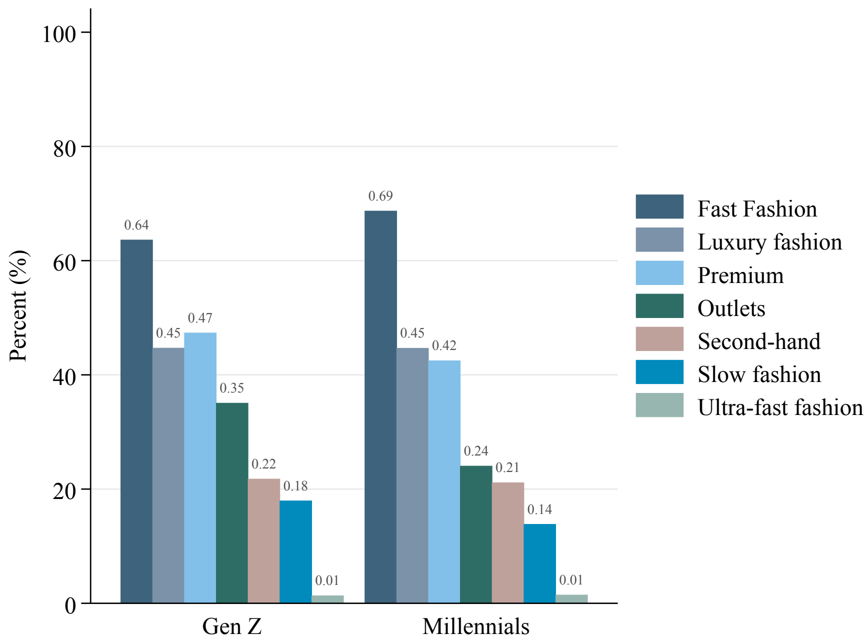
Appendix 13. In the next 5 years, where do you plan to spend more money? Comparison by age

Source: Work Project's Author.



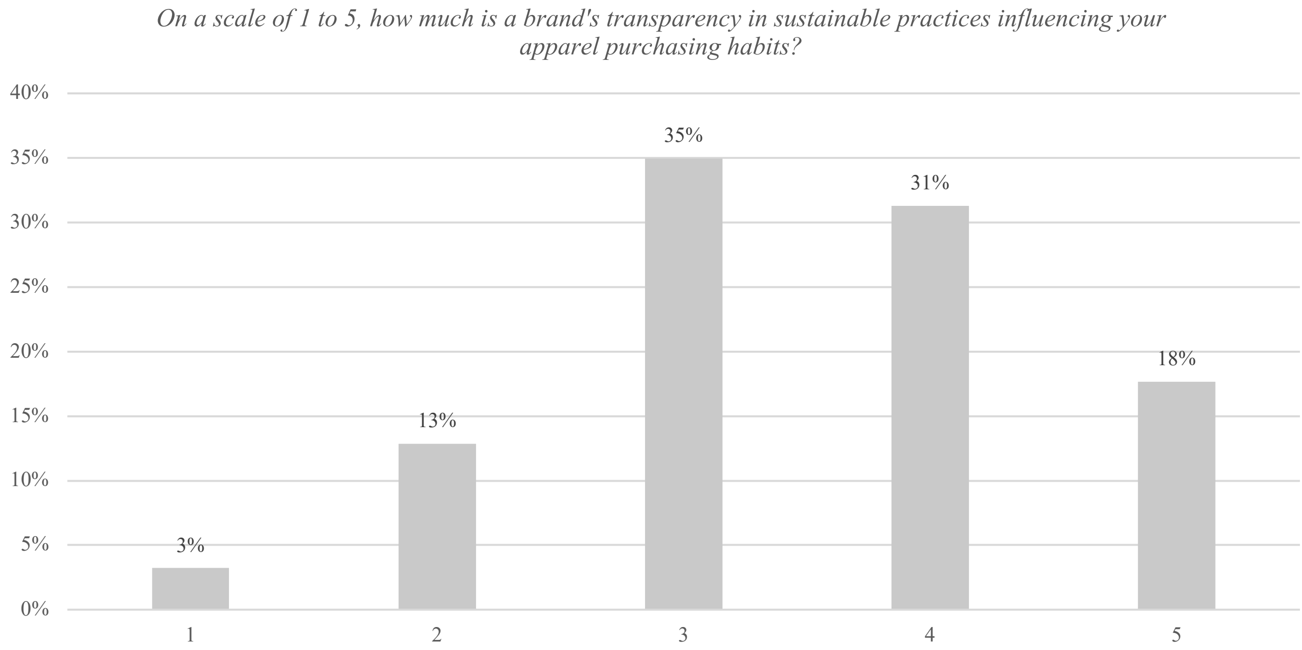
Appendix 14. In the next 5 years, where do you plan to spend less money? Comparison by age

Source: Work Project's Author.



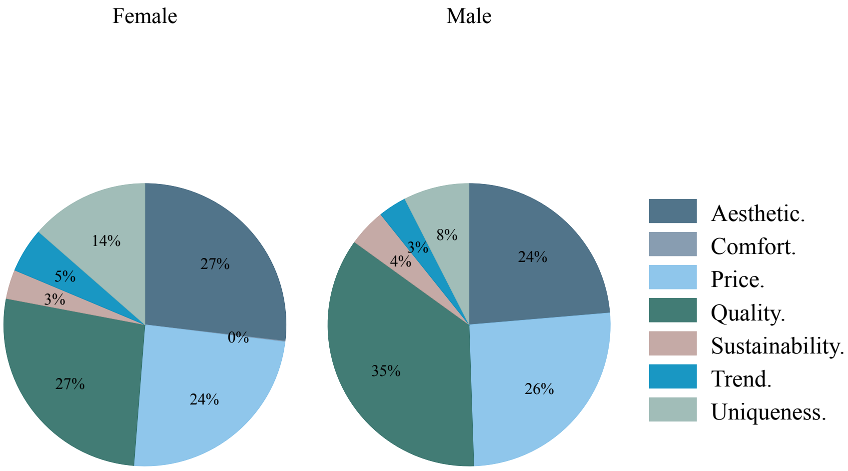
Appendix 15. On a scale of 1 to 5, how much is a brand's transparency in sustainable practices influencing your apparel purchasing habits?

Source: Work Project's Author.



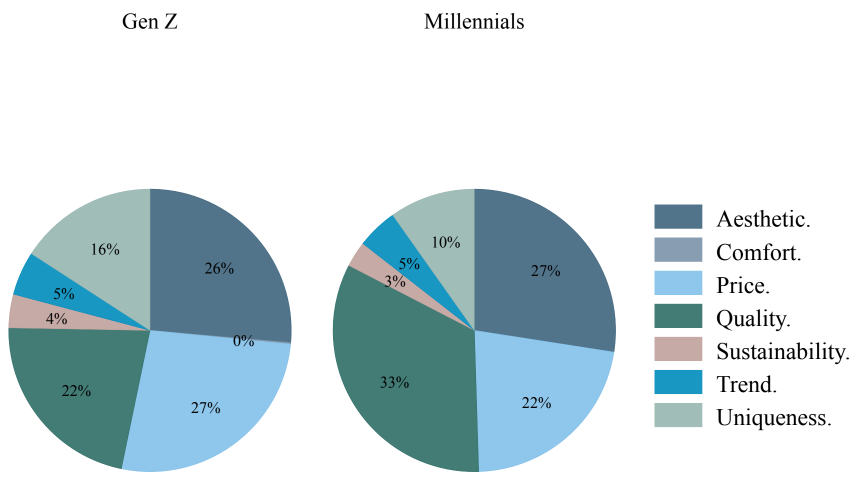
Appendix 16. What factor plays the biggest role in your apparel purchases decisions? Comparison by gender

Source: Work Project's Author.



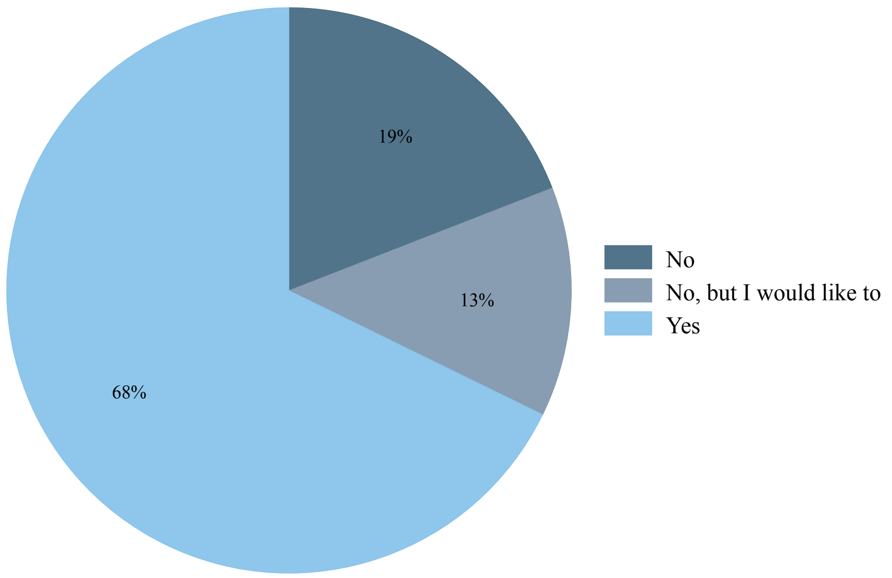
Appendix 17. What factor plays the biggest role in your apparel purchases decisions? Comparison by age

Source: Work Project's Author.



Appendix 18. Have you ever shopped second-hand apparel?

Source: Work Project's Author.



Appendix 19. Regression Analysis

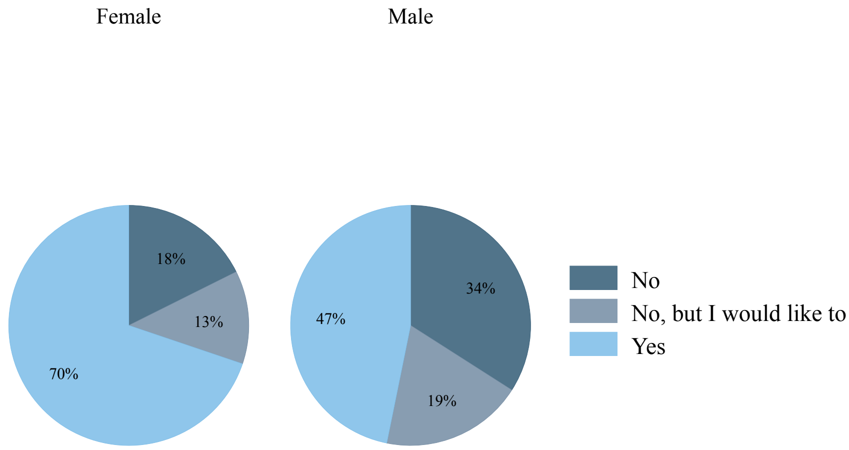
Source: Work Project's Author.

Variables	(1) What factor plays the biggest role in your apparel purchases decisions?	(2) Have you ever shopped second-hand apparel?	(3) What drives most of your second-hand apparel purchases? Sustainability	(4) In the next 5 years, where do you plan to spend less money? Second-hand
Female	0.228	0.321***	0.139***	0.110**
	(0.198)	(0.100)	(0.030)	(0.055)
What is your highest level of education?	-0.084**	-0.037**	-0.002	-0.006
	(0.035)	(0.015)	(0.007)	(0.009)
Millennials	-0.161	0.038	0.003	-0.036
	(0.156)	(0.063)	(0.030)	(0.040)
Employed	0.156	-0.074	-0.020	-0.006
	(0.153)	(0.058)	(0.030)	(0.039)
Constant	3.494***	2.341***	0.076**	0.386***
	(0.214)	(0.107)	(0.035)	(0.060)
Observations	1,001	1,007	1,007	1,007
R-squared	0.009	0.023	0.011	0.007

Robust standard errors in parentheses
*** p<0.01, ** p<0.05, * p<0.1

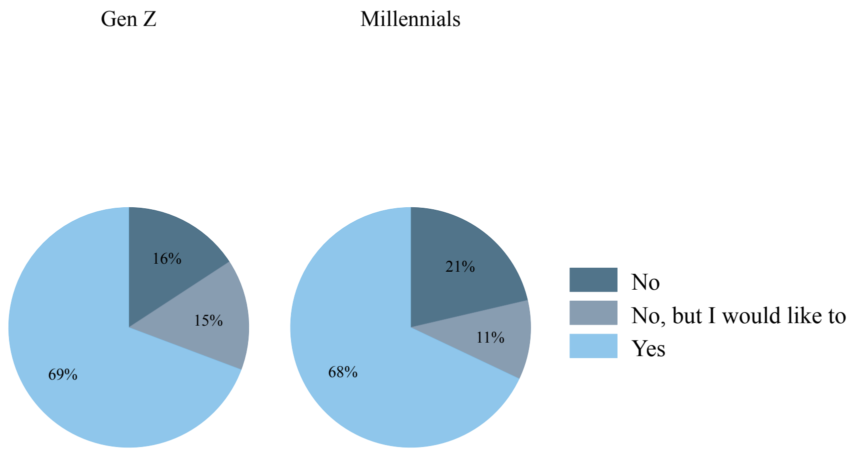
Appendix 20. Have you ever shopped second-hand apparel? Comparison by gender

Source: Work Project's Author.



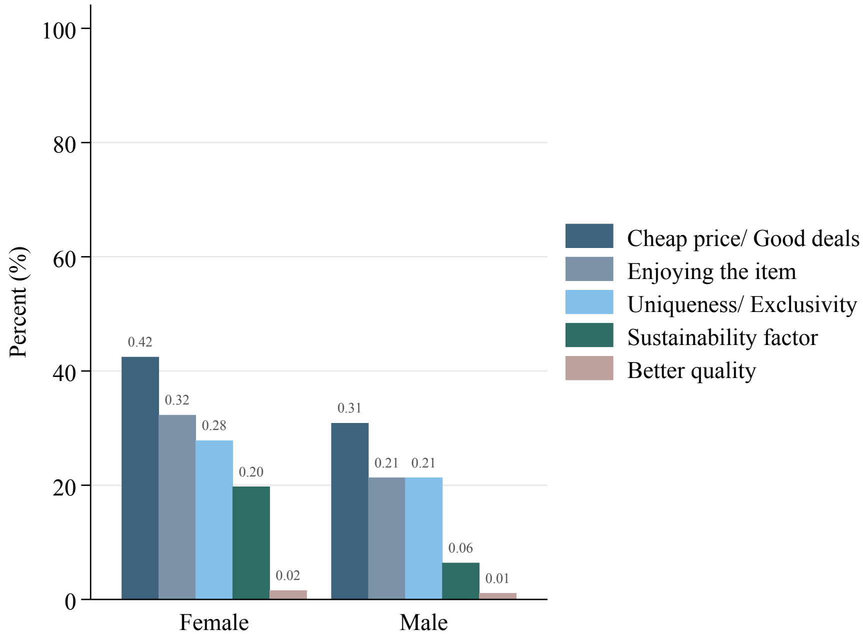
Appendix 21. Have you ever shopped second-hand apparel? Comparison by age

Source: Work Project's Author.



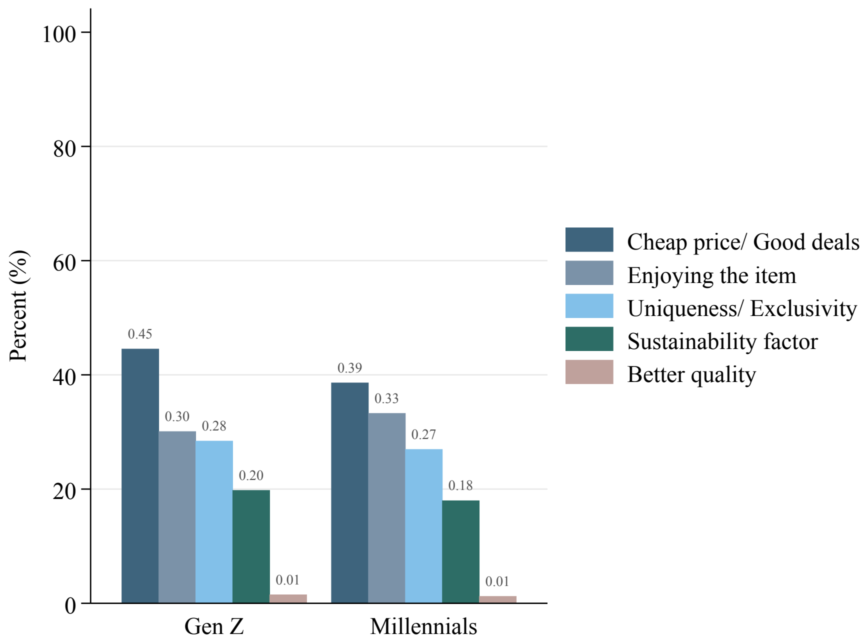
Appendix 22. What drives most of your second-hand apparel purchases? Comparison by gender

Source: Work Project's Author.



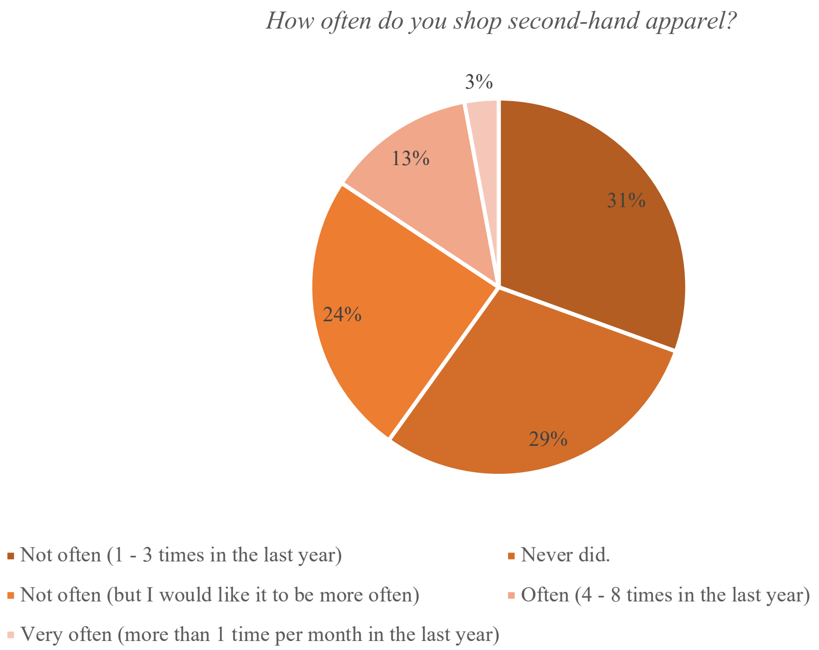
Appendix 23. What drives most of your second-hand apparel purchases? Comparison by age

Source: Work Project's Author.



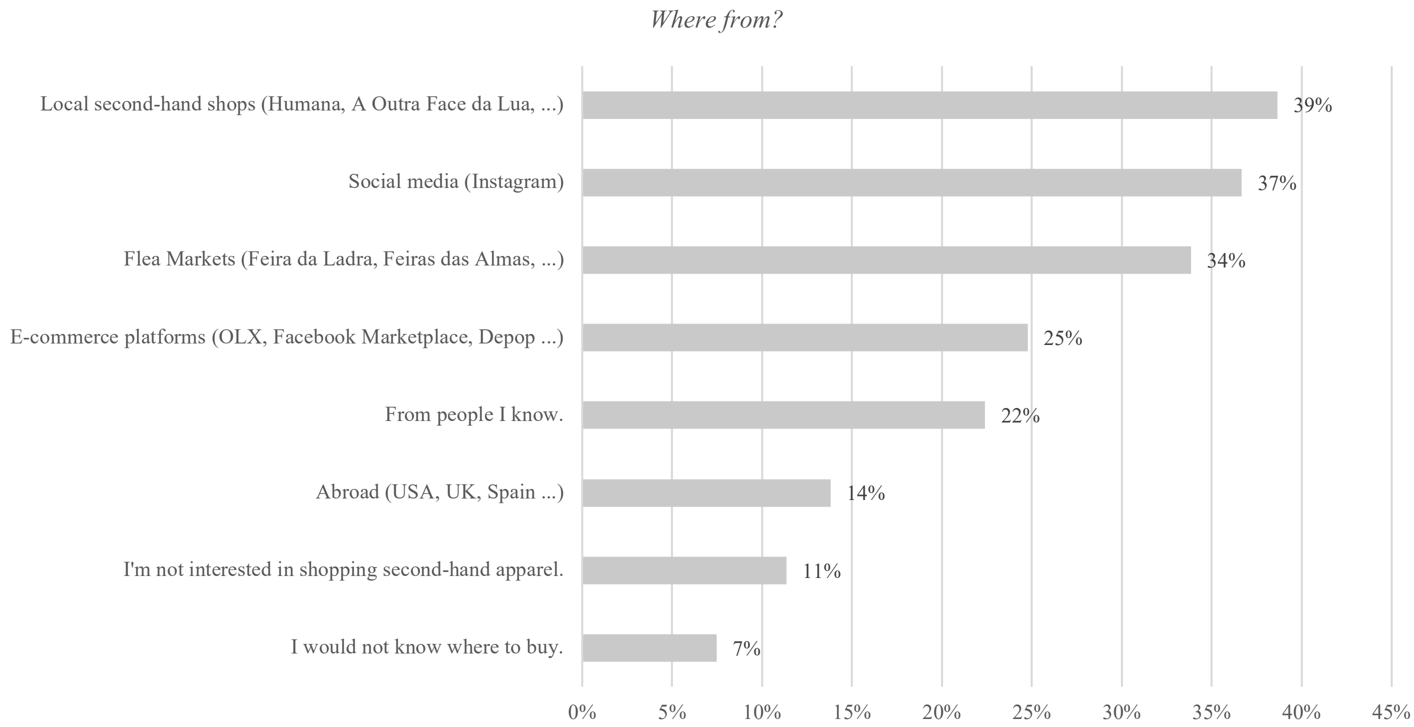
Appendix 24. How often do you shop second-hand apparel?

Source: Work Project's Author.



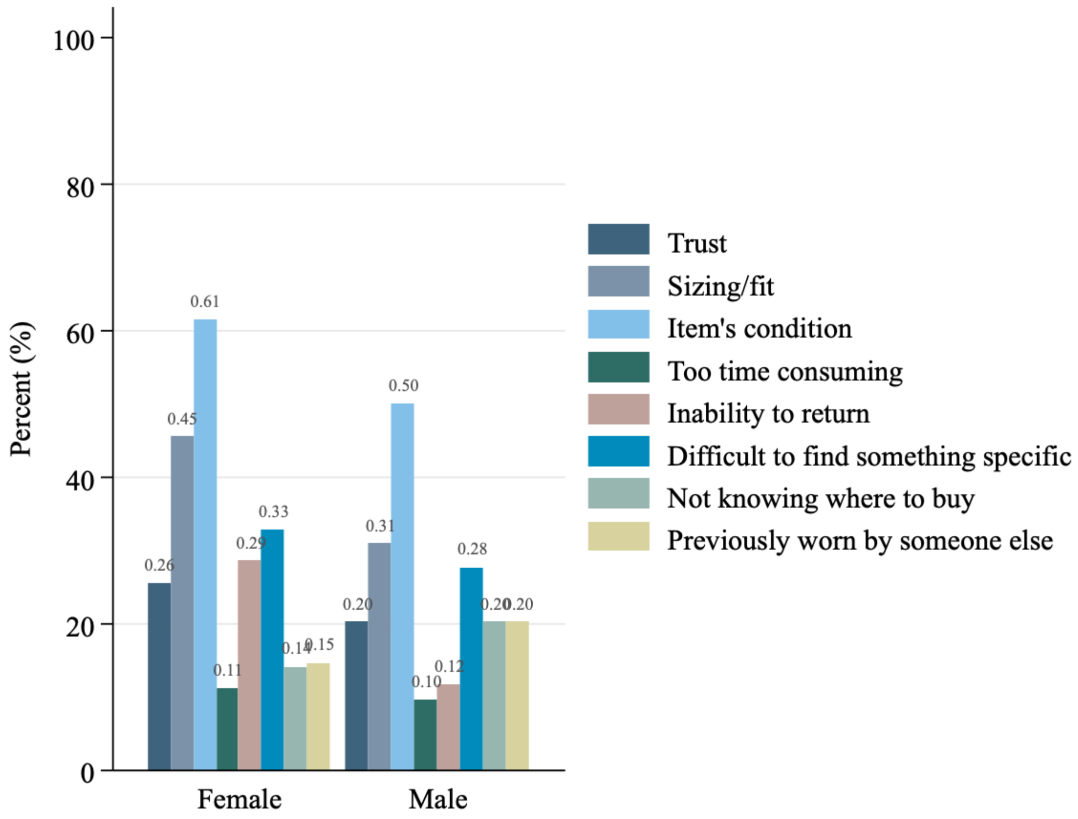
Appendix 25. Where from?

Source: Work Project's Author.



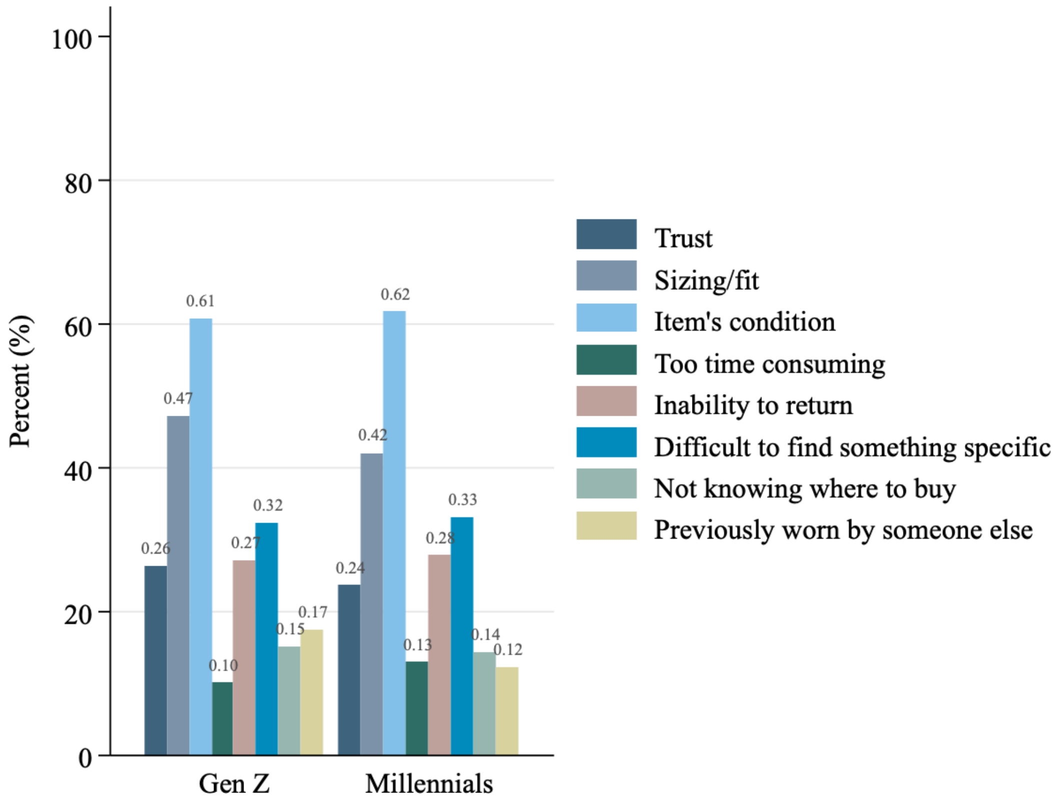
Appendix 26. What do you consider to be the main obstacles when shopping for second-hand apparel? Gender

Source: Work Project's Author.



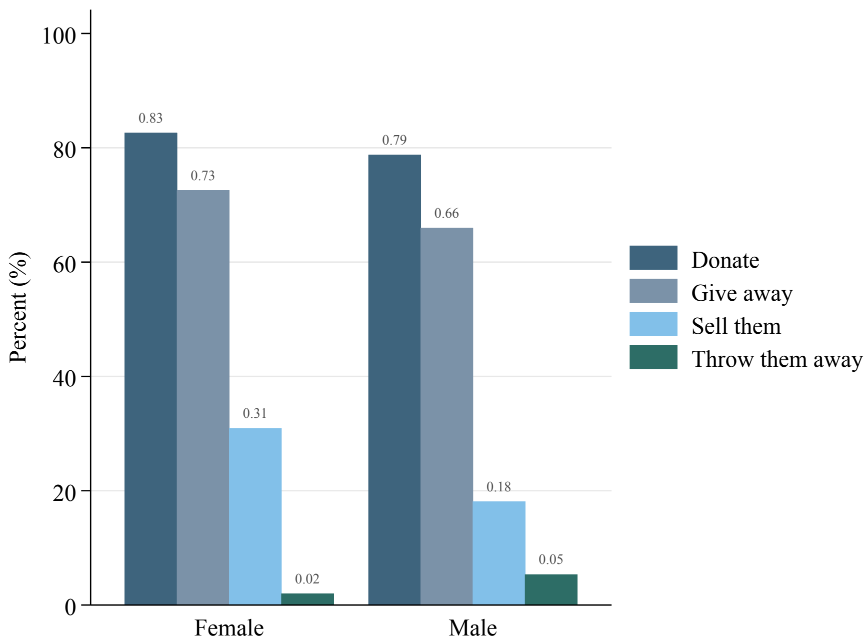
Appendix 27. What do you consider to be the main obstacles when shopping for second-hand apparel? Age

Source: Work Project's Author.



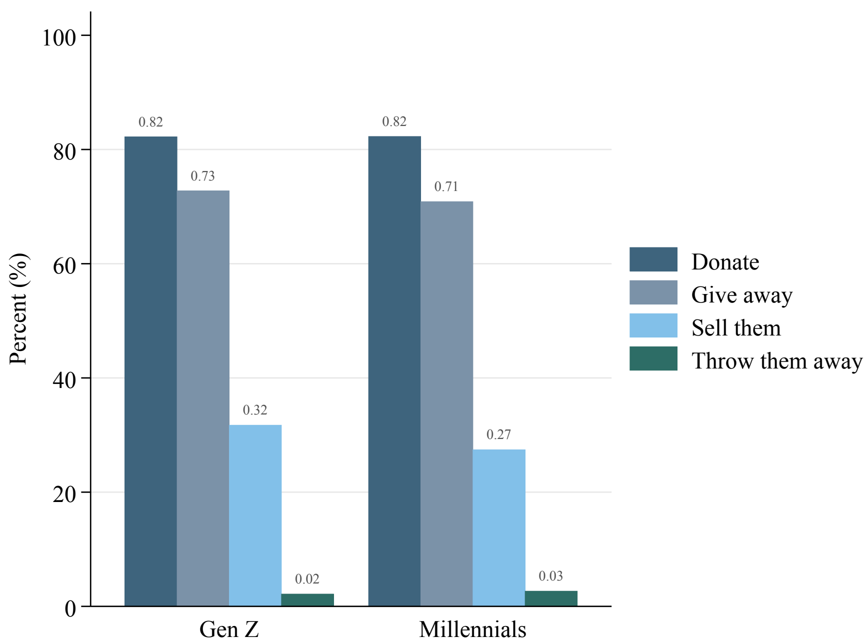
Appendix 28. What do you usually do with the apparel items you no longer wear? Comparison by gender

Source: Work Project's Author.



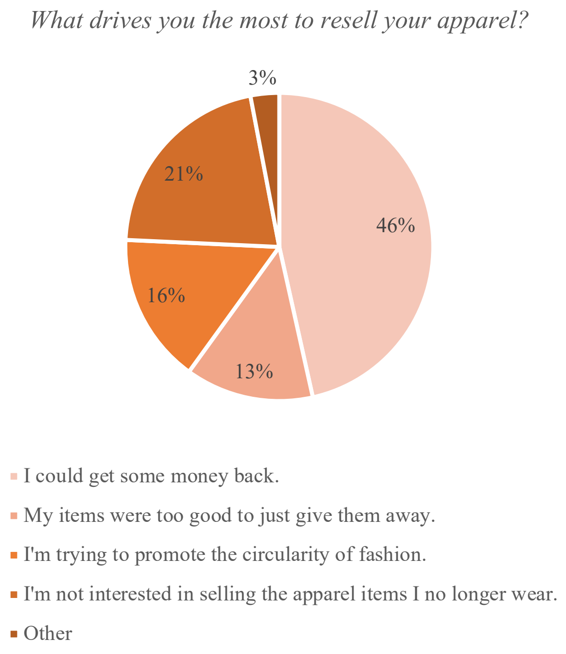
Appendix 29. What do you usually do with the apparel items you no longer wear? Comparison by age

Source: Work Project's Author.



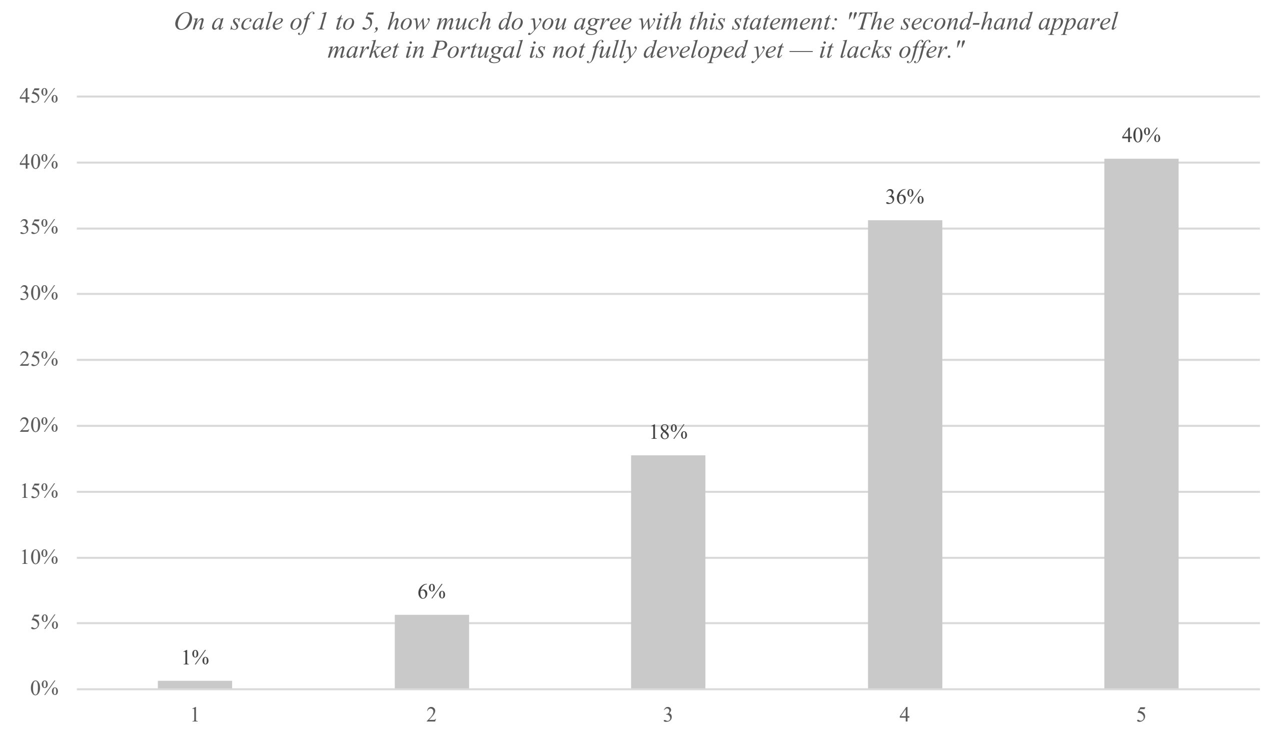
Appendix 30. What drives you the most to resell your apparel?

Source: Work Project's Author.



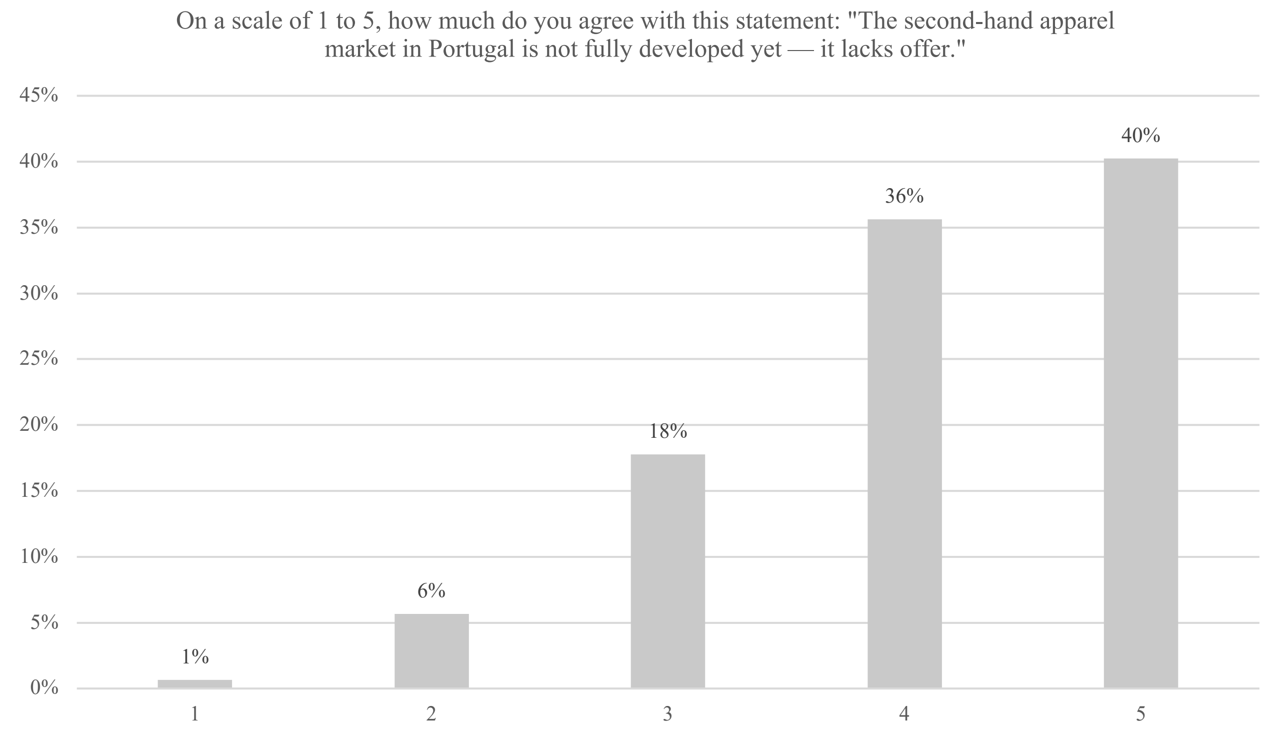
Appendix 31. On a scale of 1 to 5, how much do you agree with this statement: "The second-hand apparel market in Portugal is not fully developed yet — it lacks offer."

Source: Work Project's Author.



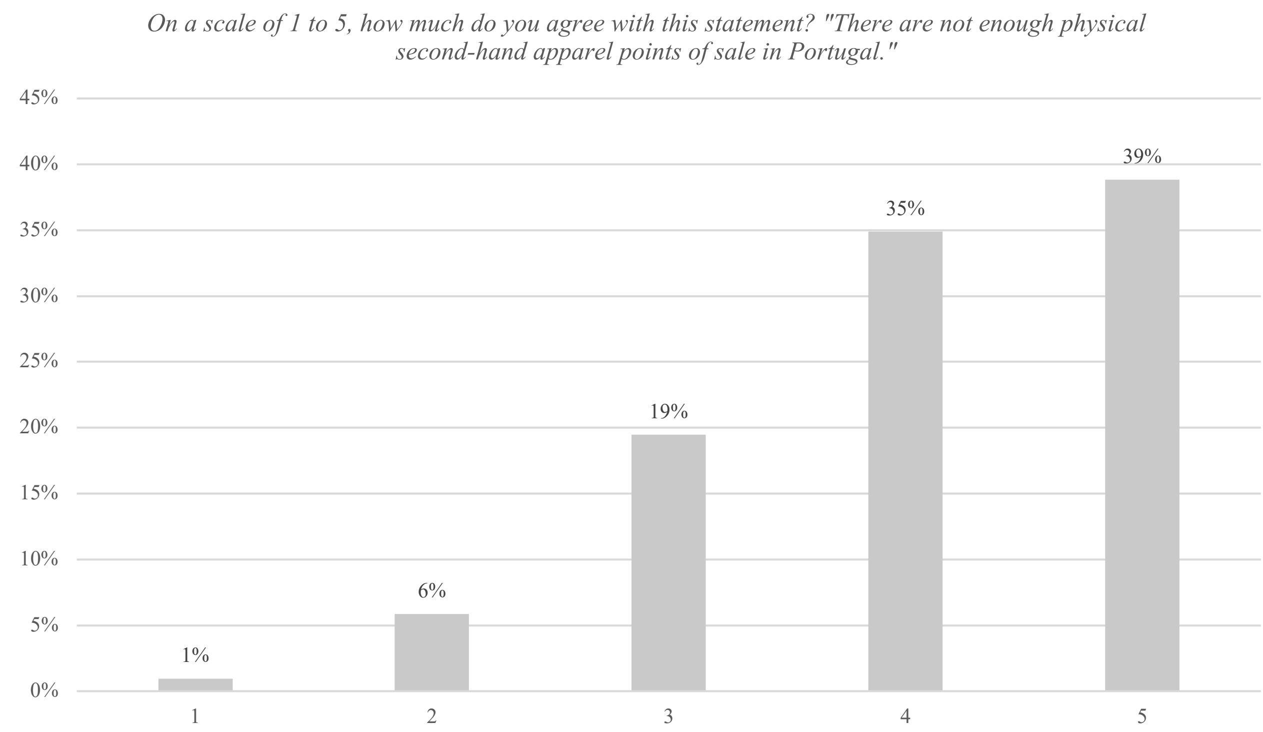
Appendix 32. On a scale of 1 to 5, how much do you agree with this statement: "The second-hand apparel market in Portugal is not fully developed yet — it lacks offer."

Source: Work Project's Author.



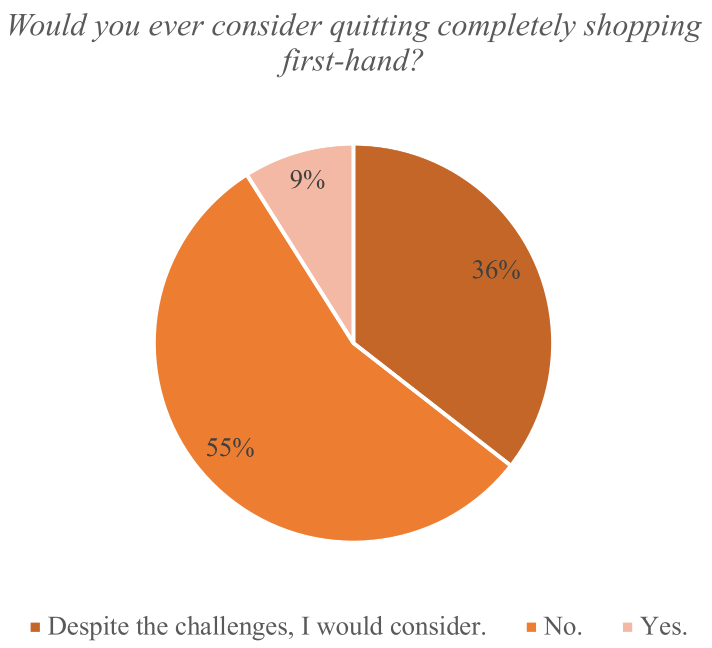
Appendix 33. On a scale of 1 to 5, how much do you agree with this statement? "There are not enough physical second-hand apparel points of sale in Portugal."

Source: Work Project's Author.



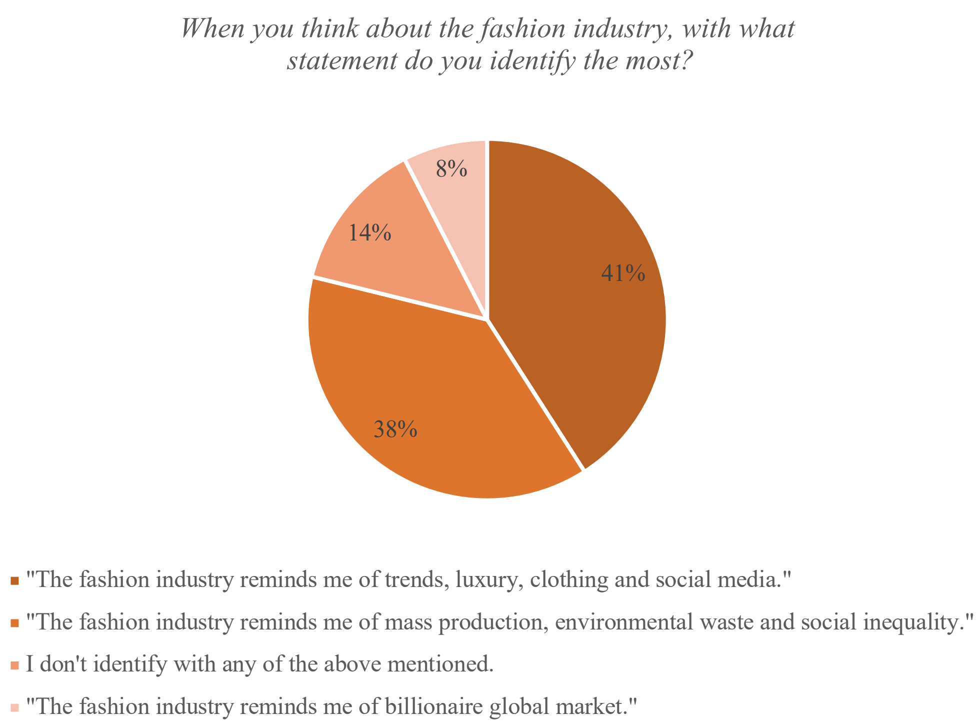
Appendix 34. Would you ever consider quitting completely shopping first-hand?

Source: Work Project's Author.



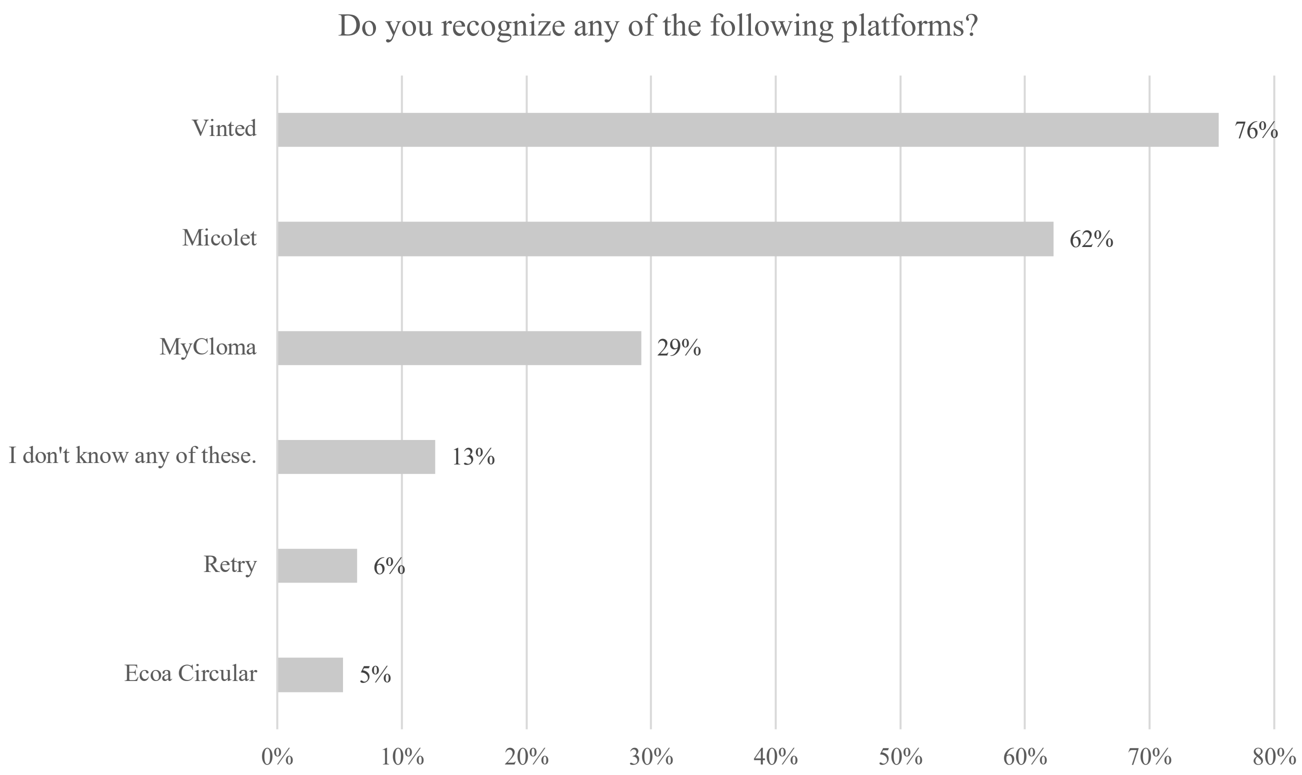
Appendix 35. When you think about the fashion industry, with what statement do you identify the most?

Source: Work Project's Author.



Appendix 36. Do you recognize any of the following platforms?

Source: Work Project's Author.



Appendix 35. Would you ever consider renting a specific apparel item for a short period of time?

Source: Work Project's Author.