



THE EVIL BEHIND FAST FASHION
Awareness of Sustainable Practices and
Purchasing Behaviors

Inês Távora Santos
[152117043]

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Abstract

Title: The Evil Behind Fast Fashion
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Author: Inês Távora Santos

Sustainability is one of the most concerning topics across several industries. The lack of control over supply chains binds the awareness level of companies on their actual impact when it comes to unsustainable practices. The fashion industry is one of the most affected by this lack of control. It is a traditionally opaque industry in terms of value chain and sourcing and has a major environmental impact.

The main objective of this study is to understand into what extent the level of consumer awareness and perception across multiple dimensions impacts the purchasing decision and the willingness to purchase of sustainable fashion items.

This study also explores whether there is a significant difference between the motivations to purchase and the willingness to purchase sustainable fashion products. Two binary logistic models were developed and relevant differences were found. In the purchasing stage, consumers were found to be affected by the marketing and communication of sustainable fashion products and their perception of the product characteristics. In the consideration stage, consumers were affected by general awareness on sustainable fashion practices. It was also concluded that the self-concern for the environment plays a fundamental role in both stages.

This study aims to allow corporations to understand which dimensions they should take into consideration to attract and convert sustainable fashion consumers.

Brands have the power to choose whether they want to lead this inevitable revolution or if they want to be led by it.

Keywords: Sustainability; Fashion; Sustainable Fashion; Green consumption; Purchasing behavior; Willingness to buy; Self-concern for the Environment; Awareness of sustainable practices

Resumo

Título: O Inferno por Detrás da *Fast Fashion*

O Conhecimento de práticas sustentáveis e os Comportamentos no Ato da Compra

Autor: Inês Távora Santos

A sustentabilidade é um dos tópicos mais preocupantes em várias indústrias. A falta de controle das empresas sobre as suas cadeias de valor limita o seu nível de consciência sobre o seu verdadeiro impacto no que respeita a práticas insustentáveis. A indústria da moda é uma das mais afetadas por essa falta de controle. É uma indústria tradicionalmente opaca, em termos da cadeia de valor e de fornecimento, e tem um grande impacto ambiental.

O principal objetivo deste estudo é entender em que medida o nível de consciência e perceção do consumidor em múltiplas dimensões, impacta a decisão de compra e a disponibilidade para comprar artigos de moda sustentáveis.

Este estudo também explora a existência de uma diferença significativa entre as motivações para comprar e a disposição de comprar de produtos de moda sustentáveis. Foram desenvolvidos dois modelos logísticos binários, tendo sido encontradas diferenças relevantes. Na fase de compra, os consumidores são afetados pelo marketing e comunicação dos produtos sustentáveis e pela perceção que têm das suas características. Na etapa de consideração, os consumidores são afetados pela sua consciência geral sobre práticas de moda sustentáveis. Concluiu-se também que a sua preocupação com o meio ambiente desempenha um papel fundamental em ambas as etapas.

Este estudo visa permitir às empresas compreenderem quais as dimensões que devem ter em consideração para atrair e converter consumidores de moda sustentáveis.

As marcas têm o poder de escolher se querem liderar esta revolução inevitável ou se querem ser lideradas por ela.

Palavras-Chave: Sustentabilidade; Moda; Moda Sustentável; Consumo Sustentável; Comportamentos no Ato da Compra; Disposição para Comprar; Preocupação com o meio ambiente; Conhecimento de práticas sustentáveis

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1. Introduction

“The clothing industry is having a horrendous impact on the planet. We can’t carry on as we are.” Fashion Revolution.

Sustainability is one of the most concerning topics across several industries, especially on the ones related to consumers goods. The lack of control over supply chains binds the awareness level of companies on their actual impact when it comes to unsustainable practices. According to a survey made to 1 700 companies, less than 20% stated to have a comprehensive view of the sustainability performance of their supply chains. Understanding how human and natural resources are exploit is relevant when it comes to define a corporation sustainable position (Bové & Swartz, 2016).

The fashion industry is one of the most affected by this lack of control. It is a traditionally opaque industry in terms of value chain and sourcing and has a major environmental impact when taking into consideration the products’ life cycle, namely production, maintenance and disposal (Chen & Burns, 2006). Apart from environmental harming a question of fair labor can also be added to the equation, such as child labor and inhumane working conditions (McKinsey&Company & Business of Fashion, 2018).

According to a group of scientists and researchers on the field of environmental impact, the planet is already out of the *“safe operating space for humanity”*, facing already significant tensions which can end up into irreversible damages (Global Fashion Agenda & The Boston Consulting Group, 2017; Rockström et al., 2009; Steffen et al., 2015). Fashion is one of the industries that contributes to the impact of a continuous breaching of these boundaries. The projection of fashion consumption is expected to increase more than double on the following 15 years, as well as the water consumption, energy emissions and waste creation. In terms of social impact, this would translate into a 52% increase of workers payed less than 120% of the minimum wage and a 7% increase on the number of injuries at work (Global Fashion Agenda & The Boston Consulting Group, 2017). In general, one cotton shirt takes around 2 720 liters of water to be produced, which is equivalent of what an average person drinks in three years. Moreover, a pair of jeans takes about 10 000 liters (WRAP, 2012). Additionally, according to the United Nations Economic Commission for Europe, the immense consumption of textiles is leading to an equivalent of 85% of the total yearly production being sent to landfills every year, due to a double increase on the turnover of clothes in wardrobes (Sherman, 2019) and around

60% of all clothing produced in a year ends up in incinerators or landfills within that same year (Remy, Speelman, & Swartz, 2016).

Fashion can be characterized as a dynamic and challenging industry which serves consumers' preferences at an increasing pace, allowing last trends to be delivered in a convenient and accessible price to masses. Time to market is crucial and production cycles are shrunk, allowing several drops a season and incentivizing a massive increase in consumption.

The emerging concept of fast fashion was introduced mainly to agile this process which adopts a pull approach that allows retailers to respond to market preferences in weeks rather than months (Sull & Turconi, 2008). In contrast the concept of slow fashion, often used to define sustainable fashion, has been neglected as it challenges fast fashion practices. Slow fashion states for more transparency in order to achieve a better communication between the organization and the stakeholders and promote employee empowerment and ethical standards. This demands a slower production which emphasis buying less by buying (high) quality rather than (high) quantity (Henninger, Alevizou, & Oates, 2016).

In April 2013 one of the worst disasters in the history of fashion took place in Bangladesh, when an eight-floor building that supplied many high street retailers collapsed. The Rana Plaza supplied at least 29 brands and the accident was such a shocking event because of how the fashion industry prioritized profits over human lives. The day before the building crashed, some workers spotted cracks and ask their employers not to go to work due to the poor conditions of the structure. They were threatened with the loss of their salary if they choose not to show up at work. More than one thousand workers died and two thousand and five hundred were injured. (Gee, 2018)

That was when Fashion Revolution was born, a global movement that fights for transparency on the way fashion is sourced, produced and consumed. On their last report, which analyzed the transparency position of 150 of the biggest fashion brands and retailers, only 37% were disclosing at least one tier for supplier traceability and only one brand discloses its suppliers for raw materials (Fashion Revolution, 2018).

Consumers more than ever demand transparency throughout the value chain of fashion companies for several reasons. They want to wear clothes that tell a new story (Lein, 2018).

Certainly, social media has enabled some transparency but are consumers aware of sustainable practices? Are they conscious of their own impact? Which entities do they trust to provide such information? Are they aware of what a sustainable fashion product is? Would their behavior towards sustainability change if they were?

The paper presented will start with a section dedicated to the revision of the most relevant literature previously developed around this topic and it will be followed by a methodology section where two models will be developed. The last section relates to conclusions and reflects how can the results obtained be interpreted and implemented business wise.

The aim of this thesis is to understand into what extent the level of awareness and perception of sustainable practices across several dimensions, impacts the purchasing behavior of fashion consumers. Furthermore, this study will explore whether there is a significant difference between the motivations to purchase and the willingness to purchase sustainable fashion products. This study aims at allowing corporations to understand which dimensions they should take into consideration to attract and convert sustainable fashion consumers.

2. Literature Review

2.1. Sustainable development and the concept of Sustainable Fashion

The Brundtland Report “Our Common Future” developed in 1987 by the Brundtland Commission, formerly known as World Commission on Environment and Development, defines sustainable development as the ability to “*meet the needs of the present without compromising future generations to meet their own needs*” (World Commission on Environment and Development, 1987). The concept is fairly broad and comprises various elements of sustainability, concerning not only human and social rights, but also ecologic and economic rights. The report also emphasizes the importance of awareness and people’s mindset to be willing to embrace change for the success of sustainable development. Sustainable development is not a straight-forward roadmap that companies and individuals have to follow. On the contrary is their ability to adapt and exploit new developments by seeking progress and innovation in a responsible and conscious manner (World Commission on Environment and Development, 1987).

Sustainable fashion emerged in the 1960s when the impact of clothing manufacturing was starting to be discussed. Throughout time, the concept evolved to a broader definition not only related to eco-friendly manufacturing, both regarding materials and production, but also related to working conditions and traceability through a sustainable business model (Henninger et al., 2016). Recently, the concept has gain strength due to the emerging concept of fast fashion, created to satisfy the needs and rapid change on taste of consumers. Sustainable fashion stands for the fair production and selling of garments, both environmentally and humanitarially, designed for a long-term use (Saricam, Erdumlu, Silan, Dogan, & Sonmezcan, 2017).

According to an article published by the Green Strategy company, sustainable fashion can be divided into seven different fields of operation that should be combined in any production process. The three first stages relate to the product itself and the means of production, by doing it (1) on demand & custom-made with a (2) high quality & timeless design while assuring (3) green and clean practices. A (4) fair and ethical approach should be transversal to the entire cycle. The last stages concerns maintenance and disposal where (5) repair, redesign & upcycle should be taken into consideration. Besides considering purchasing, (6) rent, loan & swap, as well as (7) second hand & vintage, can be a market for new sustainable acquisitions (Green Strategy, 2016).

2.2. Consumer awareness and Purchasing behavior

Consumers are better educated and informed than ever before, which allows them to shop in a sophisticated way (Carrigan & Attalla, 2001; Newell, Wu, Titus, & Petroschius, 2011; Stankevich, 2017). However, sophistication does not imply more ethically conscious decisions thus, products ethically marketed do not imply a reward behavior. In fact, in a study carried out with the purpose to understand whether consumers purchase sustainable products, only 20% associated a personal purchase of a specific product to a good cause (Carrigan & Attalla, 2001). Another study suggests that despite the fact that consumers start taking into consideration the role of the company on the society, this is not the primary criteria for a purchasing decision, being price, quality and convenience first considered. (Boulstridge & Carrigan, 2000).

2.2.1. The attitude-behavior gap

The attitude-behavior gap refers to the gap that exists between the possession of environmental awareness and pro-environmental behaviors. Pro-environmental behaviors are the ones that aim at minimizing the negative impact and encourage sustainable practices (Kollmuss & Agyeman, 2002). The first models to explain this behavior were developed in the 1970s where, through a linear analysis, environmental knowledge per se was believed to lead to an environmental attitude that would turn into a pro-environmental behavior. The deficit of knowledge was believed to be the main cause of the gap and, by educating people, environmental consumption would increase. This model was proved to be wrong and several other models emerged defending that know-how was not the only source of environmental inaction since it is a complex subject that could involve many variables (Kollmuss & Agyeman, 2002; Trivedi, Patel, & Savalia, 2014). Nonetheless, know-how may still have an impact on the purchasing decision of green products and, in particular, on sustainable fashion. The level of know-how might also have an impact when it comes to the willingness to purchase sustainable fashion.

H1 a: Consumers' purchase of sustainable fashion products is influenced by their level of awareness on sustainable practices.

H1 b: Consumers' willingness to purchase sustainable fashion products is influenced by their level of awareness on sustainable practices.

The existence of this attitude-behavior gap can be explained in different manners taking into consideration 3 broad factors – demographic, external and internal factors – as defined by

Kollmuss and Agyeman (Kollmuss & Agyeman, 2002). In what respects the Demographic factors, gender and years of education were proven to have an impact on pro-environmental behaviors. The study finds that women are typically less aware but more emotionally engaged and more willing to change than men and that more years of education are linked with more knowledge acquisition, also when it comes to environmental practices. These demographic factors were also confirmed by other studies (see Jerndahl & Næss, 2018).

Considering the external perspective, the attitude-gap is explained by a set of conditions that “limit” the individual. External factors comprise institutional, economic and social and cultural factors. Firstly, institutional factors relate to the availability of infrastructure to be able to act pro-environmentally (such as recycling facilities or public transportation). Secondly, economic factors relate to the immediate benefits the consumers will get. Lastly, social and cultural factors have an impact on shaping an individual’s behaviors (Kollmuss & Agyeman, 2002).

Moreover, the gap can also be explained by internal factors, such as motivation, environmental awareness, personal values, attitudes, emotions, (lack of) control, and a sense of responsibility. Motivations based behaviors can be affected by primary motives or selective motives, being the former more general and not bounded by a specific situation, and the later situational which might overlap the primary motives. Environmental knowledge and awareness have always been associated with lack of action when it comes to sustainable practices (Kollmuss & Agyeman, 2002; Trivedi et al., 2014). Values are highly linked with an individual social net, their cultural context and life experience – this dimension was also supported by other studies (Almodarresi, Tabataba’i-Nasab, Seyed Mohammad, Garabollagh, & Mohammadi, 2019; Gilg, Barr, & Ford, 2005). Attitudes sometimes reflect beliefs and are linked with an individual’s perception of a certain context. Emotional involvement reflects the extent to which an individual is willing to be involved with a certain cause and understands what makes us care. Lack of control implies the extent to which an individual believes that he/she can make the difference by acting in a certain manner. Finally, responsibility and priorities, state as the main priority self-well-being, which is shaped according to ones’ values, attitudes and locus of control (Kollmuss & Agyeman, 2002).

Overall, it can be seen that the level of self-impact and concern for the environment, mainly affected by internal factors, can also have an impact both on the consumption of sustainable fashion products and on the willingness to consume sustainable fashion products.

H2 a: Consumers' purchase of sustainable fashion products is influenced by their environmental concern.

H2 b: Consumers' willingness to purchase sustainable fashion products is influenced by their environmental concern.

2.2.2. Green consumption patterns

A green product can be defined as one which is “*recyclable, environment friendly, nontoxic, manufactured by natural ingredients and chemicals having no negative impact on human being*” (Hussain, Fayyaz Khokhar, & Asad, 2014). Green consumption is the “*purchasing and non-purchasing decisions made by consumers, based at least partly on environmental criteria*” (Darnall & Ponting, 2010).

When it comes to green consumption, five barriers were identified when purchasing such products. The first concerns the lack of awareness of existent product alternatives, not only in terms of physical presence but also when it comes to meaningful marketing. Consumers education on the understanding of labelling practices can impact choices made in a conscious manner. Negative perceptions are also a barrier in the sense that some consumers associate green products to lower quality or performance. Another important barrier concerns distrust, since most consumers are skeptical about green disclaimers, especially when it comes from corporations and the media, since they are seen as misleading. The fourth barrier concerns price, which are perceived to be too high compared to the benefits or the immediate return on investment. The last barrier concerns low availability of products in stores (Bonini & Oppenheim, 2008).

Numerous studies have been made which link the level of an individual's environmental awareness of products (along with several other factors) and the purchasing decision towards green alternatives. A first study (Pickett-Baker, Ozaki, & Pickett, 2008) started by confirming the existence of a gap between consumers beliefs and purchasing behaviors. The performance of a green product was not put in question by consumers that shared pro-environmental values. The purchasing behavior was also seen to be affected by lack of information which harms the identification and understanding of green products. A second study made within the UK (Darnall & Ponting, 2010) analyzed green consumption based on four different factors: (1) the trust of public entities (such as the government and environmental organizations), scientists and personal connections which can inform them about environmental concerns; (2) the distrust of

private businesses that provide such information; (3) the level of know-how concerning environmental practices and (4) personal affect for such practices. The main conclusions are related to the trust on government and environmental NGOs on providing environmental information, which strongly affects the purchase of green products as well as the individuals' level on environmental education, and the personal risk and sense of empowerment towards the subject. The distrust on private entities has also a significant impact on the aversion to buy such products. This level of trust on external entities, which can have a say on sustainable practices, can impact the consumption and the willingness to consume sustainable fashion products.

H3 a: Consumers' purchase of sustainable fashion products is influenced by their level of trust on the entities that provide such information.

H3 b: Consumers' willingness to purchase sustainable fashion products is influenced by their level of trust on the entities that provide such information.

A third study (Hussain et al., 2014) examined the impact of environmental concern, green products' awareness, brand awareness and price awareness of green products on purchasing decisions. The main result of that study underlines the previous one in the sense that the strongest factor for purchasing a green product is the perception of the brand image on the consumers' mind. The study also questions the relevance of demographic variables, such as the level of education, on the purchasing decisions.

2.2.3. Criteria for a purchasing decision in fashion

The fashion adoption theory was developed by George Sproles in 1979 and it identifies the variables taken into consideration in an apparel purchase decision (Gam, 2010). Three main variables stand out from this study, namely, pre-existing conditions, which relate to the level of awareness and acceptance of the products, where identity and shopping motivations can be an indicator of such levels; direct influences, which shape the consumers' interest and relate to psychological and social factors that can be dictated by a person's lifestyle and social influences; and a central channel of consumers' decision making, where the evaluation occurs and alternatives of use and disposal are taken into consideration (Gam, 2010). Environmentally friendly clothing is thus taken into consideration on the first stage of awareness and can have an impact on the purchasing decision.

The impact of sustainability awareness on the purchasing behavior can also be seen in the fashion industry. The level of knowledge is one of the factors that can induce sustainable consumption in fashion, thus education is key but not sufficient to assure consumption, since other factors, such as the level of trust on the communication of such benefits, have and important say through the consumer journey (Dickson, 2000; Mcneill & Moore, 2015).

A study made in 2012 (Shen, Wang, Lo, & Shum, 2012) evaluated the purchase decision of individuals concerning both social and environmental responsible business dimensions, where the former relates to social practices, such as sweatshop labor and fair trade, and the latter relates to the improvement of practices concerning to environmental issues. As noted for green products, brand awareness of fashion brands and industry beliefs can have an impact on the consumers' decision-making process. The willingness to support ethical fashion and to purchase them for a premium exists, but the lack of education on the topic and the awareness of brands that sell such products is preventing this purchase behavior.

As also confirmed for the purchase of green products in general (Bonini & Oppenheim, 2008), the perception of sustainable fashion products can have a significant impact on the purchase or the willingness to purchase of sustainable fashion products, whether in terms of marketing and communication of such products (Hussain et al., 2014), the perception of product characteristics (Green Strategy, 2016) and the positive or negative perception of sustainable fashion in general.

H4.1 a: Consumers' purchase of sustainable fashion products is influenced by their level of perception of marketing and communication of sustainable fashion products' characteristics.

H4.1 b: Consumers' willingness to purchase sustainable fashion products is influenced by their level of perception of marketing and communication of sustainable fashion products' characteristics.

H4.2 a: Consumers' purchase of sustainable fashion products is influenced by their level of perception of sustainable fashion products' characteristics.

H4.2 b: Consumers' willingness to purchase sustainable fashion products is influenced by their level of perception of sustainable fashion products' characteristics.

H4.3 a: Consumers' purchase of sustainable fashion products is influenced by their positive or negative perception of sustainable fashion in general.

H4.3 b: Consumers' willingness to purchase sustainable fashion products is influenced by their positive or negative perception of sustainable fashion in general.

3. Methodology

3.1. Overview

The main objective of this study is to understand into what extent the level of awareness and perception across multiple dimensions impacts the purchasing decision and the willingness to purchase of sustainable fashion items. To better defined the purpose of the study, four hypotheses were drawn by merging the literature analyzed, as concluded on the previous chapter.

The methodology used followed a deductive approach since the hypothesis where drawn from the literature review and an empirical testing will be performed. For the purpose of the analysis and since sustainable fashion can have many interpretations, the focus lied over apparel items.

Two binary logistic regression models were developed in order to access the individual impact of each one of the explanatory variables between the purchase and the willingness to purchase sustainable fashion and if there is are any significant differences among these predictions, in order to be able to make accurate recommendations.

For this and for following chapters, to better understand the most feasible and appropriate approaches to use, statistical and thesis structure works where used as a reference (see Fisher, 2007; Gallo, 2015; Statistics Solutions, n.d.).

3.2. Structure and Methods

To evaluate and test the previous four hypothesis and to develop an empirical analysis, an online survey with 17 questions was conducted [Appendix 1]. The survey targeted a convenient sample and it was distributed though several digital channels. A survey research approach was adopted due to the need of gathering a relevant sample for the study in question but also due to the flexibility of monitoring and to the independence and anonymity of responses, which may contribute to gather more accurate results.

The questionnaire was designed in a pre-structure way following a pre-developed script, which was divided into different parts, each one addressing a different type of variable under study. The questions followed a logical and sequential structure and took several forms, between dichotomous questions, multiple choice questions, checklists, ranking questions and Likert scales, being the later the most used. No open questions were asked in this questionnaire.

The survey was structured in the following way. Firstly, an introduction concerning the aim of the study was presented as well as information stating that the data collected was exclusively for research purposes. By clicking forward the participants were giving consent to participate on the study. The first section of questions aimed at evaluating control variables related to demographics and preferences. The second evaluated the dependent variables, which are linked with purchasing behaviors. The last section addressed the independent variables, each one related to one of the hypotheses. The series of questions were developed based on multiple other studies, to assure reliability and validity (see Eckman, Damhorst, & Kadolph, 2016; Biswas, 2016; Darnall & Ponting, 2010; Gam, 2010; Goldsmith & Goldsmith, 2002; Pickett-Baker et al., 2008; Sarker, 2016; Shen et al., 2012). The survey was shared at the beginning of April and it was online for one week. The data structure can be characterized as cross sectional since all the observations were gathered under the same time period.

3.2.1. Variables and Measurements

In order to be able to develop a model, three types of variables were developed, all of them with a discrete character. There are two dependent variables, seven independent variables and six control variables.

The dependent variables aim at measuring the consumers purchase or willingness to purchase sustainable fashion items in the future. In particular, respondents were asked whether they identify themselves with two different statements, "I already bought sustainable fashion products" and "I plan to buy apparel from socially responsible fashion retailers in the future". This variable was analyzed using a scale of "yes" =3, "no, but I have thought about it" =2, "no and never thought about it" =1.

Independent variables allow to understand the level of awareness and perception of sustainable practices, self-concern, the level of trust in specific entities and the awareness on sustainable fashion products' characteristics. The first three hypotheses related to questions that addressed the extent to which the respondents agreed with provided statements, which were measured in a scale of "Strongly agree" =5, "somewhat agree" =4, "neither agree nor disagree" =3, "somewhat disagree" =2 and "strongly disagree" =1. The last three hypotheses related with questions that were based on the selection of all the alternatives the respondent felt that could apply to the definition of a specific term, such as sustainable fashion.

The first independent variable relates with the first hypothesis previously developed, which aims at measuring the level of awareness regarding sustainable practices. Two groups of questions were developed in order to understand different dimensions: whether the respondents knew about several aspects of sustainability in fashion and whether they knew about the practices adopted by the fashion apparel industry.

The second variable relates with the second hypothesis, which addresses self-concern and two questions were developed to understand the extent into which the respondent felt that their actions are meaningful and can make the difference towards fighting environmental and social issues as well as the extent into which they identify themselves with the concept of sustainable fashion.

The third variable relates with the third hypothesis, which aims to study the level of trust on several entities, namely the Government, Environmental NGOs, Friends and Family, Scientists and Private sector companies, to provide information regarding climate change and the origin of fashion products. This variable was measured with a difference scale based on the level of trust on each particular entity (“Trust wholly” =5, “Trust a little” =4, “A moderate amount” =3, “Little trust” =2 and “None at all” =1).

The last four independent variables relate with the fourth hypothesis developed which addresses the perception of product characteristics. The fourth independent variable relates to the perception of marketing and communication of sustainable fashion products. One question was developed based on statements about how product characteristics are marketed and communicated. The last three variables relate with two questions where the respondents could choose multiple characteristics within the same option. The first related to the characteristics of a sustainable fashion product and the second and third with the perception of sustainable fashion in general, both positive and negative.

When it comes to control variables, age, occupation and place of origin (country) were taken into consideration, since lifestyle was seen to have an impact on green purchasing behaviors (Almodarresi et al., 2019; Gilg et al., 2005). The education level and gender were also considered since previous studies showed that they might have an impact on green purchases (see Jerndahl & Næss, 2018; Kollmuss & Agyeman, 2002). The most relevant apparel characteristics considered during a purchasing decision (among “aesthetics”, “brand name”,

“price”, “quality”, “sustainability” and “usefulness”) were also considered in order to access general preferences.

3.2.2. Sample Characteristics

The online survey gathered 329 valid responses with no missing values. Regarding demographics, among the 329 respondents, 66% of the sample identify as Female and 34% as Male. In terms of age, the older population is under-represented, being the majority of respondents (72%) between the age of 18 and 24 (Figure 1). Regarding country of origin, 57% are from Portugal, 17% from Italy, 3% from Germany and from Brazil, 2% from France, Spain and Russia. All the other countries represent less than 2% each, summing to a total of 13% (Figure 2).

Figure 1: Age of Respondents

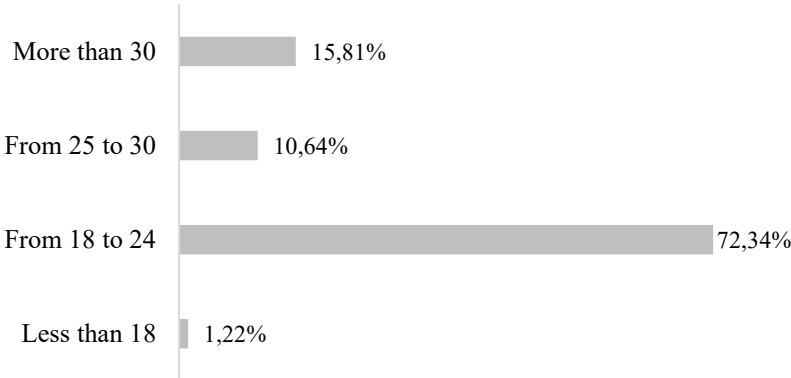
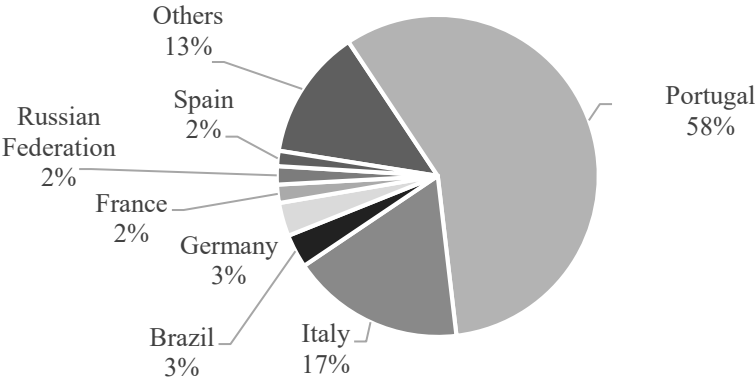


Figure 2: Respondents' country of origin



When it comes to education level, 46% have an undergraduate level, 41% have a masters' level and 11% are high school graduates (Figure 3). Regarding occupation, 64% of the respondents are students and 33% are employed (Figure 4).

Figure 3: Respondents' level of education

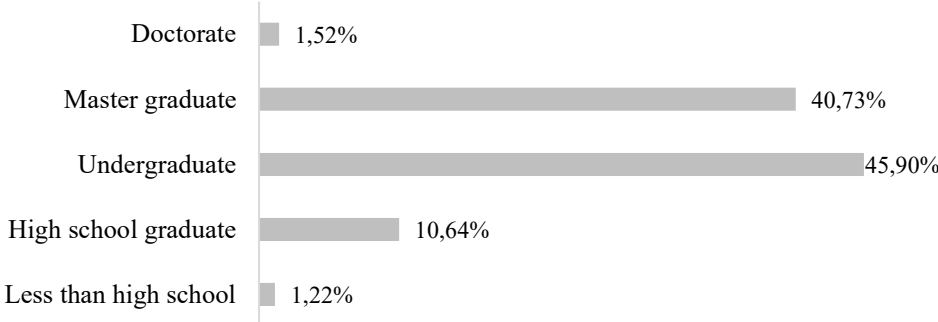
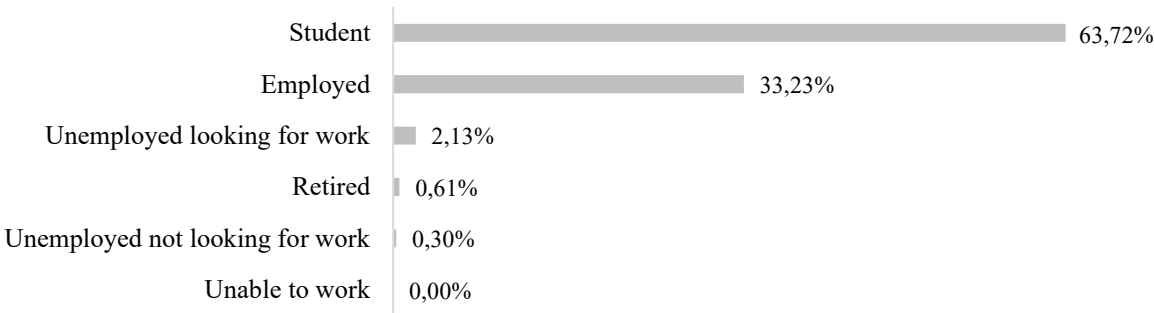


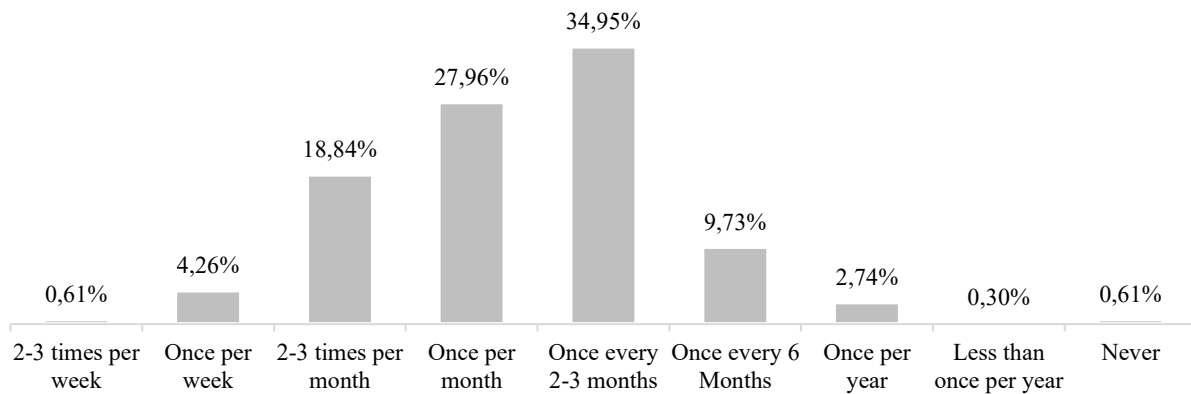
Figure 4: Respondents' occupation



In terms of apparel purchasing habits, 35% of the participants purchase apparel once every 2-3 months, 28% once per month and 19% 2-3 times per month (Figure 5). The product characteristics most taken into consideration when it comes to a purchasing decision are aesthetics, price and quality.

Regarding the purchase of sustainable fashion, 38% of the respondents already bought sustainable fashion products and 56% plan to buy apparel from socially responsible fashion retailers in the future.

Figure 5: Respondents' apparel purchasing habits



3.3. Data analysis

The data collected can be characterized as primary categorical data, both nominal (such as gender and country of origin) and ordinal (such as the level of agreement and trust level). To be able to explore and interpret the results obtained, some statistical analysis was performed. All the analysis was conducted using SPSS version 25.

Some of the variables were adapted in order to ensure that every item within each question was comparable to be able to perform statistical analysis.

Firstly, the dependent variables were transformed in order to become binary categorical variables with only two possible values. The purchase of sustainable fashion was related to the question “I already bought sustainable fashion products” and was divided into Yes (1) or No (0). The variable willingness to purchase sustainable fashion was related to the question “I plan to buy apparel from socially responsible fashion retailers in the future”, and it was also divided into Yes (1) or No (0). These new variables aim at defining the category of consumers that have bought or are willing to buy sustainable fashion products in the future and the ones that have not considered and are not likely to consider it in the future.

Secondly, all the control variables were transformed into dummies in order to allow more accurate interpretations, due to the characteristics of the sample distribution. The variable age was split in two groups, above or equal to 25 years old (1) and below 25 years old (0). The variable gender was already taking the values Male (1) Female (0). The variable country was converted into one where Portugal equaled (1) and all the other countries equaled (0). Level of Education was split in two groups, having a university degree (1) and not having a university

degree (0). Occupation took the values (1) for Student and (0) for everything else, being the last majority employed. The variable measuring the most relevant apparel characteristic during a purchasing decision was converted a variable called Sustainability, where (1) represents people that place sustainability on their top three of importance and (0) on the bottom three of importance.

As a third and last stage, independent variables were also converted to allow a proper interpretation. A factor analysis for each one of the latent variables was developed in order to be able to reduce the individual results extracted from each question into each of the seven main factors - awareness of sustainable practices, self-concern, the level of trust, perception of marketing and communication of sustainable fashion, characteristics of a sustainable fashion product, negative and positive perceptions of sustainable fashion in general.

Before performing the factor analysis, a reliability analysis was carried out and a Cronbach Alpha test was performed to each question within each factor to understand whether the questions addresses the overall meaning of the factor. Each of the following tables represent the component matrix for each factor and their respective alpha [Appendix 2].

It can be observed that the three first factors show a high level of reliability ($\alpha > 0.70$). The factors perception of the marketing and communication of sustainable fashion and the perception of the characteristics of a sustainable fashion product, present a moderated level of reliability. The factors negative and positive perception of sustainable fashion in general present a low level of reliability.

To perform the factor analysis, the method of principal components was used. In order to understand if the data set is suitable to conduct a factor analysis, KMO sampling adequacy and Bartlett test were analyzed. For all the factors extracted, the first test reported a confident outcome regarding the adequacy of the sample within each factor ($KMO > 0.50$) and the second reported highly statistical significance, meaning that the correlation coefficients are significantly different from zero ($p\text{-value} < 0.01$), therefore the analysis is appropriate. Overall, the values extracted from the component matrix for each factor load together strongly, which shows a strong relationship between the items within each factor.

The main objective of this analysis is to develop a binary logistic regression model in order to understand whether the independent variables explain the dependent variable, which factors

matter the most and which are found to have no significant impact, in order to be able to infer the validity of the four hypotheses.

Before moving to the regression, a correlation matrix was obtained in order to access if there was any significantly strong correlation between variables (Table 3). It is possible to observe that there is a weak to very weak level of correlation between the explanatory variables (Pearson Correlation < 0.4), except for the self-concern for the environment and perception of marketing and communication of sustainable fashion (Pearson Correlation = 0.523) and age and occupation (Pearson Correlation = - 0.577), where the correlation is moderately strong. Since there is are no values higher or equal to 0.8 there is no indication that there might be multicollinearity between the variables.

As a first analysis it can be seen that some variables seem to have a higher significant correlation with the dependent variables than others, which might be a signal of them being good predictors for the purchase of sustainable fashion products. When it comes to the dependent variable “Purchase of Sustainable Fashion”, the variables self-concern for the environment, the perception of the marketing and communication of sustainable fashion and the characteristics of a sustainable fashion product might be good predictors. For the dependent variable “Willingness to Purchase Sustainable Fashion”, the variables self-concern for the environment and the perception of marketing and communication of sustainable fashion might be good predictors.

Table 1: Correlation Matrix – Pearson Correlation

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)	(13)	(14)	(15)
Purchase of Sustainable Fashion (1)	1	.223**	.137*	.368**	.043	.304**	.209**	.053	.213**	.131*	-.100	-.062	.072	-.010	.192**
Willingness to Purchase Sustainable Fashion (2)	.223**	1	.219**	.453**	.135*	.266**	.164**	.046	.192**	.060	-.196**	.023	.091	-.049	.178**
Level of Awareness on Sustainable Practices (3)	.137*	.219**	1	.227**	.149**	.090	.302**	.163**	.222**	-.008	-.152**	-.123*	.038	-.007	.211**
Self-Concern for the Environment (4)	.368**	.453**	.227**	1	.286**	.523**	.184**	-.026	.340**	.120*	-.180**	-.002	.012	-.045	.307**
Level of Trust (5)	.043	.135*	-.149**	.286**	1	.316**	-.013	.021	.119*	-.028	.000	-.065	.018	.031	.040
Perception of the Marketing and Communication of sustainable fashion (6)	.304**	.266**	.090	.523**	.316**	1	.206**	.022	.389**	.006	-.091	-.048	-.048	-.034	.119*
Characteristics of a Sustainable Fashion Product (7)	.209**	.164**	.302**	.184**	-.013	.206**	1	.204**	.275**	-.038	-.175**	-.051	.122*	.047	.131*
Negative Perception of Sustainable Fashion in general (8)	.053	.046	.163**	-.026	.021	.022	.204**	1	.048	-.131*	-.179**	-.059	.107	.074	.019
Positive Perception of Sustainable Fashion in general (9)	.213**	.192**	.222**	.340**	.119*	.389**	.275**	.048	1	-.007	-.141*	-.093	.067	.119*	.207**
Age (10)	.131*	.060	-.008	.120*	-.028	.006	-.038	-.131*	-.007	1	.190**	.143**	.135*	-.577**	.097
Gender (11)	-.100	-.196**	-.152**	-.180**	.000	-.091	-.175**	-.179**	-.141*	.190**	1	-.033	-.032	-.104	-.055
Country (12)	-.062	.023	-.123*	-.002	-.065	-.048	-.051	-.059	-.093	.143**	-.033	1	-.052	-.286**	-.040
Level of Education (13)	.072	.091	.038	.012	.018	-.048	.122*	.107	.067	.135*	-.032	-.052	1	-.161**	.031
Occupation (14)	-.010	-.049	-.007	-.045	.031	-.034	.047	.074	.119*	-.577**	-.104	-.286**	-.161**	1	-.030
Sustainability (15)	.192**	.178**	.211**	.307**	.040	.119*	.131*	.019	.207**	.097	-.055	-.040	.031	-.030	1

* Correlation is significant at the 0.05 level (2-tailed)

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

3.3.1. Logistic Regressions

Since the dependent variables are binary category variables and the relationship between the variables is not linear, two binary logistic regression models were developed. By using this type of model, it is possible to understand the probability of people buying or being willing to buy sustainable fashion, given know values for the previously defined independent variables. Each one of the models developed comprises one dependent binary categorical variable, seven independent variables, each one representing the seven factors developed above, and six control variables, all categorical.

Model 1 Purchase of sustainable fashion products

Table 2 gives an overview of the SPSS output obtained with the first model developed. All the 329 observations were included on the model. Before including the variables in the equation, and by analyzing the significance level of the predictive variables when not included in the model, it can be noticed that almost all the independent variables, except for the level of trust and the negative perception of sustainable fashion in general, have an individual predictive ability of the dependent variable ($p\text{-value} < 0.05$) thus, the addition of these variables in the model will significantly affect its predictive power.

After including the independent and control variables in the equation and according to the omnibus tests of model coefficients, the $p\text{-value}$ for the model chi-square is lower than 0.05, which means that the model is significant and a good predictor of the dependent variable. This model has a prediction accuracy of 73%, which shows an increase of 11%, when compared with a model without any of the predictive variables (62%). Regarding the goodness of fit, the values of Cox and Snell's and Nagelkerke's R^2 suggest that the variance of the dependent variable is explained between 20% and 28% by the model. The $p\text{-value}$ for the Hosmer and Lemeshow Test is higher than 0.05 thus, it is insignificant, which confirms that there is enough evidence to say that the model is a good predictor.

Table 2: Purchase of sustainable fashion products (SPSS Output)

Variables	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Level of Awareness on Sustainable Practices	-.016	.145	.012	.912	.984	.741	1,307
Self-Concern for the Environment	.648	.178	13,230	.000	1,912	1,348	2,711
Level of Trust	-.227	.143	2,537	.111	.797	.602	1,054
Perception of the Marketing and Communication of Sustainable Fashion	.458	.167	7,501	.006	1,581	1,139	2,194
Characteristics of a Sustainable Fashion Product	.236	.139	2,888	.089	1,266	.964	1,663
Negative Perception of Sustainable Fashion in general	.106	.135	.612	.434	1,111	.853	1,448
Positive Perception of Sustainable Fashion in general	.040	.146	.075	.784	1,041	.782	1,385
Age	-.860	.377	5,206	.023	.423	.202	.886
Gender	.171	.294	.340	.560	1,187	.667	2,113
Country	.211	.278	.576	.448	1,235	.716	2,131
Level of Education	-.439	.438	1,008	.315	.644	.273	1,519
Occupation	-.452	.358	1,591	.207	.636	.315	1,284
Sustainability	-.527	.532	.983	.321	.590	.208	1,673
Constant	.517	.669	.596	.440	1,677		

Model 2 Willingness to purchase of sustainable fashion products

Table 3 gives an overview of the SPSS output obtained with the second model developed. All the 329 observations were included on the model. Before including the variables in the equation, and by analyzing the significance level of the predictive variables when not included in the model, it can be noticed that almost all the independent variables, except for the level of trust and the negative perception of sustainable fashion in general, have an individual predictive ability of the dependent variable ($p\text{-value} < 0.05$) thus, the addition of these variables in the model will significantly affect its predictive power.

After including the independent and control variables in the equation and according to the omnibus tests of model coefficients, the $p\text{-value}$ for the model chi-square is lower than 0.05, which means that the model is significant and a good predictor of the dependent variable. This model has a prediction accuracy of 73%, which shows an increase of 13%, when compared with a model without any of the predictive variables (60%). Regarding the goodness of fit, the values of Cox and Snell's and Nagelkerke's R^2 suggest that the variance of the dependent variable is explained between 25% and 33% by the model. The $p\text{-value}$ for the Hosmer and Lemeshow Test is higher than 0.05, thus it is insignificant, which confirms that there is enough evidence to say that the model is a good predictor.

Table 3: Willingness to purchase of sustainable fashion products (SPSS Output)

Variables	B	S.E.	Wald	Sig.	Exp(B)	95% C.I. for EXP(B)	
						Lower	Upper
Level of Awareness on Sustainable Practices	.332	.149	4,919	.027	1,393	1,039	1,867
Self-Concern for the Environment	.970	.184	27,775	.000	2,638	1,839	3,783
Level of Trust	.086	.144	.355	.552	1,090	.821	1,446
Perception of the Marketing and Communication of sustainable fashion	.140	.163	.741	.389	1,151	.836	1,584
Characteristics of a Sustainable Fashion Product	.073	.145	.250	.617	1,075	.809	1,429
Negative Perception of Sustainable Fashion in general	.032	.135	.054	.815	1,032	.792	1,345
Positive Perception of Sustainable Fashion in general	.005	.147	.001	.972	1,005	.754	1,340
Age	-.090	.378	.057	.811	.914	.435	1,916
Gender	.555	.282	3,882	.049	1,742	1,003	3,024
Country	-.199	.278	.515	.473	.819	.475	1,412
Level of Education	-.608	.413	2,173	.140	.544	.242	1,222
Occupation	.074	.347	.045	.831	1,077	.545	2,125
Sustainability	-.579	.707	.671	.413	.561	.140	2,240
Constant	.696	.794	.770	.380	2,007		

4. Findings

4.1. Primary Findings

As a first step, it is important to draft an overview of the results obtained with the survey to understand the type of answers collected. Regardless whether there is any relationship between the variables themselves, the analysis of this data can be important to understand if there are any significant patterns, which might help to further develop conclusions and recommendations.

From the 329 participants, 10% of the respondents did not buy, have not considered buying and are not willing to buy sustainable fashion in the future. Regarding general knowledge on sustainability concerning the fashion industry, around 51% of the respondents feel that they are informed about sustainable fashion and industry practices. Self-concern for the environment and the ability to make a difference when it comes to fighting climate change and unfair labor practices was shared by 62% of the respondents. Within this category, 75% of the respondents feel good about buying brands that are less damaging to the environment and 56% feel that they have an ethical obligation to avoid purchasing unsustainable clothing but only 35% care about the origin of the clothing bought and 12% research before buying to understand the origin of the product. Overall, 23% of the respondents identify themselves as sustainable fashion consumers.

When it comes to the level of trust on entities to provide information, the majority of the respondents said to trust the information provided by Environmental NGOs and Scientists, while the level of trust on the Government, Friends and Family and Private sector companies is almost evenly spread between trusting, not trusting and having a moderate amount of trust. There is no significant difference on the variation of the level of trust within each entity between providing information on climate change and providing information on the origin of fashion products.

In terms of marketing and communication of sustainable fashion products' characteristics, 62% disagreed on the fact that it is easy to identify sustainable fashion products and only 22% find that this type of products is marketed in an engaging and relevant way to one's lifestyle. Overall, 72% of the respondents expect to be informed on how environmentally friendly a product is in their marketing communication and 78% agree on the fact that if well-known fashion brands advertise sustainable fashion practices, they will be more likely to choose those brands.

Regarding the perception of sustainable fashion products, the majority of respondents associated the concept with being green and clean for all lifecycle phases and with being fair and ethical both in terms of products and human rights. On demand and custom made was the attribute with less votes along with high quality and timeless design (Figure 6). In terms of product characteristics, the majority of respondents stated that sustainable fashion is good for the planet, but also too expensive and not easily available (Figure 7).

Figure 6: Understanding of a sustainable fashion product

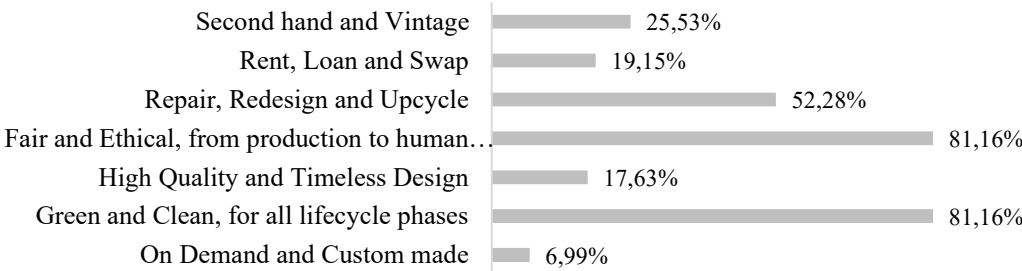
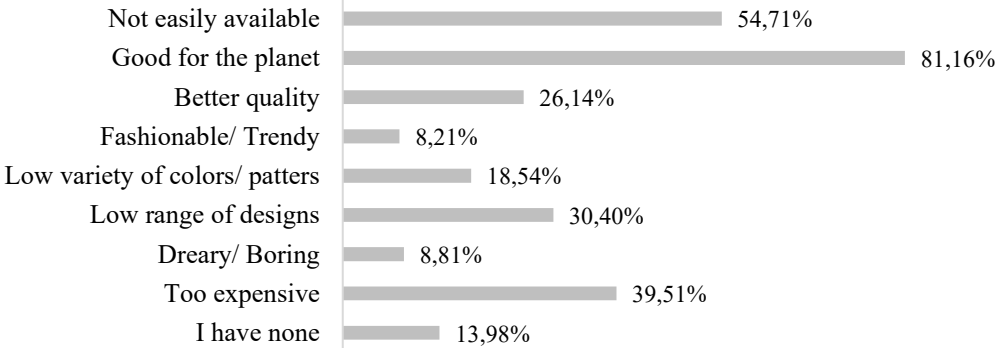


Figure 7: Perception of sustainable fashion in general



4.2. Model Findings

Taking a look at the both models (Table 2 and 3), it is possible to understand which variables have a significant impact when it comes to predicting the level of purchase or willingness to purchase sustainable fashion products.

Starting by taking a look at the Wald’s statistics, through the significance level of the coefficients, it is possible to understand whether predictors are making a significant contribution to the prediction of the dependent variable.

Regarding the first model, which addresses the purchase of sustainable fashion, it is possible to notice that three independent variables and one control variable are significant in explaining the dependent variable.

The self-concern for the environment, the perception of marketing and communication of sustainable fashion and the characteristics of a sustainable fashion product have a Wald's test coefficient significantly different from zero thus, controlling for all the other variables in the model there is significant relationship between these three variables and the purchasing of sustainable fashion products ($p\text{-value} < 0.10$). For the variables level of awareness on sustainable practices, level of trust and positive and negative perception of sustainable fashion in general, it does not seem to be any significant relationship between them and the dependent variable. In terms of control variables, only age seems to have a significant impact on explaining the dependent variable.

The Walds test can be underestimated when the value of the β coefficient is large, due to the inflation of standard error thus, increasing the probability of a type II error (rejecting a predictor as being significant when in reality it is making a significant contribution to the model). In both models the values for the β coefficients are not large thus, the probability of having a type II error is low.

Regarding the odds ratio, the value for the self-concern for the environment is 1.912 ($\text{Exp } \beta$). Since the value is higher than 1 it can be concluded that as the level of self-concern for the environment increases, the odds of the person having purchased a sustainable fashion product increase by a factor of 91.2%. The value for the perception of marketing and communication of sustainable fashion is also greater than 1 ($\text{Exp } \beta = 1.581$). Thus, as the perception marketing and communication for those products increase, the odds of the person having purchased a sustainable fashion product increase by a factor of 58.1%. The value for the characteristics of a sustainable fashion product is also greater than 1 ($\text{Exp } \beta = 1.266$). Thus, as the perception of the characteristics of a sustainable fashion product increase, the odds of the person having purchased a sustainable fashion product increase by a factor of 26.6%.

When it comes to age, it can be seen that the odds ratio is lower than 1 ($\text{Exp } \beta = 0.423$). Thus, as age increases by 1, which represents people aged above 25 years old, the odds of the person having purchased a sustainable fashion product decreased by a factor of 57.7%.

Regarding the second model, which addresses the willingness to purchase sustainable fashion, it is possible to notice that two independent variables and one control variable are significant in explaining the dependent variable.

The level of awareness on sustainable practices and self-concern for the environment have a Wald's test coefficient significantly different from zero thus, controlling for all the other variables in the model there is significant relationship between these two variables and the willingness to purchase sustainable fashion products ($p\text{-value} < 0.10$). For the variables level of trust, perception of marketing and communication, characteristics of a sustainable fashion products and positive and negative perception of sustainable fashion in general, it does not seem to be any significant relationship between them and the dependent variable. In terms of control variables, only gender seems to have a significant impact on explaining the dependent variable.

Regarding the odds ratio, the value for the level of awareness on sustainable practices is 1.393 ($\text{Exp } \beta$). Since the value is higher than 1 it can be concluded that as the level of awareness on sustainable practices increases, the odds of the person being willing to purchase a sustainable fashion product increase by a factor of 39.3%. The value for the self-concern for the environment is also greater than 1 ($\text{Exp } \beta = 2.638$). Thus, as the self-concern for the environment increases, the odds of the person being willing to purchase a sustainable fashion product increase by a factor of 163.8%.

When it comes to gender, it can be seen that the odds ratio is also higher than 1 ($\text{Exp } \beta = 1.742$), thus, as gender increases by 1, which represents male individuals, the odds of the person being willing to purchase a sustainable fashion product increase by a factor of 74.2%.

4.3. Findings' Analysis

This analysis allows to answer the hypothesis previously drawn and to understand the different influencing factor between individuals that buy sustainable fashion and individuals that plan to buy sustainable fashion products. By combining the primary finding with the model findings, a better understanding of what might be actually impacting the purchase or willingness to purchase sustainable fashion can be made.

By analyzing the first model, which concerns the purchase of sustainable fashion it is possible to conclude that the level of self-concern for the environment has a positive effect on the

purchasing behavior. This variable relates with the own accountability of an individual to actually feel in power to change and that his/her individual actions might harm the society. Overall, the respondents feel good about buying less damaging brands but only a minority research before buying and cares about the origin of their clothes. Additionally, despite the fact that 90% of the respondents have bought, have considered buying or are willing to buy sustainable fashion in the future, only one fifth identify themselves as sustainable fashion consumers.

The perception of marketing and communication of sustainable fashion products has also a positive effect on the purchase of sustainable fashion. This variable measure how consumers perceive the marketing and communication of product characteristics. Overall, the majority of the respondents disagreed on the fact that it is easy to identify sustainable fashion products and do not find this type of products marketed in an engaging and relevant way. The majority of respondents also expect to be informed on how environmentally friendly a product is and agree that if well-known fashion brands advertise sustainable fashion practices they will be more likely to choose those brands.

The perception of characteristics of a sustainable fashion product has also a positive effect on the purchase of sustainable fashion. This variable mainly relates to whether individuals perceive all the dimensions of sustainable fashion being actually associated with it. On this variable, a higher association of the concept with being green and clean for all lifecycle phases and fair and ethical both in terms of production and human rights, was made. On demand and custom made, high quality and timeless design were the attribute which were less perceived when defining sustainable fashion.

Age is the only control variable that has a significant impact, being older people less likely to purchase sustainable fashion, which is in accordance with previous statements regarding the impact of lifestyle on the adoption of sustainable fashion.

Regarding the hypothesis previously made, it is possible to understand that for hypothesis *H2 a.*, *H4.1 a.* and *H4.2 a.* the null hypothesis is not rejected, which allow to conclude that the consumers' purchase of sustainable fashion products is influenced by their environmental concern, by their perception of marketing and communication of sustainable fashion and by the characteristics of a sustainable fashion product. For the hypothesis *H1 a.*, *H3 a.* and *H4.3 a.* the null hypothesis is rejected thus, it cannot be concluded that consumers' purchase of sustainable

fashion products is influenced by their level of awareness of sustainable practices nor by their level of trust on the entities that provide such information nor by the positive or negative perception of sustainable fashion in general.

By analyzing the second model, which concerns the willingness to purchase sustainable fashion it is possible to conclude that there is a difference between what motivates people to buy and what motivates people to be willing to buy. The self-concern for the environment also has a positive impact, but also does the level of awareness on sustainable practices. This variable mainly relates to the overall awareness of practices within the fashion industry. The majority of respondents feel that they are informed about sustainable fashion and industry practices, but only a minority has heard about the Rana Plaza accident or the Fashion Revolution movement.

Gender is the only control variable that has a significant impact, being males more likely to be willing to purchase sustainable fashion, which goes against previous statements about the impact of gender on the adoption of sustainable fashion.

Regarding the hypothesis previously made, it is possible to understand that for hypothesis *H1 b.* and *H2 b.* the null hypothesis is not rejected, which allow to conclude that the consumers' willingness to purchase sustainable fashion products is influenced by the level of awareness of sustainable fashion and by their environmental concern. For the hypothesis *H3 b.*, *H4.1 b.*, *H4.2 b.* and *H4.3 b.* the null hypothesis is rejected thus, it cannot be concluded that consumers' willingness to purchase of sustainable fashion products is influenced by their level of trust on the entities that provide such information, nor by the perception of marketing and communication of sustainable fashion, nor by the characteristics of a sustainable fashion product, nor by the positive or negative perception of sustainable fashion in general.

5. Conclusions

5.1. Main Conclusions

The overall level of interest in sustainability and the sustainable fashion alternatives available on the market are increasing (Jung & Jin, 2016). But the process of changing the consumer behavior does not happen overnight, and that is why education and communication can play a crucial role in self-awareness. The power of vote of a consumers' wallet is something that is underexploit by communication but, in reality, when a consumer opts to buy from a certain brand, he/she is supporting their activities and production policies.

The impact of sustainability occurs in all stages of a product life, from materials and manufacturing, to packaging and transportation, to use and service and the end life of the product. All of these phases have to take into consideration not only water and energy but also waste, biodiversity, land use and the social dimension. Several organizations have a taken a step forward to fight unsustainable fashion and transform sustainability into the status quo, especially when it comes to fashion, but the industry revolution is yet to happen.

The primary aim of this thesis was to understand which dimensions affected the purchase of sustainable fashion products and whether there was a difference between the motivations to purchase and to be willing to purchase sustainable fashion. Through these differences, corporations will be able to understand how important it is to distinguish the different types of consumers according to where they are on the customer journey and how to properly communicate and market to those different segments. The topic of sustainability has a tremendous impact in companies, especially those that want to be the pioneers of this massive but inevitable change, that will allow fashion companies to sustain their operations in the future.

If the different layers of the costumer journey are considered when buying apparel (awareness – consideration – purchase – retention – advocacy), it is known that the consideration stage comes before the acquisitions stage. The willingness to buy sustainable fashion can be placed with the consideration stage and the purchase of sustainable fashion within the acquisition stage. Thus, it is possible to conclude from this study that first, a stage of awareness is important for consumers to consider buying, which is also in accordance with the costumer journey. While in this first stage the consumer is influenced by the level of know-how on sustainable practices within the fashion industry, in the second stage consumers are more bounded by the easiness to find those products and what type of information they expect to get from brands, as well as the

reason why they are searching for those types of products - for being green, clean, fair and ethical, and not by being on demand and custom made, high quality or by having timeless design.

Additionally, self-concern for the environment is placed in both stages, which goes accordingly with the fact that individuals will not buy or even consider buying something that is good for the environment with such purpose in mind, when they feel that their actions will not have a significant impact by doing so.

Moreover, when it comes to demographic variables it can be noticed that in a first stage gender is relevant, which goes against what was previously discussed in the literature review about the purchasing behavior, where a study found that women are typically less aware but more emotionally engaged and more willing to change than men (Kollmuss & Agyeman, 2002). This might be due to the fact that women consume more and at a higher frequency rate than men, as women associate the shopping experience with an enjoyable activity connected with a variety of hedonic needs besides the purchase itself. In general, both groups spent similar amounts of money, but since women buy more they tend to opt for the largest variety possible and paying less for each item (Chen-Yu & Seock, 2009).

Regarding the second stage, age was seen to have an influence, where younger people are more likely to buy than older people. It was already seen that lifestyle could have an impact on the purchase of sustainable fashion. In fact, young generations are perceived to be more educated mainly due to the high connectivity and availability of information, which allows them to be more sophisticated shoppers, when compare to older generations. Young generations are also characterized by being less loyalty to brands, higher spending and more sensitive to digital word of mouth than to traditional advertising due to the authenticity attach to the evaluation criteria. (Atamian Hahn-Petersen, 2018; Igneri, 2016; Key, 2017).

5.2. Managerial and Theoretical Implications

With this study it was found that there is a major opportunity for brands that want to become pioneers on the industry. The communication of sustainable fashion brands should be adapted to the customer journey and different aspects should be taken into consideration.

At a first stage, communication should focus on awareness in general. Despite the fact that consumers feel that they are informed about industry practices, events such as the Rana Plaza

accident or the Fashion Revolution movement should be supported by brands and not only by environmental organizations. As it was seen in the purchasing phase, consumers do not research before buying and expect to be informed by brands on the origin of products, which is why the role of companies in the awareness phase is crucial.

However, the topic of sustainability is becoming a double-edged sword. While some companies want to transform it into a status quo of the fashion industry, as it is all about how to sustain their activities in the long term, it is also becoming a trend. This is why the concept of green washing is emerging, especially when it comes to fast fashion. Due to the complexity of the topic, some companies use sustainability as a communication strategy to increase sales. Using eco-labels for some of the products or for an entire line, especially when it comes to fast-fashion should not position the brand as sustainable, since it does not truly change the system behind the brand as the company impact continues to be significant when it comes to fast cycle products (Niinimäki, 2015).

Regulation and certification will play a major role when it comes to overcome green washing practices and allow brands to stand a position in sustainability. The role of companies is detrimental in the way consumers perceive sustainability, as brands are the main communication point between the industry and the consumers themselves. Independent organizations, such as the Fashion Revolution, should be the linking point between sustainability and best industry practices and companies. The communication and marketing made by brands should be supported by such entities, which will allow the consumer to easily identify such products, as well as assuring that the evaluation criteria behind it is objective and reliable.

Moreover, and regarding the second stage of purchase, consumers feel that it is not easy to find such products and feel that if well-known fashion brands advertise sustainable fashion practices, they will be more likely to choose those brands. Additionally, the motivations behind the acquisition stage are mainly related to the perception of the products being green and clean for all lifecycle phases and fair and ethical, both in terms of products and human rights. A minority of respondents perceive it as being on demand and custom made, high quality and timeless design as well as second hand.

This is a major incentive for well-known brands to become pioneers within this movement, especially when it comes to brands in the premium to high-end sector, as those brands are

actually the inspiration for (fast) fashion and the ones that lead industry trends and practices. Furthermore, these brands have the resources to do it when it comes to communication, content creation and meaningful communication, since they resort to this means to promote their own products. These brands also have the power to make a difference not only in a product line but actually throughout all the different stages of sustainability (from the overall approach to production, maintenance and disposal).

Brands are becoming content creators, not only when talking about their products, but also about their values and their stories. Content is the main driver to catch people's attention and that is why brands should invest on content that drives emotional engagement, especially when it comes to sustainability. Certification is important but getting a beautiful message to the heart of the consumer allows the consumer to feel the product as value. Sustainability is a storytelling topic per se, since it usually requires innovation at the material level, on craft and, sometimes, a radical change in culture. It is a source of inspiration and could be the crucial driver for a massive consumer behavior shift.

When it comes to demographic characteristics, companies should define and be aware on how important it can be to target different groups with different strategies. Regarding gender, it could be seen through the survey results that around 52% of the people analyzed in study buy clothes at least once per month, where 77% are women and 23% are men. This fact not only rises up a major question on how to slow down global consumption, as it is a current and actual problem at the industry overall, but also on how to specifically target women due to their larger impact, while making a shift in consumption habits.

When it comes to age, the majority of communication nowadays is targeted to younger people, as the main bet on companies' communication relies on digital channels, while inclusive marketing is not that well thought out. Older people have different consumption patterns thus, companies should be aware of lifestyle practices and identity definition to properly fit the communication to such targets and be able to do it in a customized manner.

Overall, regardless whether the focus is on customer acquisition or conversion, self-impact should be taken into consideration, as it was also seen to have an influence when it comes to sustainable fashion products consideration or acquisition. Despite the fact that a majority of individuals from this study have considered buying or are willing to buy sustainable fashion in the future, only one fifth identify themselves as sustainable fashion consumers, which shows

that despite the fact that people consume, they do not base the majority of their purchases on sustainable alternatives, at least when it comes to fashion. This shows that there is room for improvement within the industry and a major shift on mindset and consumption habits is required.

Finally, it is important to stress out that for position a company as sustainable, it requires an entire business model adaptation and cultural change within the entire organization, from company values and principles, to practices and execution. All the stakeholders, from employees to investors should be briefed about the aim and the importance of such transformation and people working on the retail floor should be educated to better inform consumers.

In conclusion, and as it was seen previously, transparency and accountability are the first steps to be able to implement an actual change. Brands have the power to choose whether they want to lead this inevitable revolution or if they want to be led by it. The whole cycle of a piece of garment, as it is defined by fast fashion, does not only has a tremendous impact on the environment and on the society, but also on our own individual health. Resources will eventually run out and companies implementing better policies, which take into account economic, social and environmental practices, will be the ones surviving. Fast fashion is not a sustainable business model and slow fashion will conquer the next steps of the industry. Fashion was never about keeping up with every latest trend but more about appreciating every item fully, while creating a unique style that reflects ones' personality and identity. Slow-fashion is all about the creation of customer value. As Fashion Revolution stated, fashion is not about being fast, it is about respecting:

“culture and heritage. It fosters, celebrates and rewards skills and craftsmanship. It recognizes creativity and its strongest assets. Fashion never appropriates without giving due credit or steals without permission. Fashion honors the artisan”.

The devil within fast fashion will eventually die. But the question remains, “Who will take the lead on this massive revolution?”.

5.3. Limitations and Future Research

The presented study has some limitations on what concerns the data gathered. The sample used was a convenience sample, which did not allow for much diversity in some of the control variables. It was not possible to access the effect of country of origin due to the lack of respondents from other countries besides Portugal. Older people were also underrepresented as well as people with lower levels of education, which might have slightly affected the results.

This study contributed to the overall perception on what impacts two of the main stages of the customer journey, mainly the consideration and acquisition stage. Further studies will have to be made in order to understand if the several suggestions made can actually improve the overall level of consumption. Such studies can focus on whether consumers buy more when certifications from external entities are presented on branded clothes and which elements are crucial for companies to include in their communication strategy to be able to attract and retain consumers.

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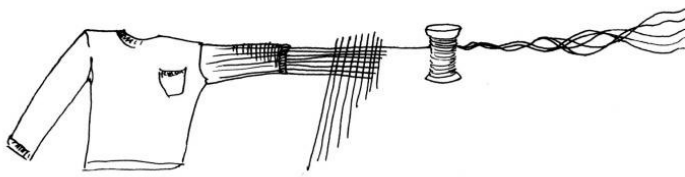
7. Appendix

Appendix 1: Survey – Sustainable Fashion

Nice to meet you! I am a management student doing a dual Master's degree at Bocconi University and Católica Lisbon. I'd like to find out how you feel about the consumption of sustainable fashion items. Thank you for agreeing to take part of this survey. I know how precious your time is, but this survey will only take you around 5 minutes to answer.

The data collected will only be used for research purposes.

If you want to be informed about the results of this research, please don't hesitate to write down your email on the last page of this survey.



Q1 How old are you?

- Less than 18
- From 18 to 24
- From 25 to 30
- More than 30

Q2 Which gender do you identify with?

- Male
- Female
- I prefer not to say

Q3 Where are you from?

Choose one option out of an automatic-generated list of 198 countries.

Q4 What is your education level?

- Less than high school
- High school graduate
- Undergraduate
- Master graduate
- Doctorate

Q5 What is your occupation?

- Employed
- Unemployed looking for work
- Unemployed not looking for work
- Retired
- Student
- Unable to work

Q6 On average, how often in a year do you purchase apparel items?

- 2-3 times per week
- Once per week
- 2-3 times per month
- Once per month
- Once every 2-3 months
- Once every 6 Months
- Once per year
- Less than once per year
- Never

Q7 When purchasing apparel, which characteristics do you consider the most relevant?
(order from most to least important)

- Price
- Brand Name
- Quality
- Aesthetics
- Sustainability
- Usefulness

Since the term fashion can have many interpretations, please focus your answer on apparel items.

Q8 Do you identify with following statements?

	Yes	No, but I have thought about it	No and never thought about it
I already bought sustainable fashion products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan to buy apparel from socially responsible fashion retailers in the future	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 To what extent do you agree with the following statements?

	Strongly Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I am informed about environmental issues in the fashion manufacturing business	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard about the 2013 Rana Plaza accident, that took place in Bangladesh	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am knowledgeable about what sustainable fashion is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have heard about the Fashion Revolution movement	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know about retailers that sell sustainable fashion	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q10 What do you understand by a sustainable fashion product? (Select all that apply)

- On Demand and Custom made
- Green and Clean, for all lifecycle phases
- High Quality and Timeless Design
- Fair and Ethical, from production to human Rights
- Repair, Redesign and Upcycle
- Rent, Loan and Swap
- Second hand and Vintage

Q11 To what extent do you agree with the following statements?

	Strongly Agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
Fashion apparel manufacturers generally do not adopt eco-friendly production practices	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fashion apparel manufacturers generally do not state clearly on garment labels the material used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fashion apparel manufacturers generally do not state clearly on garment labels the origin of the material used	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Toxic chemicals are generally used in production by fashion apparel manufacturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Fashion apparel manufacturers generally do not provide safe workplaces for their employees	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Child labor is generally used by fashion apparel manufacturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q12 To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I think that I will be personally affected by climate change	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that there is a point in trying to reduce emissions at an individual level	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see why I should take action on climate change even if other people are not	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think of myself as someone who is concerned about ethical issues	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that consumption of environment friendly alternatives will prevent environmental downturn	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am concerned about the impact of clothing production on the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q13 To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
I think of myself as a sustainable fashion consumer	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I'm someone more orientated towards purchasing clothing which are ethical in nature	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel that I have an ethical obligation to avoid purchasing unsustainable clothing	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I research before buying a clothing piece to understand where it came from	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about the origin of the clothing I buy	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel good about buying brands which are less damaging to the environment	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
It is still worthwhile to support sustainable fashion production even if I have to forgo some clothing options	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q14 How much do you trust the following entities to provide you with information on climate change?

	Trust wholly	Trust a little	A moderate amount	Little trust	None at all
The government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental NGOs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends and Family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private sector companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 How much do you trust the following entities to provide you with information on the origin of fashion products?

	Trust wholly	Trust a little	A moderate amount	Little trust	None at all
The government	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Environmental NGOs	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Friends and Family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scientists	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Private sector companies	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q16 To what extent do you agree with the following statements?

	Strongly agree	Somewhat agree	Neither agree nor disagree	Somewhat disagree	Strongly disagree
It is easy for me to identify sustainable fashion products	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Sustainable fashion products are marketed to me in a way which I find really engaging and relevant to my lifestyle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
In the marketing communication of a fashion product, I expect to be informed of how environmentally friendly the product is	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If well-known fashion brands advertised sustainable fashion practices I would be much more likely to choose those brands	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q17 What is your perception of sustainable fashion? (select all that apply)

- I have none
 - Too expensive
 - Dreary/ Boring
 - Low range of designs
 - Low variety of colors/ patters
 - Fashionable/ Trendy
 - Better quality
 - Good for the planet
 - Not easily available
-

If you want to be informed about the results of this research, please don't hesitate to write down your email. Otherwise you can skip this step.

Appendix 2: Factor Analysis

Factor 1 - Level of awareness of Sustainable Practices

	Level of awareness of Sustainable Practices
Im am informed about enviornmental issues in the fashion manufacturing business	.369
I have heard about the 2013 Rana Plaza Accident, that took place in Bangladesh	.409
I am knowledgeable about what sustainable fashion is	.395
I have heard about the Fashion Revolution movement	.345
I know about retailers that sell Sustainable Fashion	.270
Fashion apparel manufacturers generally do not adopt eco-friendly production practices	.685
Fashion apparel manufacturers generally do not state clearly on garment labels the material used	.398
Fashion apparel manufacturers generally do not state clearly on garment labels the origin of the material used	.591
Toxic chemicals are generally used in production by fashion apparel manufacturers	.787
Fashion apparel manufacturers generally do not provide safe workplaces for their employees	.784
Child labor is generally used by fashion apparel manufacturers	.734

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.799
Bartlett's Test of Sphericity	Sig. .000
Cronbach's Alpha	.755

Factor 2 – Self Concern with the Environment

	Self Concern with the Environment
I think that I will be personally affected by climate change	.404
I feel that there is a point in trying to reduce emissions at an individual level	.239
I see why I should take action on climate change even if other people are not	.309
I think of myself as someone who is concerned about ethical issues	.605
I think that consumption of environment friendly alternatives will prevent environmental downturn	.412
I am concerned about the impact of cloth production on the environment	.688
I think of myself as a sustainable fashion consumer	.655
I'm someone more oriented towards purchasing clothing which is ethical in nature	.751
I feel that I have an ethical obligation to avoid purchasing unsustainable clothing	.686
I research before buying a clothing piece to understand where it came from	.570
I care about the origin of the clothing I buy	.671
I feel good about buying brands which are less damaging to the environment	.668
It is still worthwhile to support sustainable fashion production even if I have to forgo some clothing options	.583

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.842
Bartlett's Test of Sphericity	Sig.	.000
Cronbach's Alpha		.824

Factor 3 – Level of Trust

		Level of Trust
provide information about climate change	Government	.589
	Environmental NGOs	.608
	Friends and Family	.492
	Scientistis	.546
	Private sector companies	.468
provide information about the origin of fashion products	Government	.640
	Environmental NGOs	.661
	Friends and Family	.534
	Scientistis	.634
	Private sector companies	.473

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.638
Bartlett's Test of Sphericity	S ig.	.000
Cronbach's Alpha		.762

Factor 4 – Perception of the Marketing and Communication of Sustainable Fashion

	Perception of the Marketing and Communication of sustainable fashion
It is easy for me to identify sustainable fashion products	.725
Sustainable fashion products are marketed to me in a way which I find really engaging and relevant to my lifestyle	.761
In the marketing communication of a fashion product, I expect to be informed of how environmentally friendly the product is	.661
If well-known fashion brands advertised sustainable fashion practices, I would be much more likely to choose those brands	.493

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.539
Bartlett's Test of Sphericity	Sig.	.000
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Cronbach's Alpha		.580

Factor 5– Perception of the Characteristics of a Sustainable Fashion Product

	Characteristics of a Sustainable Fashion Product
On Demand and Custom made	.229
Green and Clean, for all lifecycle phases	.178
High Quality and Timeless Design	.513
Fair and Ethical, from production to human Rights	.368
Repair, Redesign and Upcycle	.652
Rent, Loan and Swap	.740
Second hand and Vintage	.736

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.613
Bartlett's Test of Sphericity	Sig.	.000
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Cronbach's Alpha		.548

Factor 6 – Negative Perception of Sustainable Fashion in General

		Negative Perception of Sustainable Fashion in General
Too expensive		.315
Dreary/ Boring		.537
Low range of designs		.770
Low variety of colors/ patters		.705
Not easily available		.385
Extraction Method: Principal Component Analysis.		
a. 1 components extracted.		
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.604
Bartlett's Test of Sphericity	Sig.	.000
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Cronbach's Alpha		.430

Factor 7 – Positive Perception of Sustainable Fashion in General

		Positive Perception of Sustainable Fashion in General
Fashionable/ Trendy		.611
Better quality		.734
Good for the planet		.622
Extraction Method: Principal Component Analysis.		
a. 1 components extracted.		
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.549
Bartlett's Test of Sphericity	Sig.	.000
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Cronbach's Alpha		.339