



UNIVERSIDADE D
COIMBRA

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**THE INFLUENCE OF CONSUMER OPTIMISM
AND PESSIMISM ON THE INTENTION TO
PURCHASE SUSTAINABLE CLOTHING BY
GENERATION Z**

Dissertação no âmbito do Mestrado em Marketing orientada pela Professora Doutora Susana Maria Palavra Garrido e coorientada pela Professora Doutora Cristela Maia Bairrada e apresentada à Faculdade de Economia da Universidade de Coimbra.

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The accomplishment of this work represents much more than the conclusion of a chapter in my academic life, it means a strength and a desire to do more that I would never be able to assert if a group of people did not surround me.

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Abstract

Purpose: This study aims to determine the effect of dispositional traits, namely optimism and pessimism, on generation Z's intention to purchase sustainable clothing. That is, to examine the influence of optimism and pessimism on the intention to purchase sustainable clothing, environmental concerns, and perceived effectiveness. The effect of these two final factors on the intention to purchase sustainable clothing was also analysed.

Methodology: To reach the research aim, a quantitative methodology was performed based on a survey administered to students at the Faculty of Economics of the University of Coimbra belonging to generation Z. From these students it was possible to gather 247 completed questionnaires representing a sample rate of 10 percent. The statistical software packages IBM SPSS and IBM SPSS AMOS were used to handle and analyze data.

Results: The results show that optimism and pessimism do not have a direct impact on the intention to purchase sustainable clothing by generation Z, however, they impact environmental concerns and perceived consumer effectiveness. It was possible to say that environmental concerns and perceived effectiveness positively influence the intention to purchase sustainable clothing.

Limitations: The main constraint is that the sample is non-probabilistic and the findings cannot be extrapolated to the population. In addition, using a Coimbra-centered population instead of a national or international one could bias the results.

Practical Contributions: A more sustainable company culture is essential. The present research offers some guidance to businesses on how to best communicate their messages by better understanding emotions' impact on consumers' intention to purchase sustainable clothes.

Originality: The current research aims to advance in the field by considering the lack of studies analysing the dispositional traits with the intention to purchase sustainable clothing. As a consequence of this, it is one of the initial studies in marketing that addresses this issue in such a specific manner.

Keywords: Purchase intention, Optimism, Pessimism, Environmental concern, Perceived consumer effectiveness, Sustainable clothing, Generation Z.

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1 - Introduction

1.1. Investigation Context

We live in a consumer society where consumption is seen as the backbone of the global economy, greatly stimulated, and fueled by unlimited products and at breakneck rhythms that give little consideration to the necessities of nature and its cycle.

The fast fashion industry is one of the most environmentally damaging, powered by fads and low-quality products that are frequently discarded and replaced. Between 1975 and 2018, the average annual consumption of clothes per person increased by around 7 kilograms, from 5.9 kilograms to 13 kilograms (Niinimäki *et al.*, 2020). This demonstrates the growth in consumption and, subsequently, the damage. The business is propelled not only by trends, but also by remarkably low prices (Cline, 2012), which leads to an ongoing cycle of consumer purchases.

On the other hand, the notion of slow fashion emerges, which seeks a decrease in production and consumption with a reduction in waste (Niinimäki *et al.*, 2020). In addition to the system having to change drastically, with the need to understand how the transition can occur on a technical level, consumers must also change the paradigm, beginning to view clothes “as more of a functional product rather than entertainment, and be ready to pay higher prices that account for the environmental impact of fashion” (Niinimäki *et al.*, 2020, p. 198).

Given the critical role that the consumer plays in the prospect of altering the way fashion is consumed, it is necessary to comprehend how we might communicate a message that stimulates consumers' purchase intentions for sustainable clothing with a lower environmental impact. As dispositional traits significantly impact on how we see the world (Scheier & Carver, 1985), it will be crucial to include them while analyzing the purchase intention of sustainable clothes to understand the impact of natural features better.

1.2. Objectives and Relevance of the work

In recent years, conscious clothing consumption has gained traction in the public discourse among businesses, governments, and consumers who are more concerned with the environmental effect of their purchasing and demanding a change from brands (Ciasullo, 2017).

In turn, businesses need to advance in a manner that is sustainable and adjust their offerings to suit the rising awareness of customers (Haws, Winterich & Naylor, 2014).

Keeping this in mind, the current work provides a primary purpose in addition to two others, which will be explained in the subsequent paragraphs.

The first goal is to relate the dispositional traits of optimism and pessimism with the intention to purchase sustainable clothing and to understand the impact that may exist.

The second purpose is to understand how dispositional traits influence environmental concerns and perceived consumer effectiveness. These are two antecedents of the intention to purchase sustainable clothing and are of utmost significance in investigating the variable.

In conclusion, to arrive at different conclusions, it is planned to study the impact of environmental concerns and perceived consumer effectiveness on the intention to purchase sustainable clothing, all of this in generation Z, to gain a better understanding of these relationships as they apply to the main group of consumers both now and in the future.

1.3. Work Structure

This dissertation is divided up into six sections: the "Introduction", which is where this subchapter is inserted; the "Research Background and Hypotheses" chapter; the "Investigation Model" section; the "Investigation Methodology" section; the "Results Analysis" chapter; and the "Final Considerations" section.

The first chapter, "Introduction", provides a foundation for the current study and an overview of the issues covered. The work's aims, significance, and organization are described.

The second chapter, "Research Background and Hypotheses", presents the dissertation's conceptual structure. This entails presenting and developing pertinent ideas to the study. First, we discuss fashion's environmental impact. Sustainable fashion and the intention to purchase sustainable clothing are counterarguments. Next, we will analyze the relationship between optimistic customers' intention to purchase sustainable clothing, environmental concerns, and consumer effectiveness as well as consumer pessimism and those variables. The last case explains the relationship between environmental concerns and consumer effectiveness, and the debate finishes with generation Z.

In the third chapter, titled "Conceptual Model", the conceptual model along with the related hypotheses that resulted from the suggested model are provided.

In the fourth chapter, "Methodology", the study details the investigation methodology. This chapter describes the questionnaire, variables, pre-test findings and sample profile. In addition, the exploratory factor analysis, the analysis of model adjustment, and the reliability of the variables and indicators.

The fifth chapter is titled "Results Analysis". The chapter opens with the hypothesis test, which verifies the literature review's linkages. This chapter has a results discussion and conclusion.

The final chapter, "Final Considerations", presents key findings from the study. The study's theoretical and practical consequences, limits, and future research suggestions follow.

2 - Research Background and Hypotheses

This chapter describes the theoretical framework of this work. This part offers concepts, definitions, theories, and discoveries important to the dissertation's overall topic to create a greater understanding of the issue's state of the art.

First, fashion-related concepts will be discussed. This part introduces "fast fashion", its environmental impact, and "slow fashion" as an alternative.

Next, the concepts that represent the variables that will be investigated will be presented. These concepts include: the intention to purchase sustainable clothing; environmental concern; perceived consumer effectiveness; and dispositional traits, comprising optimism and pessimism.

The research hypotheses based on the provided range of literature are presented at various points throughout the development of the chapter.

2.1. Fashion Consumption

Fashion products, like many others, have always had a purpose in society that transcended their practicality. The desire to spend for status impacts the purchase of a wide variety of product categories, but fashion plays a particularly prominent role in this sort of consumption (Goldsmith, Flynn & Eastman, 1996). Consumers view fashion as a primary means of expressing themselves, establishing an identity, and participating in society. Clothing emphasizes an image and portrays images that display success and status (Cass, 2001). In the same sense, having the latest fashion in clothing is one of the most common ways consumers gain prestige among their peers, which leads to endless and unrestrained consumption of clothing (Goldsmith, Flynn & Eastman, 1996). In other words, fashion is a collection of signs, each with its interpretation, that everyone applies according to their preferences (Craik, 1993). To conclude this discussion, it is necessary to remember that consumption status is quite related to fashion consumption, in which consumers purchase items for reasons other than utility or function (Puiu *et al.*, 2021). Consumption of fashion is strongly tied to acquiring an identity and enables the consumer to achieve the desired status.

According to Birtwistle and Moore (2007), consumers fall into two categories: innovators and followers. Around 16% of consumers are innovators who are constantly aware of and ready to accept new trends; on the other side, followers are more conservative and concerned with the piece's usability and versatility. However, even these consumers, followers, do not foresee wearing the same clothing for an extended period (Birtwistle & Moore, 2007).

Whatever consumer type is considered, the importance of defining one's identity and social position frequently overcomes the intention to purchase ethically and sustainably (McNeill & Moore, 2015). According to Birtwistle and Moore (2007), this occurrence is due to buyers' lack of awareness regarding the negative impact that fashion production has on the environment, as well as how clothes should be disposed of and the importance of recycling them when they reach the end of their life cycle. This results in environmentally hazardous consumption levels, underlining the critical need for a paradigm shift. Today, we have a good opportunity for making this transition, as "the current state of the industry, coupled with contemporary concerns for environmental well-being, as well as recent economic trends leaving families and individuals at financial risk, presents a platform that supports the potential for consumer change" (McNeill & Moore, 2015, p. 213).

2.2. Impact of Fashion on the Environment

Climate change occurs worldwide due to human consumption practices and the effects are both evident and terrifying. It is a reality that we are currently experiencing cultural overconsumption, which the linear economic model promotes. Indeed, "in the past fifty years, many advanced societies have gradually become "consumer societies" in which consumption performs a major role in the stimulation of economic growth" (Crane, 2010, p. 354). It becomes a cause for concern when we witness uncontrolled consumption highly harmful to the environment.

Fast fashion is the industry that transformed clothing purchasing by making it a low-cost item with a high turnover rate and, as a result, inferior quality. The concept is about clothing with short life cycles made with an emphasis on low costs and high

turnover, with frequent collections that result in an explosion in their consumption (Mukherjee, 2015). Even though unfettered clothing consumption is very profitable economically, it has a devastating effect on the environment. This influence is evident across the garment's lifecycle, including during production, manufacturing, transportation, use, and disposal.

While it is vital to consider the materials used in the production phase, because they require different treatments, there are critical areas that are cross-cutting across the various materials. The most popular is cotton in terms of raw materials, which requires extensive usage of insecticides and chemicals classified by the Environmental Protection Agency as harmful to people (Mukherjee, 2015). Additionally, cotton cultivation occurs primarily in developing nations with limited water resources. The Aral Sea in Central Asia is an excellent illustration of this phenomenon. It has lost around 70% of its volume between 1960 and 2000 due to the redirection of water from rivers that flowed into the sea to grow cotton in the desert. Polyester and nylon, the most often used synthetic fibers, contribute to the release of greenhouse gases and are difficult to recycle at the end of the piece's life, requiring 30 to 40 years to decompose (Mukherjee, 2015).

In the fashion sector, the manufacturing process is lengthy and complex. Converting raw materials into textiles creates issues "related to water consumption, use of chemicals, the release of pollutants into the environment and production of waste and hazardous waste" (Jacometti, 2019, p. 3). The dyeing process is critical because it involves using environmentally and humanely damaging chemicals. This operation is significant because "only approximately 80% of synthetic colours are retained by the fabric; the remainder is rinsed off the garments" into the water (Mukherjee, 2015). The distribution phase generates pollution mainly via the use of fossil fuels, which are finite and emit large amounts of gases into the environment (Jacometti, 2019).

When garments are washed for personal use, they also have a significant environmental impact (WRAP, 2017). Although laundry habits have improved due to lower-temperature programs and extended usage of clothing, the impact is higher today than in 2012 due to customers' increased clothing ownership (WRAP, 2017).

Finally, consumer awareness of end-of-life behaviour is critical; unfortunately, “the average number of times a garment is worn before it ceases to be used has decreased by 36% compared to 15 years ago (Ellen Macarthur Foundation, 2017). Worse yet, clothing ends up in landfills, contaminating the land and water with difficult-to-compost components toxic to the environment (Morgan & Birtwistle, 2009). Additionally, incineration threatens the environment due to the discharge of greenhouse gases.

To conclude this chapter, it is critical to emphasize that the energy and water consumed during these processes, the emissions to the atmosphere, the discharges into the water, the release of microplastics into the water, and, ultimately, the items typically ending up on landfills or being incinerated are the primary ways in which the industry has a negative impact on the environment (Jacometti, 2019). According to a 2017 assessment by the Ellen Macarthur Foundation, the take-make-dispose method is unsustainable for the environment’s survival, as annual greenhouse gas emissions from textile production exceed those from all international flights and maritime shipping combined. The industry has a significant environmental impact that can only be mitigated by adopting a more sustainable manufacturing process that utilizes low-impact raw materials of high quality, reuses and recycles parts to reduce, if not eliminate, waste and make the industry more sustainable and environmentally friendly.

2.3. Sustainable Fashion

Following the 1972 United Nations meeting in Stockholm, environmental problems became a globally recognized issue, as most people expressed worry over pollution and degradation of nature (Sanne, 2002). Brundtland's report, titled "Our Common Future," published by the World Commission on Environment and Development in 1987, marked a turning point in the public debate on environmental sustainability, regularly bringing awareness to the issue (Sanne, 2002). One of the specific issues that emerged from the buzz was sustainable consumption, a prominent theme of the 1992 Rio de Janeiro Earth Summit report "Agenda 21" (Murphy & Cohen, 2001). The report identified the fulfilment of a limitless stream of consumer needs as a

critical contributor to worldwide environmental problems (Murphy & Cohen, 2001). The Oxford Commission on Sustainable Consumption defined the term in 1999 as “consumption that supports the ability of current and future generations to meet their material and other needs, without causing irreversible damage to the environment or loss of function in natural systems” (Jackson & Michaelis, 2003, p. 14). The United Nations Environment Program also stated that sustainable consumption encompasses various critical aspects, including satisfying demands, improving quality of life, increasing efficiency, reducing waste, adopting a lifecycle perspective, and considering the equity component (Jackson & Michaelis, 2003).

With increased customer awareness about the environment, but also with an upsurge in political debate on the matter, companies have been driven to provide more sustainable alternatives for their goods. Indeed, international brands like Patagonia, H&M, Thought, and Stella McCartney have shifted their attention to an ethical and transparent approach to fashion that considers both the environment and the clients (Khandual & Pradhan, 2019). Other significant developments by established brands include Gucci, which created a program to report on corporate social responsibility, environmental impact, employee satisfaction, and structural innovation, and Primark, which launched a clothing recycling program in which it accepts clothing that would otherwise go to waste (Grazzini, Acuti & Aiello, 2020). Not only established brands but also emerging sustainable fashion brands such as 11.11, [Ka] [Sha] and Doodlage are committed to designing and selling clothing that is made fairly and ethically, including providing a safe working environment for factory workers, collaborating with artisans to create handcrafted goods, sourcing organic or recycled raw materials, and repurpose post-production and post-consumer wastes (Khandual & Pradhan, 2019). There is a growing diffusion of environmentally friendly clothing on the market due to the increasing interest and demand from consumers. Indeed, consumer interest in more sustainable options is growing, which is remarkable considering that a third of millennials and generation Z consumers in the United States say they are prepared to spend more on products that are less detrimental to the environment. In Europe, two-thirds of consumers say they would discontinue or considerably limit their spending with companies that abuse employees or suppliers (Business of Fashion, 2021).

As noted earlier, the concept of sustainable fashion generates a myriad of concepts due to the industry's size, making it a problematic multitude concept to describe. Additionally, a review of various publications on the issue reveals that the term "sustainable fashion" is often substituted with "green fashion" or "ethical fashion," which either allude to the same notion. Regardless of the confusion caused by the proliferation of terms used to refer to the same concept, precise criteria must be completed to declare a brand sustainable, green, or ethical. For the present work, the term "sustainable fashion" will be employed since it is the term that the author's colleagues agree they use the most daily. Sustainable fashion "can be defined as fashionable clothes that incorporate fair trade principles with sweatshop-free labor conditions while not harming the environment or workers by using biodegradable and organic cotton" (Joergens, 2006, p. 361). Straightforwardly and practically, sustainable fashion tries to minimize negative impacts on the environment and workers; it makes use of biodegradable and organic materials, as well as ecologically friendly and recycled materials; finally, sustainable fashion goods are made to last a more extended amount of time (Mandarić, Hunjet & Kozina, 2021). The concept of "sustainable fashion" encompasses both environmental and ethical considerations. On the environmental consideration, the idea emphasizes recyclable and biodegradable materials; the ethical consideration emphasizes fair trade standards and a production system free of sweatshop labor. These two variables work in tandem to widen and enhance the reach of the sustainable fashion notion (Shen, Richards & Liu, 2013).

Within the context of sustainable fashion, another vital notion, "slow fashion", arises in contrast to the rooted fast fashion industry. Fletcher (2007) coined the term, and brought awareness for the need to the industry to shift its mentality. The author advanced a new paradigm that calls for an increased understanding of the industry's influence on employees, communities, and the environment. Changing from quantity to quality is vital, with planned production rather than mass production that negatively impacts employees and the environment (Fletcher, 2007). To deconstruct the principles of fast and slow fashion, Mukherjee (2015) argues that fast fashion promotes short fashion cycles with a high emphasis on profit and a low focus on quality, resulting in inefficient resource usage, while slow fashion emphasizes quality with less

manufacturing, hence decreasing resource waste (Cline, 2012). Slow fashion advocates suggest that customers should see their fashion purchases as investments in high-quality apparel, enabling them to extend the life of products without often replacing them. Slow fashion is produced at a slower pace, focusing on quality, conserving resources, allowing the environment to recover, and minimizing waste (Jung & Jin, 2016). Additionally, it involves businesses that slow down production and make sustainable goods available, and consumers, who reduce their consumption and raise their aspirations to more sustainable levels (Jung & Jin, 2016).

2.4. Intention to Purchase Sustainable Clothing

Individual consumption significantly impacts the environment; therefore, using green products can help prevent or even reverse environmental degradation (Joshi & Rahman, 2015). In that scenario, it is critical to understand the elements that influence the intention to purchase sustainable clothing.

As a result, researchers concentrate on consumers' norms, attitudes, and intentions, leading to the development of two theories that serve as the foundation for the majority of studies: Ajzen and Fishbein's Theory of Reasoned Action (TRA) in 1980 and Ajzen's Theory of Planned Behavior (TPB) in 1985 (Joshi & Rahman, 2015).

The TRA identifies the immediate predictors of an individual's intention to engage in a particular activity and enables the prediction of such purposes (Fishbein & Ajzen, 1975). Fishbein and Ajzen (1975) hypothesized that a person's desire to engage in particular conduct is determined by two fundamental factors: attitudinal and normative. The attitudinal component is concerned with the individual's attitude toward performing the desired behaviour, behaviour's consequences, and evaluations of those consequences; the normative component (i.e., the subjective norm) is concerned with the individual's beliefs about whether or not relevant referents believe he should or should not perform the desired behaviour, as well as his motivation to comply with the referents. Sheppard, Hartwick, and Warshaw, (1988) demonstrated that the model presented by Fishbein and Ajzen can understand and forecast consumer behaviour. In

virtue of this ability, the theory is used when it is essential to comprehend the decision-making process in various circumstances, such as when purchasing sustainable clothes.

TPB evolved from TRA and, as an extension, TPB incorporates perceived behavioural control into the original theory (Fishbein & Ajzen, 2015). Perceived Behavioural Control is described as individuals' views of their ability to accomplish, or control, a specific activity. According to TPB, we might extract meaningful information about its potential determinants by carefully eliciting and evaluating relevant behavioural, normative, and control beliefs about a particular behaviour (Fishbein & Ajzen, 2015).

In simple terms, according to TPB, "human behavior is guided by considerations regarding a behaviour's likely consequences (behavioural beliefs), by perceived demands of the social environment (normative beliefs), and by one's perceptions of barriers and facilitators that may be present when performing a behaviour (control beliefs)" (Fishbein & Ajzen, 2015, p. 398).

Individuals who feel that completing the desired behaviour results in beneficial effects develop an intuitive and spontaneous, positive attitude toward the behaviour. However, when a person feels that a particular behaviour will result in unpleasant repercussions, he creates a negative attitude toward the behaviour. On the other hand, when significant persons are believed to discourage the behaviour or abstain from it, individuals experience social pressure to abstain from the activities. When an individual perceives those with whom he wishes to associate would engage in or support action, he feels driven to engage in it. Finally, individuals who believe they will meet more facilitators than barriers and be able to overcome any obstacles that arise develop a feeling of perceived behavioural control, or self-efficacy, towards the behaviour (Fishbein & Ajzen, 2015). "In combination, attitudes toward the behaviour, perceived norms, and perceptions of control produce an intention to perform (or not to perform) the behaviour" (Fishbein & Ajzen, 2015, p. 399), which enables the prediction and comprehension of a variety of human activities, such as the purchase of certain items.

As a general rule, Ajzen (2008) states that the more positive the attitude and subjective norm are, and the better the perceived behavioural control, the more determined the individual's intention to accomplish the desired behaviour. When given

a chance, people will behave on their intentions if they feel considerable control over their actions. As a result, the intention is maintained as a necessary and sufficient condition for behaviour.

TPB is a model often adopted to study human behaviour since it best explains its antecedents. In their analysis, Armitage and Conner (2001) found that the model effectively comprehends and predicts human behaviour. TPB is used to support numerous research that aims to understand better how consumers behave when it comes to purchasing sustainable products (Yang, Li & Zhang, 2018; Paul, Modi & Patel, 2016; Brandão & Costa, 2021; Hsu, Huang, Hsu & Huang, 2016).

Despite this, researchers continue to encounter a poor correlation between buyers' favourable opinions about sustainable items and their actual purchase of these products. Bray, Johns and Kilburn (2011) highlighted the "30:3 issue" for the first time, referring to the reality that 30% of consumers worry about more ethical purchasing, while only 3% of consumption reflects such concerns. Due to the prevalence of studies demonstrating this difference, numerous authors have termed it the "ethical purchasing gap" or the "attitude-behaviour gap". According to the "attitude-behaviour gap", customers who have a good attitude toward sustainable products do not necessarily act on that favourable attitude by purchasing sustainable products (Joshi & Rahman, 2015).

Consequently, Guagnano introduced the Attitude-Behavior-Situation model in 1995, proving that the purchasing behaviour of environmentally friendly items is determined not only by the consumer's attitude but also by the context in which the product is acquired (Joshi & Rahman, 2015). Contextual elements include "personal influences, beliefs and feelings, abilities, publicity, expectations, physical surroundings, institutional factors, and temporal views" (Yadav, Balaji & Jebarajakirthy, 2019, p. 2).

In fashion, both the environmental stewardship of the corporation and the social influence of consumer groups play a vital role in determining which fashion items to purchase (Ciasullo *et al.*, 2017). On the other side, the price might be detrimental if it is costly, yet consumers are often willing to pay a premium price for sustainable fashion (Ciasullo *et al.*, 2017). Slow fashion brands must offer superior quality, durability, and wearability since these attributes distinguish slow fashion from fast fashion (Lundblad & Davies, 2015).

2.5. Environmental Concerns

Environmental concerns are one of the concepts stated while examining factors that may influence the desire to purchase sustainable goods. It has been reviewed extensively by various fields investigating human behaviour.

It is worth noting that researchers began to see an increasing degree of public knowledge and concern about environmental issues, regardless of age, gender, or level of education (Lampert *et al.*, 2019). Individuals are becoming more worried about environmental damage due to global warming.

According to Singh and Bansal (2012), environmental concern refers to consumers' awareness of environmental problems and their motivation to take action to address them.

According to Schultz (2001), the level of environmental concern that an individual develops is contingent on the consequences he anticipates for himself, others, and nature, culminating in an assessment of a concept divided into these three values. Cruz (2017) notes that while the idea varies according to the study, environmental concern relates to an individual's attitude toward environmental problems or their judgment of the problem's relevance. Dunlap and Jones (2002) concur that the extension and continuous expansion of research on the concept of environmental concern make it challenging to define the concept's key characteristics; however, the authors describe it as "the degree to which people are aware of environmental problems regarding the environment and support efforts to solve them and indicate a willingness to contribute personally to their solution" (p. 485).

Franzen and Vogl (2013) take a different approach to the concept, arguing that environmental concern is divided into three components: the cognitive component, which results in internal reflection and knowledge of the problem, the conative component, which results in a desire to act, and the affective component, which addresses the emotional impact of environmental degradation.

The same authors argue that younger generations should be more worried than older generations since they grew up during an increasing media coverage of the issue. Also, education should raise responders' environmental consciousness. Wealthy people

should be more worried about environmental issues than poor people. It is due to two factors. On one side, wealthy people have fewer financial worries and can concentrate on other things. On the other hand, higher-income individuals consume more private goods and demand more public benefits. Their capacity (and willingness) to pay for improved public goods is higher.

Numerous researches have established that the environmental concern variable favours the intention to purchase sustainable goods (Junior *et al.*, 2015; Arisal & Atalar, 2016; Ahmad & Thyagaraj, 2015).

With this in mind, we can presume that environmental concern has a strong and positive correlation with purchasing sustainable products; consumers who want to purchase sustainable products have a solid environmental concern from the beginning.

2.6. Perceived Consumer Effectiveness

Perceived Consumer Effectiveness (PCE) was initially regarded as an element of attitude and, as such, was considered a predictor of conscious environmental behaviour (Berger & Corbin, 1992). However, more recent research has shown that attitudes and PCE are more effectively used when classified as two distinct constructs (Berger & Corbin, 1992).

Allen (1982) defines PCE as a self-concept that involves the perception of acts taken by an individual, motivated by a desire to contribute to resolving a particular situation. The authors Berger and Corbin (1992) clarify that while an attitude is a brief evaluation of an individual's ideas or sentiments about an issue, PCE evaluates the self about the subject. The authors give an example, as a person may be deeply worried about a problem (pollution, for example) yet feel entirely helpless to alter the situation via their consumption. In this case, the person will not have the intention to purchase sustainable products. This indicates that a person may have worries about a particular situation, but if they believe they have little or no power over it, they will not engage in behaviours aimed at resolving the issue.

PCE is a strict term to disentangle from the concepts of attitude and action, but let us suppose that a group of individuals are concerned about the environment but feel

that only huge businesses, governments, or "others" can give concrete solutions. These individuals are likely to have favourable views, low PCE, and low scores for sustainable purchasing behaviour. The second group of individuals may be unconcerned about the environment and feel that it is manifestly ineffective, although individual efforts may be successful. These individuals are more likely to have opposing views, a high degree of PCE, and a low level of sustainable purchasing behaviour. Keeping this in mind, there is a more significant likelihood of a direct and positive association between attitude and behaviour when the PCE is high.

Since PCE is influenced by communication, Ellen, Wiener and Cobb-Walgren (1991) recommend that environmental organizations offer frequent feedback to indicate that people are making a difference and encourage the behaviour by focusing on success rather than failure. Governments, corporations, and environmental organizations must clearly illustrate how individual consumption and disposal impact the situation.

2.7. Dispositional Traits

Dispositional traits are "psychological characteristics of behaviour as needs, motives, attitude, preferences, personality, and particular style to respond to any situation, different in the state of temperament, activation and usefulness" (Shah, 2014, p. 63). Scheier and Carver introduced the term in 1985, defining it as a person's expectations for the future (Zhang *et al.*, 2014). Dispositional traits are classified into two categories: positive affects and negative affects (Shah, 2014). They are a permanent trait of an individual that manifests via certain emotions and actions in reaction to a particular event or situation. Dispositional traits are a person's propensity to respond consistently across time (Shah, 2014). Because "optimists and pessimists differ in their approach to the world", disposition significantly influences an individual's life (Carver, Scheier & Segerstrom, 2010, p. 880).

2.7.1. Consumer Optimism

Consumers with positive personality trait have a more optimistic outlook on life and its aspects, as they describe themselves as "cheerful, energetic, alert, enthusiastic, or fully concentrated" (Coelho *et al.*, 2017, p. 128). Zhang *et al.* (2014) indicate that individuals who score highly on dispositional optimism are more likely to anticipate positive results than negative consequences.

Dispositional optimism is a personality characteristic that influences our behaviour and how we react to certain circumstances (Lindblom, Lindblom & Wechtler, 2020). Individuals with more excellent rates of positive affect often have more favourable perspectives of their circumstances. They are more ready and eager to seek out and fully participate in different life experiences (Kuiper, McKee, Kazarian & Olinger, 1998). Additionally, compared to pessimists, optimists have greater confidence and tenacity in the face of adversity, which raises the likelihood of an individual's success in stressful circumstances and life in general. Likewise, it benefits physical and mental health, well-being, and social integration (Carver, Scheier & Segerstrom, 2010).

Dispositional optimism is a psychological feature that is explained in 25% by genetics which is a low value compared to other qualities and is not stable throughout an individual's life. Additionally, familial warmth, economic stability, and a favourable general environment at the start of and throughout an individual's life all contribute to optimism in adulthood (Pais-Ribeiro, 2012).

It has been examined and debated whether optimism is one-dimensional or if, on the contrary, it is bidimensional, consisting of two distinct and independent dimensions. The one-dimensional concept of optimism explains that it exists on a spectrum and that very optimistic individuals have low levels of negativism; each person is either an optimist or a pessimist, never both, with the majority falling somewhere in between. On the other side, seeing optimism and pessimism as distinct dimensions views them as different and allows a person to be both optimistic and pessimistic simultaneously (Ribeiro, Pedro & Marques, 2012). According to Ribeiro, Pedro, and Marques (2012), there is a need to continue studying the best strategy to address the problem, despite the concept's multifaceted nature. Thus, according to Pais-Ribeiro, given that research

aiming to address this problem concludes that the dimensions have little effect on the correlation between the variables in both theories, the one-dimensional version should be used as intended when the concept was established (Pais-Ribeiro, 2012).

2.7.1.1. Consumer Optimism and Intention to Purchase Sustainable Clothing

Optimistic consumers are acknowledged to be highly engaged in confronting issues rather than avoiding them, taking meaningful and active actions to resolve their own and others' issues (Zhang *et al.*, 2014). Optimistic individuals are more inclined to act and participate in defined-goal initiatives (Lyubomirsky, King & Diener, 2005). As extroverts, they are more likely to engage in social activities that demand cooperation (Lu & Argyle, 1990). As a result, optimistic peoples' increased engagement with their surrounding context should increase their participation in actions that decrease or remove humanity's negative environmental consequences on the planet (Coelho *et al.*, 2017).

In their research, Akbar *et al.* (2020) stated that optimistic consumers are more likely to be active, sociable, and engage in sustainable consumption. Additionally, excitement, extroversion, and self-confidence, which are traits of optimistic people, are indications of pro-environmental attitudes (Milfont & Sibley, 2012), which results in individuals' desire to engage in environmental activism. Lastly, it should be mentioned that the act of assisting, positively contributing to a cause, is very appealing to positive individuals since it delivers a pleasant experience in part by providing the sense of working to alleviate the negative feeling associated with difficulties (Penner *et al.*, 2005). In the sustainable domain, protecting nature and seeing environmental stewardship as a duty instils a pleasant emotion in people, acting as a mechanism to promote individual happiness (Bolderdijk *et al.*, 2012). In consideration of the above, the following hypothesis is proposed:

H₁ – Optimism has a direct and positive influence on the Intention to Purchase Sustainable Clothing.

2.7.1.2. Consumer Optimism and Environmental Concern

Positive individuals emphasize negative information to remove or resolve it before it adversely impacts their disposition (Aspinwall, 1998). Additionally, it is necessary to establish that when negative information becomes urgent, positive individuals will exert cognitive effort to process it (Aspinwall, 1998). Optimists' desire and capacity to digest information are very beneficial for their ability to analyze and solve problems. According to Isen (2001), positivism enables cognitive flexibility and openness to information, enabling individuals to react to issues in clever ways. Given the growing body of knowledge regarding climate change and its recognized harmful consequences, positive individuals will pay attention to the point and develop a broad picture of the situation. Optimistic individuals are likely to express environmental concerns due to their knowledge of the problem and awareness of the scope of environmental issues. In consideration of the above, the following hypothesis is proposed:

H₂ – Optimism has a direct and positive influence on Environmental Concerns.

2.7.1.3. Consumer Optimism and Perceived Consumer Effectiveness

Numerous researches have indicated that happy emotions promote pro-environmental action by reinforcing positive sentiments (Kaida & Kaida, 2019). Additionally, it is worth emphasizing that optimism enables the cognitive process to be optimized as it analyzes and saves knowledge for future use, therefore boosting the efficacy of issue resolution (Sadiq *et al.*, 2021). Thus, positive individuals enhance their proactivity and preventative action in response to emerging difficulties. This is also because optimism conveys that an individual's resources are sufficient and adequate to deal with and endure adverse events or information (Aspinwall, 1998).

Optimism instils higher confidence in a person's abilities (Lisá, 2020), which leads the individual establishing ambitious objectives for himself (Lyubomirsky, King & Diener, 2005), based on a strong sense of self-effectiveness that is prevalent and plentiful in optimistic people (Rawat & Mahapatra, 2020). Changing habits and the drive to do so strongly correlate with effectiveness perceptions and the intensity and perseverance invested in the activity (Bandura, 1977). Thus, the PCE is critical for the consumer to

respond and be proactive. We may infer that individuals with high levels of optimism are proactive in issue solving, have well-defined objectives, and always believe they will succeed in their performance when confronted directly with difficulty (Lyubomirsky, King & Diener, 2005). In consideration of the above, the following hypothesis is proposed:

H₃ – Optimism has a direct and positive influence on Perceived Consumer Effectiveness.

2.7.2. Consumer Pessimism

Pessimism is the opposite of optimism since pessimistic persons often anticipate bad events in their future (Pellegrino *et al.*, 2020). Watson and Clark (1984) describe that "high in negative affect individuals tend to be distressed and upset and have a negative view of self" (p. 465). The authors demonstrate different gloomy feelings such as anxiousness, tension, concern, wrath, self-dissatisfaction, and even grief. While pessimistic persons are not always unhappy or seem to be angry, they do have a general propensity to respond adversely to events and information delivered to them (Brandes, Kushner & Tackett, 2018).

2.7.2.1. Consumer Pessimism and Intention to Purchase Sustainable Clothing

Individuals' moods influence the information they concentrate on, and individuals with high levels of pessimism are more sensitive to negativity in their environment, making cognition more challenging in these instances (Sadiq *et al.*, 2021). Additionally, being proactive and responsive involve physical, social, and psychological resources that pessimistic people, in contrast to optimistic individuals, lack (Coelho *et al.*, 2017).

Even though pessimistic individuals assist others in specific circumstances, they do not do it as easily as optimistic individuals (Lyubomirsky, King & Diener, 2005). As Cunningham *et al.* (1989) demonstrate, pessimistic individuals contribute less, as seen by their reduced predisposition to make charitable contributions. Weyant (1978) reinforces this hypothesis with his research, concluding that pessimism causes

individuals to be willing to help only when the benefits are great, and the costs are low. Willingness to assist is crucial when considering purchasing sustainable clothing. Thus, the desire to purchase sustainable clothes is contingent on the individual's assessment of the cost/benefit ratio, which may be challenging to attain in the near term. In consideration of the above, the following hypothesis is proposed:

H₄ – Pessimism has a direct and negative influence on the Intention to Purchase Sustainable Clothing.

2.7.2.2. Consumer Pessimism and Environmental Concern

Additionally, to what has been said before, pessimism influences the information that a person pays attention to, with pessimism serving as an incentive for the individual to seek negative information in his surroundings (Watson & Clark, 1984). Similarly, to seeking it, pessimistic individuals exaggerate their reactions to situations, elevating them above the actual issue and causing them to experience higher than typical amounts of stress (Judge, Erez & Thresen, 2000).

With this being considered, pessimistic individuals tend to see the world, themselves, and their lives through a negative lens and are unmoved by happy occurrences (Brief, Butcher & Roberson, 1995). With this in mind, it is logical for pessimistic individuals, who see the world negatively and concentrate on it, to view the environment similarly, focusing on concerning facts related to the subject, naturally increasing concern. In consideration of the above, the following hypothesis is proposed:

H₅ – Pessimism has a direct and positive influence on Environmental Concerns.

2.7.2.3. Consumer Pessimism and Perceived Consumer Effectiveness

The inability of pessimistic individuals to establish coping mechanisms (Lyubomirsky, King & Dlener, 2005) makes it very difficult to see the positive side of situations, leaving them in a constant state of tension (Judge, Erez & Thoresen, 2000).

Individuals' propensity to dwell on and exaggerate their flaws, failures and inherent risks leads to poor self-esteem (Lorr & Wunderlich, 1988). Rawat and

Mahapatra (2020) discovered a positive correlation between optimism, self-esteem, and self-efficacy, demonstrating that pessimistic individuals also have a low sense of self-efficacy and poor self-esteem. Pleasant memories of the past with positive experiences and triumphs lead to an appraisal of future success, which is a sense that pessimistic individuals lack (Lyubomirsky, King & Diener, 2005). With this in mind, people will believe they lack the competence to make a constructive contribution to the environment and lack the drive and capacity to build resources to mitigate their impact on the planet (Coelho *et al.*, 2017). In consideration of the above, the following hypothesis is proposed:

H₆ – Pessimism has a direct and negative influence on Perceived Consumer Effectiveness.

2.8. Environmental Concerns, Perceived Consumer Effectiveness, and Intention to Purchase Sustainable Clothing

The concept of environmental concern, defined as the knowledge of environmental issues and the propensity to resolve them, is expected to be directly associated with the intention to purchase sustainable clothing. Individuals who have high levels of environmental concerns also display habits that are by the preservation of the environment, such as recycling, conserving energy, and purchasing sustainable products (Bamberg, 2003). As Esmailpour and Bahmiary (2017) demonstrate, “consumers concerned about the environment purchase goods and services that they think have a positive impact (or less negative impact) on the environment” (p. 299-300). Additionally, an individual concerned about the environment will make additional efforts to purchase sustainable products, including paying a premium price (Bang *et al.*, 2000).

Moreover, multiple researches support the assumption that environmental concerns have a positive effect on the intention to purchase sustainable products (Azizan & Suki, 2013; Frederico, Quevedo-Silva & Freire, 2013; Khandelwal, Bajpai & Khandelwal, 2015; Kim & Chung, 2011; Lin & Huang, 2012). In consideration of the above, the following hypothesis is proposed:

H₇ – Environmental Concerns have a direct and positive influence on the Intention to Purchase Sustainable Clothing.

Concerning Perceived Consumer Effectiveness, this is a trait of environmentally conscious individuals, as consumers who believe they have a significant impact on pollution mitigation are significantly more concerned about the environment (Kinneer, Taylor & Ahmed, 1974).

Numerous theories support the proposition that the greater the perceived effectiveness, the more pro-environmental behaviour the consumer demonstrates (Ellen, Wiener & Cobb-Walgren, 1991). Research conducted by Berger and Corbin (1992) has shown that the greater the perceived consumer effectiveness, the stronger the association between attitude and behaviour, motivating customers to choose environmentally sustainable goods. Lastly, in the same vein, Lee *et al.* (2014) established that perceived consumer effectiveness had a favourable impact on three distinct forms of pro-environmental behaviour: “good citizen behaviour, green purchase behaviour, and environmental activist behaviour” (p. 2102). In consideration of the above, the following hypothesis is proposed:

H₈ – Perceived Consumer Effectiveness has a direct and positive influence on the Intention to Purchase Sustainable Clothing.

2.9. Generation Z

The current study focuses on generation Z since it is the most recent consumer generation and the most ecologically conscious. Although generation Z specialists claim various birth dates, Schroer (2015) suggested that generation Z people were born between 1995 and 2015 and are developing rapidly, having grown up in the most diversified environment possible. The current work will consider those precise birth dates for generation Z members. Keeping this in mind, we shall refer to generation Z as individuals aged up to and including 27.

Compared to the previous generation of millennials, generation Z is more “technologically advanced, pragmatic, risk-averse, financially responsible, and

individualistic” (Schenarts, 2019, p. 248). As the first generation born into a technology environment, they are intimately linked to their cellphones and laptops, conveying real-time information about what is occurring in the world. As a result, generation Z is more aware of the broader picture and more accepting of diversity (Schenarts, 2019).

Education is more relevant to generation Z than to prior generations, with 89 percent of respondents to a Barner & Noble Education research in 2016 believing that college is necessary and decisive for successful future employment. Despite this, individuals have a minimal concentration span since “they have always had instant access to information, maps, movies, Netflix, music, shopping, and their educational material” (Nicholas, 2008, p. 2). As a result, they carefully pick the subjects they will devote their attention, avoiding spending time on issues that do not attract them.

Considering that this generation has experienced the most profound effects of climate change, energy, and water scarcity, this is the generation that, among the current ones, “are most interested in monitoring sustainability into their activities” (Dabija, 2020, p. 3). With this in mind, generation Z is altering their consumption habits by gravitating toward more environmentally friendly and responsible items (Khalil, Ismail & Ghalwash, 2021). Additionally, younger consumers are aware of a brand's ecological impact and want it to be reduced.

3 - Conceptual Model

After the literature review, we can advance with the presentation of the conceptual model that supports the current work and the respective research hypotheses. The research hypotheses were formulated based on the literature review. They suggest potential relationships between optimism and pessimism with environmental concerns and perceived consumer effectiveness, and their influence on the intention to purchase sustainable clothing.

In this study the suggested research hypotheses are presented in table 1.

Table 1 - Research Hypotheses

H ₁	Optimism has a direct and positive influence on the Intention to Purchase Sustainable Clothing.
H ₂	Optimism has a direct and positive influence on Environmental Concerns.
H ₃	Optimism has a direct and positive influence on Perceived Consumer Effectiveness.
H ₄	Pessimism has a direct and negative influence on the Intention to Purchase Sustainable Clothing.
H ₅	Pessimism has a direct and positive influence on Environmental Concerns.
H ₆	Pessimism has a direct and negative influence on Perceived Consumer Effectiveness.
H ₇	Environmental Concerns have a direct and positive influence on the Intention to Purchase Sustainable Clothing.
H ₈	Perceived Consumer Effectiveness has a direct and positive influence on the Intention to Purchase Sustainable Clothing.

Attending to the suggested hypothesis and bearing in mind the Research Question of this study: "Does the dispositional traits of generation Z consumers (optimism and pessimism) affect their environmental concerns, perceived consumer effectiveness, and subsequently their intention to purchase sustainable clothing?". Based on the literature review and the relationships identified between the latent variables, the following conceptual model is proposed (Figure 1).

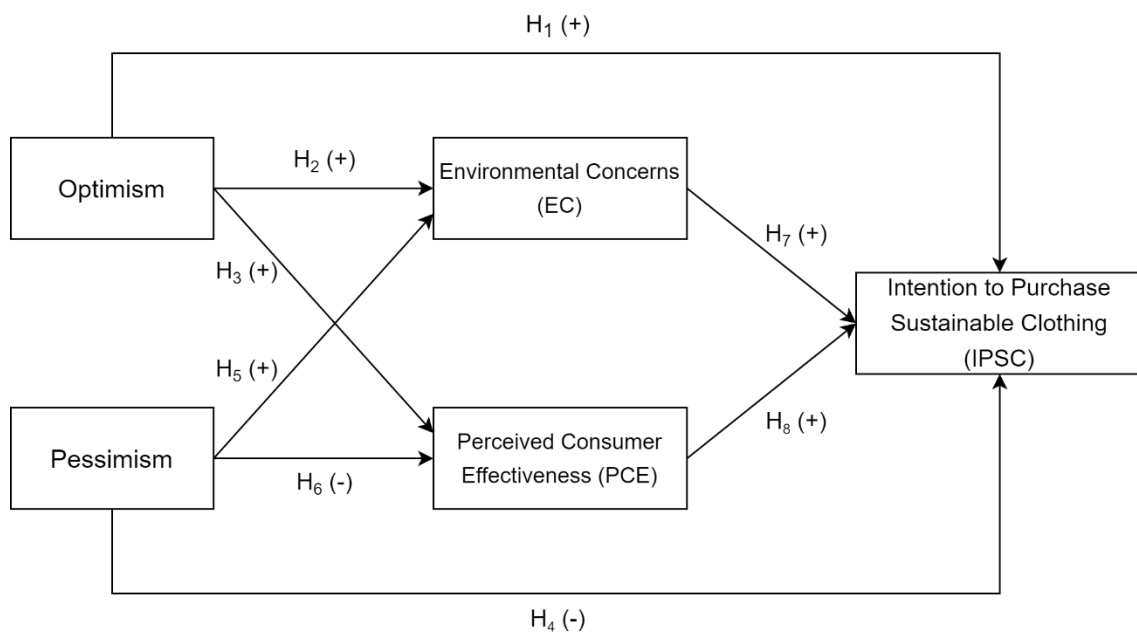


Figure 1 – Conceptual model proposal

Typically, "environmental concerns" and "perceived consumer effectiveness" are investigated as antecedents of "intention to purchase sustainable clothing", but not in the context of consumer dispositional traits. Optimism and pessimism are extensively studied in psychology and the human sciences; nevertheless, they are also significant in the study of marketing since they influence everyday behaviours, such as the purchasing of sustainable products.

4 - Methodology

This section intends to describe the methodology used in the study and the procedures used to collect data that will assess the fit of the proposed model by testing the suggested hypotheses.

A quantitative research methodology was used since it makes it possible to describe or analyze facts and phenomena, being characterized by precision, also having an objective of providing data and test hypotheses (Marconi & Lakatos, 2002).

4.1. Questionnaire Design

To gather data to test the hypotheses stated above and draw conclusions, a questionnaire was designed and delivered in person on paper. By definition, a questionnaire is an ordered set of questions which has the benefits of collecting accurate responses, with more freedom and security, since they are anonymous. Without the researcher's influence, distortion is less likely (Marconi & Lakatos, 2002).

As we will see in the next section, the literature review made it possible to identify the best indicators to translate the meaning of the latent variables using as a rule of thumb the most frequent ones. After that, the questionnaire (appendix I) was constructed by combining scales previously tested in other researches.

The final questionnaire comprises five main sections. The first section addresses the researcher's presentation and study scope. The respondent's anonymity and confidentiality were then guaranteed, and an email address was provided in case respondents decided to contact the researcher.

The second part consisted of questions related to the variables "Perceived Consumer Effectiveness", "Environmental Concern", "Consumer Attitude toward Green Products", and "Intention to Purchase Sustainable Clothing."

In the third section of the questionnaire, respondents were asked to respond to the variables "Consumer Optimism" and "Consumer Pessimism" and control questions to assess their attention while completing the questionnaire were also used.

In the fourth section, consumer values, including egoistic, altruistic, and biospheric values were also considered. A 5-point Likert scale was applied in each area, with 1 representing "strongly disagree" and 5 representing "strongly agree."

The fifth and last part considers a collection of questions to characterize the participants' profile. These questions were multiple choice to obtain just one option among the possibilities.

4.2. Operationalization of Variables

In the present investigation, based on an analysis of the relevant literature, the questionnaire was constructed utilizing scales already used and validated by other authors to analyze the variables inherent in our conceptual model.

Next, we present the latent variables explored during our research and included in the conceptual model, as well as the items used to evaluate each variable, which were translated and adjusted from the original authors' works (see table 2 to 7).

Table 2 - Perceived Consumer Effectiveness Variable Scale

Variable	Author	Items
Perceived Consumer Effectiveness	Lee <i>et al.</i> , (2014)	<ol style="list-style-type: none"> 1. I can protect the environment by buying products that are friendly to the environment. 2. I feel I can help solve natural resource problems by conserving water and energy. 3. I feel capable of helping solve environmental problems. 4. Each person's behavior can have a positive effect on society by signing a petition in support of promoting the environment.

Table 3 - Environmental Concern Variable Scale

Variable	Author	Items
Environmental Concern	Lee <i>et al.</i> , (2014)	<ol style="list-style-type: none"> 1. Humans are severely abusing the environment. 2. If things continue on their present course, we will soon experience a major ecological catastrophe. 3. The balance of nature is very delicate and easily upset.

Table 4 - Consumer Attitude towards Green Products Variable Scale

Variable	Author	Items
Consumer Attitude towards Green Products	Siyal <i>et al.</i> , (2021)	<ol style="list-style-type: none"> 1. I feel that green products' environmental reputation is generally reliable. 2. I feel that green products' environmental performance is generally dependable. 3. I feel that green products' environmental claims are generally trustworthy. 4. Green products' environmental concern meets my expectations. 5. Green products keep promises and responsibilities for environmental protection.

Table 5 - Intention to purchase Sustainable Clothing Variable Scale

Variable	Author	Items
Intention to Purchase Sustainable Clothing	Sreen, Purbey & Sadarangani (2018)	<ol style="list-style-type: none"> 1. I Intend to buy sustainable clothing. 2. I plan to purchase sustainable clothing. 3. I will purchase sustainable clothing in my next purchase.

Table 6 - Consumer Optimism Variable Scale

Variable	Author	Items
Consumer Optimism	Sadiq, Paul & Bharti (2020)	<ol style="list-style-type: none"> 1. In uncertain times, I usually expect the best. 2. I always look on the bright side of things. 3. I'm always optimistic about my future. 4. When I undertake something new, I expect to succeed. 5. Where there's a will, there's a way. 6. In general, things turn out all right in the end.

Table 7 - Consumer Pessimism Variable Scale

Variable	Author	Items
Consumer Pessimism	Sadiq, Paul & Bharti (2020)	<ol style="list-style-type: none"> 1. It is best not to get your hopes too high since you will probably be disappointed. 2. Rarely do I expect good things to happen. 3. If something can go wrong for me, it will. 4. I hardly ever expect things to go my way. 5. Things never work out the way I want them to. 6. If I make a decision on my own, I can pretty much count on the fact that it will turn out to be a poor one. 7. I rarely count on good things happening to me. 8. Better to expect defeat: then it doesn't hit so hard when it comes. 9. Give me 50/50 odds and I will choose the wrong answer every time.

4.3. Pretest

Before the final application of the questionnaires, it is essential to conduct a pretest. According to Hunt (1982), "pretesting, the final stage, is the use of a questionnaire in a small pilot study to ascertain how well the questionnaire work" (p. 269). On this premise, it is possible to evaluate the performance of the questionnaire and, if necessary, to adapt it for maximum application success.

A convenience sample was used for the pretest phase. The questionnaires were hand-delivered to 33 persons at the start of April 2022. The participants were asked to provide a comprehensive evaluation of the questionnaire, including their thoughts on its legibility, size, and response time. Following the pretest, a question was modified for clarification purposes, and an average response time of 5 minutes was established. Respondents generally did not indicate any sections that needed improvement. Thus no more adjustments were implemented. The data from the pretest were also subjected to exploratory factor analysis, which, given the positive findings, allowed the questionnaire to progress to the next level. Consequently, we completed the questionnaire that was subsequently utilized to gather data from the sample.

4.4. Data collection

As the objective of this research is to study the intention of generation Z to purchase sustainable clothing, the population was defined as all individuals of generation Z, that is, up to the age of 27. During April and May 2022, data collection was carried out at the Faculty of Economics at the University of Coimbra with the participation of many students from various classes and courses. The questionnaires were delivered and collected in person. After the collection, 247 questionnaires were gathered resulting from the contributions of students. This amount of responses represents a sample rate of 10 percent.

4.5. Sample Profile

Knowing that in most circumstances, there are insufficient resources, particularly time and money, to gather data from the whole population, a sample of the population must be used. The sampling procedure permits the selection of the sample that will participate in the research, which consists of a group of participants with the same characteristics as the population from which it was chosen to accurately reflect it (Coutinho, 2014).

In selecting the sample for this study, we used a non-probabilistic technique based on convenience sampling. The sample is formed by students from the Faculty of Economics at the University of Coimbra. The study of higher education students was considered because they represent a homogeneous segment, which is extremely useful when attempting to comprehend aspects relating to the consumption of fashion products (Ciasullo et al., 2017).

To characterize the sample under study, questions of a personal and individual nature were incorporated into the final section of the questionnaire, taking into account the following variables: sex, age, nationality, marital status, occupation, level of education, monthly household income, and the number of times the respondent purchased sustainable clothing in the past six months. On the foundation of these characteristics, the investigated sample is described below. The average of the various items was used to fill in the gaps left by missing responses in the surveys.

Regarding gender, 61.1% (151 individuals) of the 247 respondents were female, while 38.9% (96 individuals) were male (appendix II a)).

Concerning the age of the respondents, 40.5% (100 individuals) of the sample group of 247 were 18 or 19 years old, 28.3% (70 individuals) were 20 or 21 years old, 16.2 percent (40 individuals) were 22 or 23 years old, 12.6 percent (31 individuals) were 24 or 25 years old, and 2.4% (6 individuals) were 26 or 27 years old. Respondents are, on average, 21 years old. Considering that, we included all respondents in our sample, with no need to eliminate surveys based on age (appendix II b)).

The sample proved to be homogeneous in terms of nationality, considering that 247 respondents (100%) were Portuguese (appendix II c)).

The majority of responders, 243 persons (98.4%), were single. The remaining four respondents were equally balanced between married and widowed, with two respondents (0.8% of the total) indicating they were married and the other two (0.8% of the total) indicating they were widowed (appendix II d)).

Considering that the sample consisted only of students, there were only two legitimate responses to the occupation question: student and working student. The great majority of students do not work, with 214 respondents (86.6%) identifying as students and 33 (13.4%) selecting the working student option (appendix II e)).

Regarding the level of education, the majority of the sample, 166 persons (67.2%), had finished secondary school; 29.1% (72 respondents) had a bachelor's degree; and just 3.6% (9 individuals) held a master's degree (appendix II f)).

The statistics of the monthly income of the respondent's household indicate that the sample was split, with 47.3% of respondents' household earning up to €1500 per month and 52.7% of respondents' household earning more than €1500 per month (appendix II g)).

The last question of the survey revealed that most respondents had never purchased sustainable clothing, with 151 respondents (61.1% of the total) selecting this answer. 49 respondents (19.8%) had bought sustainable clothing once in the past six months, whereas 30 respondents (12.1%) had purchased sustainable clothing twice, and

17 respondents (6.9%) had purchased sustainable clothing three or more times in the last six months (appendix II h)).

4.5. Statistical Data Analysis Performed

Once data collection was complete, version 28 of the IBM SPSS (Statistical Package for the Social Sciences) software was used to enter the data, creating the database to be researched. Variables and answers were also encoded in IBM SPSS, providing meaning to the Likert scale values in the questionnaire. Finally, we recognized potential filling mistakes and replaced occasional missing elements with their average value.

After the database has been structured, it is time to begin the process of data analysis. This will allow us to examine the hypotheses proposed for the current study and provide a response to the problem brought up by the investigation.

According to Brown (2006), exploratory factor analysis (EFA) is an exploratory or descriptive technique whose primary objective is to analyze the dimensionality of a collection of multiple indicators by identifying the least amount of interpretable variables required to explain their correlations. Furthermore, EFA is typically used at the beginning of the construct validation process.

According to João Marôco (2010), structural equation modeling (SEM) is utilized when a researcher develops correlations between variables and aims to assess their validity. The author adds that, in simple terms, SEM combines the traditional approach of factor analysis, in which latent variables are operationalized in a measurement model, with linear regression, in which the correlations between the variables under investigation in the structural model are determined.

Structural equations have become indispensable in the social sciences because they permit the analysis of latent variables, observable through indicators but not directly, which is challenging to do using traditional approaches that provide plainly observable variables (Marôco, 2010).

Keeping this in mind, data analysis was conducted using IBM SPSS AMOS (version 28) statistical software, recognizing that it will be based on structural equation modeling

(SEM). This is validated by the preceding description and the model's high analytical capabilities in social science research.

Moving forward for data analysis, we will start with exploratory factor analysis.

4.5.1. Exploratory Factor Analysis (EFA)

To investigate the data matrix, Kaiser-Meyer-Olkin (KMO) analysis was conducted, which, as Marôco (2007) explains, permits to evaluate the homogeneity of the variables by comparing the simple correlations with the partial correlations observed between the variables. Values range from 0 to 1, with values near to 0 suggesting that the variables are heterogeneous or have little in common, and values close to 1 indicating that the variables can be categorized into homogeneous groups, that is, they measure the same construct or dimension (Sharma, 1996). Table 8 presents the KMO value meanings.

Table 8 - KMO index values meaning

KMO Measure	Recommendation
Above 0,9	Superb
0,8 to 0,9	Great
0,7 to 0,8	Good
0,6 to 0,7	Mediocre
0,5 to 0,6	Miserable
Below 0,5	Unacceptable

Source: Adapted from Sharma (1989)

Bartlett's test "examines the extent to which the correlation matrix departs from orthogonality" (Sharma, 1996, p. 123). Results near one suggest that the variables are uncorrelated, while the result will be close to zero if there is a correlation between the variables.

To evaluate the data's variability, we analyzed the total explained variance, which represents the overall percentage of the data's variability that can be attributed to the

relationship between the variables (Coutinho, 2014). High variance values are good indicators while low variances may indicate that the items are independent.

Finally, it is essential to mention Cronbach's Alpha, which measures the questionnaire's internal consistency. According to Coutinho (2014), it is the most suitable indicator for instruments that use the Likert scale since it permits monitoring how an item measures the same as the latent variable, hence examining internal consistency. Damásio (2012) clarified the significance of the alternative values (table 9).

Table 9 - Alpha Cronbach values meaning

Cronbach Alpha values	Recommendation
Above 0,9	Superb
0,8 to 0,9	Great
0,7 to 0,8	Good
0,6 to 0,7	Mediocre
0,5 to 0,6	Miserable
Below 0,5	Unacceptable

Source: Own construction

Several conclusions may be drawn from an analysis of the data presented in table 10.

Table 10 - Variables Description

	Items	KMO	Bartlett's test	% of explained variance	Cronbach's Alpha
Perceived Consumer Effectiveness	PCE1	0,746	<0,001	58,702%	0,762
	PCE2				
	PCE3				
	PCE4				
Environmental Concerns	EC1	0,700	<0,001	80,267%	0,876
	EC2				
	EC3				
Intention to Purchase Sustainable Clothing	IPSC1	0,769	<0,001	91,044%	0,951
	IPSC2				
	IPSC3				

Consumer Optimism	CO1	0,709	<0,001	63,268%	0,854
	CO2				
	CO3				
	CO4				
	CO5				
	CO6				
Consumer Pessimism	CP1	0,828	<0,001	68,157%	0,886
	CP2				
	CP3				
	CP4				
	CP5				
	CP6				
	CP7				
	CP8				
	CP9				

It is possible to conclude that the variables are homogenous using the KMO test. The variable "Consumer Optimism" has a great value ($>0,8$). The variables "Perceived Consumer Effectiveness", "Environmental Concern", "Intention to Purchase Sustainable Clothing", and "Consumer Optimism" all have values more than or equal to 0,70, therefore, they are good.

Bartlett's test revealed the presence of a correlation between all the variables' constituent elements, given that they all present a value $<0,001$.

The values related to the percentage of explained variance vary between 58,702 and 91,044, which means that they are considered significant.

Cronbach's Alpha indicates the internal consistency of the variables. Through the analysis of the obtained values, we can conclude that the variable "Intention to Purchase Sustainable Clothing" has a superb internal consistency ($>0,9$). In contrast, the variables "Environmental Concern", "Consumer Optimism", and "Consumer Pessimism" have values greater than 0,8, indicating that they have great internal consistency. The last variable with good internal consistency is "Perceived Consumer Effectiveness", which has a value of 0,762.

Considering the analysis performed above, it is reasonable to infer that the tests conducted on the current research variables worked well and were good for its continuation.

4.6.2. Quality of Model Fit as a whole

At this point, the results of the most statistical indicators used to measure the model's fit will be presented: Chi-Square (χ^2), Comparative Fit Index (CFI), Tucker-Lewis Fit Index (TLI), Incremental Fit Index (IFI) and Root Mean Square Error of Approximation (RMSEA). Table 11 shows the rules of the thumb used for the different measures according to the several authors.

Table 11 - Statistics and Adjustment Indexes

Model Fit Index	Recommended Values		Authors
χ^2	-	The smaller, the better	(Marôco, 2010)
χ^2/df	>5]2;5]]1;2] ~1	Very bad adjustment Bad adjustment Good adjustment Very good adjustment	(Marôco, 2010)
CFI TLI	<0.8 [0.8;0.90[[0.9;0.95[≥0.95	Very bad adjustment Bad adjustment Good adjustment Very good adjustment	(Marôco, 2010)
IFI	≥0.95	Very good adjustment	(Lisboa <i>et al.</i> , 2012)
RMSEA	>0.10]0.05-0.10] ≤0.05	Unacceptable adjustment Good adjustment Very good adjustment	(Marôco, 2010)

After examining the initial measurement model, it was clear that the model requires improvement. By analyzing the Modification Indices, it was feasible to exclude four components from the model to make it stronger. In addition, using the IBM SPSS program, we grouped the nine "Consumer Pessimism" components into four groups of combined variables, resulting in four sets of items for the variable above: three sets of two items and one set of three items. These stages allowed improving the measurement model, as shown in table 12.

Table 12 - AFC fit

	Measurement Model (original)	Measurement Model (after modification indexes)
IFI	0,925	0,943
TLI	0,908	0,926
CFI	0,924	0,942
RMSEA	0,066	0,066
χ^2/DF	2,056	2,085

The analysis of table 12 allows us to confirm that, after the alteration indices, we obtain values that suggest a good model fit. IFI = 0,943 (good adjustment), TLI = 0,926 (good adjustment), CFI = 0,942 (good adjustment), RMSEA = 0,066 (good adjustment), and χ^2/DF = 2,085 (poor adjustment) are displayed in table 12. Thus, we may infer that the model's values are generally regarded as positive, allowing us to continue the investigation.

4.6.3. Reliability of Indicators and Variables

4.6.3.1. Reliability of Indicators

It is essential to determine if the indicators are relevant to the measuring model. The Multiple Correlation Coefficient (R^2) allows us to determine if an indicator contributes to the prediction of a variable. This is accomplished by evaluating the indicators' dependability. According to Marôco (2010), "in general, R^2 values below 0,25 (the factor explains 25% of the variance of the manifest variable) suggest probable local adjustment issues with this variable" (p. 53). This indicator is meant to have a value as near one as possible, suggesting more dependability. In table 13, output of the AMOS statistical program, the Multiple Correlation Coefficient is indicated by the SRW (Standardized Regression Weights). Items deleted from the model during an analysis of the overall goodness of fit are represented by a dash instead of a value. All values in the table are higher than 0,25, meaning that the indicator of dependability is positive.

Table 23 - Reliability of Indicators Values

		SRW	C.R.
CO1	In uncertain times, I usually expect the best.	0,745	
CO2	I always look on the bright side of things.	0,835	11,725
CO3	I'm always optimistic about my future.	0,748	10,858
CO4	When I undertake something new, I expect to succeed.	0,444	6,457
CO5	Where there's a will, there's a way.	-	-
CO6	In general, things turn out all right in the end.	-	-
CP1/CP4	It is best not to get your hopes too high since you will probably be disappointed./I hardly ever expect things to go my way.	0,836	
CP8/CP9	Better to expect defeat: then it doesn't hit so hard when it comes./Give me 50/50 odds and I will choose the wrong answer every time.	0,671	11,116
CP2/CP5	I rarely expect good things to happen./Things never work out the way I want them to.	0,822	14,357
CP3/CP6/CP7	If something can go wrong for me, it will./If I make a decision on my own, I can pretty much count on the fact that it will turn out to be a poor one./I rarely count on good things happening to me.	0,803	13,974
EC1	Humans are severely abusing the environment.	0,723	
EC2	If things continue on their present course, we will soon experience a major ecological catastrophe.	0,762	5,49
EC3	The balance of nature is very delicate and easily upset.	-	-
PCE1	I feel I can protect the environment by buying products that are friendly to the environment.	0,75	
PCE2	I feel I can help solve natural resource problems by conserving water and energy.	0,69	7,738
PCE3	I feel capable of helping solve environmental problems.	0,623	7,463
PCE4	Each person's behavior can have a positive effect on society by signing a petition in support of promoting the environment.	-	-
IPSC1	I intend to buy sustainable clothing.	0,84	
IPSC2	I plan to purchase sustainable clothing.	0,947	18,546
IPSC3	I will purchase sustainable clothing in my next purchase.	0,854	16,77

4.6.3.2. Reliability of each Latent Variable (Composite Reliability – CR)

In addition to examining the dependability of the indicators, it is essential to assess the dependability of the variables. For this purpose, we employ the CR, which relates to "the total amount of true score variance relative to the total scale score variance" (Brunner and Sub, 2005, p. 229). The CR value of a good indicator should be close to 1, while values greater than 0,70 are regarded as acceptable. As seen in table 13, all values meet the criteria for being rated good.

In addition, it is essential to assess the Cronbach's Alpha values, which also measure the dependability of the variables. This indicator must likewise have values higher than 0,7 for it to be considered good. In fact, as shown in table 13, all the research variables had values that respect this criterion.

4.6.3.3. Average Variance Extracted (AVE)

According to Valentini and Damásio (2016), the AVE represents the "average percentage of variance of items free of measurement error (error referring to a lack of internal consistency)" (p. 3). Ideal values for this indicator are more than 0,5, while values greater than 0,7 are very good. It is feasible to verify that all values in table 14 are more than 0,5, except one. The value of the variable "Perceived Consumer Effectiveness" is 0,48, which is nearly 0,5 to be deemed an acceptable value.

Table 14 - Reliability of Variables: Standard Deviation, Correlation Matrix and Cronbach's Alpha

	SD	PCE	EC	IPSC	CO	CP	AVE	CR
PCE	0,51	0,77					0,48	0,73
EC	0,44	0,4	0,70				0,55	0,71
IPSC	0,69	0,29	0,32	0,91			0,78	0,91
CO	0,77	0,06	-0,12	0,08	0,80		0,50	0,79
CP	0,76	-0,16	-0,06	-0,08	-0,65	0,86	0,62	0,86

Subtitle: SD: Standard Deviation; Highlighted diagonal: Cronbach's Alpha; AVE: Average Variance Extracted; CR: Composite Reliability; PCE: Perceived Consumer Effectiveness; EC: Environmental Concern; IPSC: Intention to Purchase Sustainable Clothing; CO: Consumer Optimism; CP: Consumer Pessimism

Analyzing the table as a whole, we may infer that the acquired findings are in agreement with the ideal values, and so the measurement model is reliable.

4.6.3.4. Discriminant Validity

The discriminant validity "evaluates the degree to which the indicators connected to the measurement of different latent variables are associated with each other and, subsequently, the degree to which the independent latent variables are correlated with

each other" (Lisboa *et al.*, 2012, p. 436-437). Using this indicator, we may determine whether the variable measures as intended.

Here, the AVE is compared to the correlations between the variables, i.e., the square of the correlation between the variables must be less than the AVE.

Continuing with the analysis, it is reasonable to conclude that the value resulting from the square of the variables' correlation is always less than AVE. The outcomes are available for review in appendix III.

5 – Results Analysis

In the fifth chapter, we will discuss the results reached through the data collection process discussed in the previous chapter.

The first thing that must be accomplished is to conduct an analysis of the hypothesis test so that conclusions can be drawn about the hypotheses formed in the literature research.

After that, a discussion of the results will be provided, and the chapter will be wrapped up with its conclusion.

5.1. Hypothesis Test

Regarding the structural model, we can see in table 15 that it shows satisfactory values.

Table 35 - Structural Model Adjustment Values

	Structural Model
IFI	0,933
TLI	0,915
CFI	0,932
RMSEA	0,071
X²/DF	2,246

As for values, the table shows an IFI = 0,933, TLI = 0,915, CFI = 0,932, RMSEA = 0,071, and $X^2/DF = 2,246$. Comparing the indicated values to the suggestive values in table 11 reveals a good fit.

After that, it was possible to proceed with the AMOS statistical software-developed hypothesis test. Table 16 displays the outcomes of the tests.

Table 16 – Outcomes of hypotheses test

			Hypothesis	SRW	P	Obs.
CO	→	IPSC	H ₁	0,124	NS	Not supported hypothesis
CO	→	EC	H ₂	-0,236	**	Not supported hypothesis
CO	→	PCE	H ₃	-0,106	NS	Not supported hypothesis
CP	→	IPSC	H ₄	0,044	NS	Not supported hypothesis
CP	→	EC	H ₅	-0,207	*	Not supported hypothesis
CP	→	PCE	H ₆	-0,238	**	Supported hypothesis
EC	→	IPSC	H ₇	0,298	***	Supported hypothesis
PCE	→	IPSC	H ₈	0,22	***	Supported hypothesis

Subtitle: *** = between 0 e 0,01, ** = between 0,01 e 0,05 e * = between 0,05 e 0,1

At this step, it is crucial to examine the SRW values, which show the direction of the relationship between the variables, and the p (p-value), which indicates whether the hypothesis is statistically significant.

In the present study, two consumer optimism-related hypotheses (H₁ and H₃) were not supported, implying that they lack statistical significance. The relationship between Consumer Optimism and Environmental Concern is demonstrated in Hypothesis 2 that consumer optimism has a negative effect on environmental concern.

H₄ is not relevant in the context of consumer pessimism, but consumer pessimism has a negative influence on consumers' environmental concerns and perceived consumer effectiveness (H₅ and H₆).

As for hypotheses 7 and 8, it is reasonable to conclude that environmental concerns and perceived consumer effectiveness positively influence the Intention to Purchase Sustainable Clothing.

It is also worth mentioning that Environmental Concerns (SRW = 0.298) have the most significant influence on the Intention to Purchase Sustainable Clothing.

5.3. Results Discussion

Through testing hypotheses, it was feasible to evaluate the hypotheses produced throughout the chapter of the literature review and determine if the predicted correlations are confirmed by the data or not.

The results of the hypothesis test show that the optimism of generation Z consumers is not directly related to the intention to purchase sustainable clothing (H_1) or to the Perceived Consumer Effectiveness (H_3). In light of this, the results contradict what was projected in the chapter on the literature review, which predicted a direct relationship between the factors.

Still within the realm of optimism, the relationship with environmental concerns was negative (H_2), contrary to what the literature assessment had projected. As previously indicated, it was anticipated that consumers with the dispositional feature of positivism would exhibit increased environmental concern; nevertheless, the data indicate the contrary. The justification might be based on a frequent concept within the realm of environmental issues and beyond, such as optimism bias or unrealistic optimism. The concept reflects the disparity between an individual's expectation and reality, with the expectation being better than reality (Sharot, 2011). The phenomenon influences an individual's sense of personal risk, and there is a propensity to believe that unfavorable occurrences are more likely to occur to others than to oneself (Burguer & Burns, 1988; Lek & Bishop, 1994; Regan, Snyder & Kassas, 1995; Weinstein, 1980). In the sphere of environmental issues, Beattie *et al.* (2017), who investigated the attention optimists pay to messages concerning climate change, discovered that optimists dedicate minimal effort to focusing on such messages. In addition to ignoring negative information, optimistic individuals believe they are unlikely to be harmed by climate change. Despite being a strategy that maintains a happy mood and ignores concerns, this attitude is very harmful when it is necessary to pay attention to potential impending hazards, such as climate change. The idea of optimism bias justifies the unfavorable link between optimism and environmental concerns in this way.

Proceeding to the results about the dispositional trait of pessimism. The results indicate that there is no correlation between dispositional pessimism and the intention

to purchase sustainable clothing (H₄), contrary to what the existing research on the topic would predict.

There is a clear and negative association between the environmental concern and perceived consumer effectiveness variables and the pessimism of generation Z consumers. Focusing exclusively on the demonstrated direct and negative association between pessimism and environmental concerns (H₅), the outcome does not match what was anticipated based on the literature review. This discrepancy may be attributed to the fact that pessimistic people frequently deal with unfavorable information at a mental and physical distance, despite their ability to contribute to its resolution (Scheier, 1994). In this approach, there is a chance that pessimistic individuals prefer to ignore negative climate-related news and do not have a comprehensive understanding of the problem's scope. In this manner, individuals will lack sufficient knowledge to inspire environmental concern.

Regarding hypothesis 6, as expected by the literature analysis, the direct and negative association between consumer pessimism and perceived consumer effectiveness was validated. In agreement with the authors, Lyubomirsky and King (2005), these findings indicate that pessimistic people have poor self-esteem and, as a result, do not believe they are capable of different things in life. Negative thinking leads to a sense of helplessness in the face of issues because pessimistic people find it difficult to discover answers to problems.

The results confirmed a direct and positive relationship between the variables, supporting hypothesis 7, which states that environmental concerns positively influence the intention to purchase sustainable clothing. The results support the literature indicating that those with environmental concerns tend to choose items with negligible or minimal environmental impact (Esmailpour & Bahmiary, 2017). Multiple studies demonstrate a direct and positive relationship between environmental concerns and the purchase of sustainable products, such as the study conducted by Lin and Huang (2012), which demonstrated that individuals with environmental concerns tend to choose sustainable products and opt for a green product quickly.

The eighth and final hypothesis, which expected a direct and positive relationship between the variables perceived consumer effectiveness and the intention to purchase

sustainable clothing, was validated, as predicted by the literature. According to the authors Kinnear, Taylor, and Ahmed (1974), individuals with higher perceived effectiveness tend to be more worried about the environment and to have attitudes that reflect this concern. Authors Ellen, Wiener, and Cobb-Walgren (1991) argue similarly, indicating that individuals with pro-environmental practices tend to have a high perception of their effectiveness.

Summing up, the hypothesis test allowed us to corroborate three of the eight hypotheses, three of which did not show statistical significance. Consumer optimism is only related to environmental concerns, negatively affecting it due to optimism bias. Pessimism, in turn, negatively impacts both environmental concerns and perceived effectiveness, which is a fundamental element in the poor engagement of pessimistic individuals in topics about nature. Finally, it is worth noting an evidently positive impact of environmental concerns and perceived consumer effectiveness on the intention to purchase sustainable clothing, indicating that individuals who are concerned about the environment and who believe they can make a difference are more likely to have such intentions.

6 – Final Considerations

6.1. Conclusions

The urgency of a paradigm shift about climate change was the impetus for the present investigation. Specifically, this dissertation elaborated on generation Z's intention to purchase sustainable clothing, taking into account the modern development of excessive consumption. Due to the fact that the fast fashion sector is one of the most polluting and has the most significant impact on the environment, it is imperative that the industry and how it is seen be altered immediately. This necessitates that customers adopt more ecologically conscious purchasing practices with a higher emphasis on quality, which is the core objective of slow fashion (Cline, 2012).

Although research on the subject of sustainability and sustainable consumption habits already exists, this study is the first to investigate the link between the subject and dispositional traits. Realizing this gap in the literature and being convinced of the topic's immense appeal, it was clear that a study was required to examine the relationship between dispositional traits and the intention to purchase sustainable clothing, taking into account environmental concerns and perceived consumer effectiveness. All of this with an emphasis on generation Z, as this is the present and next big consumer group that will determine consumer trends and facilitate paradigm shifts.

In light of this, the purpose of the present study is to investigate the effect of dispositional traits on the intention to purchase sustainable clothing, environmental concerns, and perceived consumer effectiveness.

First, the topic of fashion in general was investigated, taking into consideration the global consumption of fashion and the environmental effect of this consumption. Effectively, the fashion business is one of the world's most polluting industries because of the toxins used and discharged during the garment production process. At the stage of transforming raw materials into textiles it includes environmentally damaging processes, such as significant water consumption, the use of chemicals, and even the discharge of pollutants (Jacometti, 2019). This was accomplished at a fast rate with continuous manufacturing.

Slow fashion attempts to shift the paradigm of unfettered consumerism, at an excessive speed, for a planned and careful consumption where quality is invested in order to have garments that do not deteriorate rapidly and, by lasting longer, eliminate the need for frequent clothing purchases.

As the intention to purchase sustainable clothing is the focus of the present study, the research conducted in this field is well-known. Being a significant and relevant problem, it continues to astonish experts with its peculiar phenomenon of customers expressing care for the environment without purchasing green items (Bray, Johns & Kilburn, 2011). The data allowed us to infer that the intention to purchase sustainable clothing has no direct association with dispositional traits but does have a relationship with environmental concerns and perceived effectiveness. It is evident that these final two have a beneficial effect on the intention to purchase sustainable clothing.

Regarding environmental concerns, this is an area that is also examined and investigated since it is crucial to the comprehension of consumers. It has been demonstrated that dispositional traits negatively influence environmental concerns. On the optimism side, the idea of optimism bias prevents optimistic individuals from viewing climate change as an immediate threat. The phenomenon is distant because optimists do not believe it will happen to them (Beattie *et al.*, 2017). In addition, the same individuals prefer to ignore unfavorable information, distancing themselves from it (Beattie *et al.*, 2017). These facts are crucial because everyone must understand the scope of the situation. On the pessimistic side, this negatively influences environmental concerns, which may be explained by the propensity of negative individuals to be unable to manage unfavorable information and, as a result, avoid it (Scheier, 1994). Such conduct prevents the processing essential for absorption and behavior modification.

Consumer effectiveness was shown to be negatively influenced by pessimism, as the author Coelho *et al.* (2017) claims that pessimists do not believe they have the power to fix an issue and also lack the will to do so, which is why they do not feel in control.

In order to examine the effect of environmental concerns and perceived effectiveness on the intention to purchase sustainable clothing, there is a clear positive effect. There was little question that individuals with environmental concerns are more

likely to take measures in their everyday lives that promote environmental conservation, such as purchasing sustainable clothing (Junior *et al.*, 2015). All of this is made extra clearer by the fact that the sample for this study, the generation Z, grew up in the context of the publicized discussion of climate change and the importance of modifying habits. Perceived effectiveness also positively influences the intention to purchase sustainable clothing, and it is evident that a person who believes they can contribute to the solution will have a more significant intention to act in line with this concept (Berger & Corbin, 1992).

6.2. Managerial Implications

Given the urgent need to make consumers aware of the impact of their consumption on the environment, it is essential to comprehend the variables that influence awareness of the problem and the intention to act accordingly, keeping in mind that personal characteristics play a significant role in environmental protection behavior (Markowitz *et al.*, 2012). In this way, the present study is important for understanding the impact of dispositional traits not only on the intention to purchase sustainable clothing, but also on environmental concerns and perceived effectiveness, factors associated to the intention to purchase sustainable products.

The present study is interesting from a theoretical standpoint in that it provides evidence of the effect of dispositional traits on environmental concerns and, in the case of pessimism, on PCE. Moreover, the data demonstrated that EC and PCE had a beneficial effect on IPSC. It is evident that they are precursors of the IPSC, and in light of this, it is crucial to focus on these factors in order to promote the purchase of sustainable products.

The emergence of the idea of optimism bias in the interpretation of outcomes is equally significant, since it has a substantial impact on optimists. Keeping this in mind, it is essential to recognize that they are interrelated and that messages will be better received if there is a sense that the problem is relevant to all of us and will affect the whole human population. In addition, one strategy to reach optimistic individuals is to emphasize that the mission is for the community and impacts everyone, since optimistic

persons are more likely to support causes that serve the common good. (Lyubomirsky & King, 2005). In the sphere of pessimism, the knowledge that pessimistic persons lack environmental care provides insight into how to circumvent this. In this regard, it will always be vital to emphasize the transmission of positive signals that do not exacerbate the general mood of individuals and do not demand a great deal of work on their side, given that they are not naturally inclined to the activity. In conclusion, in order to reach the two extremes of dispositional traits, the message must have a positive atmosphere, emphasizing on what each individual can do to enhance the human imprint on the earth, while avoiding substantial complexity and limits.

The influence of PCE on IPSC, which may be utilized to encourage consumers to purchase sustainable items, is another significant outcome. This may be accomplished by demonstrating to consumers that their activities contribute to the resolution of the problem.

Keeping this in mind, the present study contributes to companies or institutions with a conscious culture, such as companies with a focus on green business or a general interest in it, sustainable brands or those just starting, non-profit environmental organizations, and publicity agencies.

6.3. Limitations and Directions for Future Research

The primary limitation of this study is that the sample was non-probabilistic out of convenience, which makes it difficult to extend the results to the sampled population. Consequently, it would be interesting if the study was based on a probabilistic sample. In addition, although the study was naturally conducted with students from various regions of the country, it was only conducted in Coimbra; thus, it would be advantageous to gather data at a national level in order to achieve more generalized conclusions by extrapolating the study.

After that, the literature on the subject is quite reduced so there were not many points of view created to serve as a basis or for comparison.

Future research might evaluate the impact of emotions on the intention to purchase sustainable items among generation Z and non-generation Z individuals. It

would be important to comprehend how the emotions affect the evaluation of sustainable products and whether they gained or lost interest.

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Appendixes

Appendix I – Questionnaire

Questionário sobre consumo de roupa amiga do ambiente

O meu nome é Sofia Antunes e encontro-me a frequentar o Mestrado em Marketing na Faculdade de Economia da Universidade de Coimbra. No âmbito da minha dissertação de mestrado, venho solicitar a sua colaboração no preenchimento do questionário que se segue.

O anonimato e confidencialidade dos dados são garantidos, pois os mesmos serão tratados de forma agregada e destinam-se exclusivamente à realização deste trabalho de investigação, e eventual publicação dos seus resultados em revistas de carácter científico. Qualquer questão relacionada com o preenchimento do questionário ou se pretender algum esclarecimento, pode contactar-me diretamente através do email sofia_897@hotmail.com.

O tempo médio de resposta a este questionário é cerca de 5 minutos.

I- Através de um círculo (o) ou de uma cruz (x), indique o seu nível de concordância/discordância com cada uma das afirmações que se seguem:

	Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1 Acho que posso proteger o ambiente comprando produtos ecológicos.	1	2	3	4	5
2 Sinto que posso ajudar a resolver os problemas de falta de recursos naturais conservando água e energia.	1	2	3	4	5
3 Sinto-me capaz de ajudar a resolver os problemas ambientais.	1	2	3	4	5
4 Ao assinar uma petição que apoia questões ambientais, cada pessoa pode ter um impacto positivo na sociedade.	1	2	3	4	5
5 Os seres humanos estão a abusar gravemente do ambiente.	1	2	3	4	5
6 Se as coisas continuarem como estão atualmente, iremos passar em breve por uma grande catástrofe ambiental.	1	2	3	4	5
7 O equilíbrio da natureza é muito delicado e facilmente perturbado.	1	2	3	4	5
8 Sinto que, de uma forma geral, a reputação dos produtos amigos do ambiente é de confiança.	1	2	3	4	5
9 Sinto que, de uma forma geral, o desempenho dos produtos amigos do ambiente é confiável.	1	2	3	4	5
10 Sinto que, de uma forma geral, as alegações ambientais dos produtos amigos do ambiente são credíveis.	1	2	3	4	5
11 Sinto que, de uma forma geral, as alegações ambientais dos produtos amigos do ambiente vão ao encontro das minhas expectativas.	1	2	3	4	5
12 Os produtos amigos do ambiente cumprem promessas e assumem responsabilidades pela proteção ambiental.	1	2	3	4	5
13 No futuro, coloco a hipótese de comprar roupa amiga do ambiente.	1	2	3	4	5
14 No futuro, tenho a intenção de vir a comprar roupa amiga do ambiente.	1	2	3	4	5
15 No futuro, estou convicto(a) que irei comprar roupa amiga do ambiente.	1	2	3	4	5

II- As afirmações que se seguem são referentes à sua forma de ser. Através de um círculo (o) ou de uma cruz (x), indique o seu nível de concordância/discordância com cada uma das afirmações que se seguem:

	Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1 Em contextos de incerteza geralmente espero o melhor.	1	2	3	4	5
2 Vejo sempre o lado bom das coisas.	1	2	3	4	5
3 Sou sempre otimista em relação ao meu futuro.	1	2	3	4	5
4 Quando começo algo novo, acredito que vou ter sucesso.	1	2	3	4	5
5 Quando há vontade, há forma de fazer acontecer.	1	2	3	4	5
6 De uma forma geral, as coisas acabam por correr bem.	1	2	3	4	5

III- Continue a pensar na sua forma de ser. Através de um círculo (o) ou de uma cruz (x), indique o seu nível de concordância/discordância com cada uma das afirmações que se seguem:

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	É melhor não ter grandes expectativas porque provavelmente ficarei desapontado(a).	1	2	3	4	5
2	Raramente espero que aconteçam coisas boas.	1	2	3	4	5
3	Se existe alguma possibilidade de algo correr-me mal, corre mesmo.	1	2	3	4	5
4	Quase nunca espero que as coisas me corram bem.	1	2	3	4	5
5	As coisas nunca correm da forma como eu quero que aconteçam.	1	2	3	4	5
6	Se eu tomar uma decisão por mim mesmo, posso contar com o facto de que ela se revelará uma má decisão.	1	2	3	4	5
7	Raramente conto que me aconteçam coisas boas.	1	2	3	4	5
8	É melhor esperar a derrota: assim não custa tanto quando acontece.	1	2	3	4	5
9	Num contexto em que tenho 50% de probabilidades de escolher a resposta errada é sempre essa que escolho.	1	2	3	4	5
10	Para mim, comprar produtos/serviços pela Internet é simples.	1	2	3	4	5
11	Na minha opinião, comprar produtos/serviços pela Internet requer pouco esforço mental.	1	2	3	4	5
12	Considero que é fácil comprar produtos/serviços pela Internet.	1	2	3	4	5

IV- As afirmações que se seguem continuam relacionadas com a sua forma de ser. Através de um círculo (o) ou de uma cruz (x), indique o seu nível de concordância/discordância com cada uma das afirmações que se seguem:

		Discordo totalmente	Discordo	Não concordo nem discordo	Concordo	Concordo totalmente
1	É importante para mim ter controlo nas ações dos outros.	1	2	3	4	5
2	É importante para mim ter autoridade sobre os outros.	1	2	3	4	5
3	É importante para mim ser influente.	1	2	3	4	5
4	É importante para mim ter dinheiro e bens.	1	2	3	4	5
5	É importante para mim trabalhar muito e ser ambicioso(a).	1	2	3	4	5
6	É importante para mim que todas as pessoas tenham as mesmas oportunidades.	1	2	3	4	5
7	É importante para mim cuidar dos mais fragilizados.	1	2	3	4	5
8	É importante para mim que não haja guerra ou conflitos.	1	2	3	4	5
9	É importante para mim ajudar os outros.	1	2	3	4	5
10	É importante para mim prevenir a poluição do planeta.	1	2	3	4	5
11	É importante para mim proteger o ambiente.	1	2	3	4	5
12	É importante para mim respeitar a natureza.	1	2	3	4	5
13	É importante para mim estar em harmonia com a natureza.	1	2	3	4	5

V- Por último, solicitamos-lhe alguma informação para efetuarmos uma caracterização do perfil dos inquiridos:

1. Sexo: <input type="checkbox"/> (1) Feminino <input type="checkbox"/> (2) Masculino <input type="checkbox"/> (3) Outro	2. Idade: ____ anos	3. Nacionalidade: <input type="checkbox"/> (1) Portuguesa <input type="checkbox"/> (2) Outra. Qual? _____	4. Estado civil: <input type="checkbox"/> (1) Solteiro(a) <input type="checkbox"/> (2) Casado(a)/união de facto <input type="checkbox"/> (3) Divorciado(a) <input type="checkbox"/> (4) Viúvo(a)
5. Profissão: <input type="checkbox"/> (1) Estudante <input type="checkbox"/> (2) Trabalhador/estudante	6. Nível de escolaridade mais elevado que concluiu: <input type="checkbox"/> (1) 12º ano <input type="checkbox"/> (2) Licenciatura <input type="checkbox"/> (3) Mestrado	7. Rendimento mensal líquido do agregado familiar: <input type="checkbox"/> (1) Menos de 500€ <input type="checkbox"/> (2) 500-999€ <input type="checkbox"/> (3) 1000-1499€ <input type="checkbox"/> (4) 1500-2499€ <input type="checkbox"/> (5) 2500-4999€ <input type="checkbox"/> (6) 5000€ ou mais	8. Nos últimos 6 meses, quantas vezes comprou roupa amiga do ambiente? <input type="checkbox"/> (1) Nenhuma vez <input type="checkbox"/> (2) 1 vez <input type="checkbox"/> (3) 2 vezes <input type="checkbox"/> (4) 3 vezes <input type="checkbox"/> (5) Mais do que 3 vezes

Obrigado pela sua colaboração.

Appendix II – Sample Profile

a) Profile of participants: sex

	Absolute Frequency	Relative Frequency
Feminine	151	61,1%
Masculine	96	38,9%
Total	247	100%

b) Profile of participants: age

	Absolute Frequency	Relative Frequency
18 - 19	100	40,5%
20 - 21	70	28,3%
22 – 23	40	16,2%
24 – 25	31	12,6%
26 - 27	6	2,4%
Total	247	100%
Average	21 years	

c) Profile of participants: nationality

	Absolute Frequency	Relative Frequency
Portuguese	247	100%
Total	247	100%

d) Profile of participants: marital status

	Absolute Frequency	Relative Frequency
Single	243	98,4%

Married	2	0,8%
Widower	2	0,8%
Total	247	100%

e) Profile of participants: occupation

	Absolute Frequency	Relative Frequency
Student	214	86,6%
Working student	33	13,4%
Total	247	100%

f) Profile of participants: education level

	Absolute Frequency	Relative Frequency
Highschool	166	67,2%
Bachelor's	72	29,1%
Master's	9	3,6%
Total	247	100%

g) Profile of participants: household income

	Absolute Frequency	Relative Frequency
Less than 500€	9	3,6%
500€ - 999€	26	10,5%
1000€ - 1499€	82	33,2%
1500€ - 2499€	86	34,8%
2500€ - 4999€	39	15,8%
More than 5000€	5	2%
Total	247	100%

h) Profile of participants: Frequency of sustainable clothing purchase in the previous 6 months

	Absolute Frequency	Relative Frequency
Never	151	61,1%
Once	49	19,8%
Twice	30	12,1%
Three times	6	2,4%
More than 3 times	11	4,5%
Total	247	100%

Appendix III – Discriminating Validity

			Estimate	Estimate ²	AVE 1	AVE 2
PCE	<-->	EC	0,4	0,16	0,48	0,55
PCE	<-->	IPSC	0,29	0,08	0,48	0,78
PCE	<-->	CO	0,06	0,003	0,48	0,50
PCE	<-->	CP	-0,16	0,02	0,48	0,62
EC	<-->	IPSC	0,32	0,1	0,55	0,78
EC	<-->	CO	-0,12	0,01	0,55	0,50
EC	<-->	CP	-0,06	0,003	0,55	0,62
IPSC	<-->	CO	0,08	0,006	0,78	0,50
IPSC	<-->	CP	-0,09	0,007	0,78	0,62
CO	<-->	CP	-0,65	0,42	0,50	0,62