


# Generation Z, Circular Fashion, and Sustainable Marketing

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## ABSTRACT

This study explores Generation Z's perceptions, attitudes, and behaviors regarding sustainable fashion, focusing on the contradiction between their environmental awareness and consumption patterns. Using a mixed-method approach that includes a literature review and surveys of young consumers, the research aims to understand the motivations and barriers they face when considering sustainable fashion options. The key finding reveals that, despite high levels of environmental and ethical awareness, Generation Z continues to prefer fast fashion, primarily due to its affordability and the constant influx of new trends. The premium pricing associated with sustainable fashion is identified as a significant barrier to its adoption within this demographic. The study concludes by recommending that the fashion industry and policymakers enhance transparency, affordability, and authenticity in their practices. By positioning sustainability as a core brand value and addressing perceptions of greenwashing, the industry can foster more responsible consumption patterns among younger generations.

## KEYWORDS

Sustainable Marketing, Generation Z, Externality, Circular Fashion, Price Sensitivity, Fast Fashion

## 1. INTRODUCTION

Despite the efforts of a large part of the industry, fashion continues to be an activity with a significant negative environmental impact. The manufacturing process is resource-intensive (material, human and energy) and generates a significant amount of waste. The logistical process results in a high carbon footprint. In addition, consumer habits, especially among younger people, are oriented towards ephemeral trends, constant renewal and shortening the useful life of the garment.

Among younger people, fashion is a form of personality expression, a sign of belonging to a social group, a status symbol and even a means of self-fulfilment. Consequently, the times in which a fashion item is trendy are becoming shorter and shorter, which puts pressure on the industry, demanding more and faster collections, while clothes worn a few times go straight from the wardrobe to the dump in a short period of time.

In recent years, a third of consumers, aware of the impact of the global textile industry, have broadened the criteria on which they base their purchasing decisions, incorporating principles and

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values related to sustainability. In this way, they use the act of consumption as a way of expressing these beliefs (Larios, 2019). However, in the fashion sector, the sustainability attribute is associated with a premium price, which younger people (Generation Z or Centennials) cannot afford, as they buy up to 60 new garments every year (Gestal, 2020).

The study investigates the disconnect between Generation Z's sustainability awareness and their actual purchasing behaviour in the context of fast fashion. It explores the extent to which economic barriers, such as the perceived "premium price" of sustainable fashion, and issues of trust, such as greenwashing, hinder the adoption of sustainable consumption practices. By focusing on this dynamic, the research aims to uncover actionable insights for businesses and policymakers to address this sustainability paradox.

## 2. METHODOLOGY

This study employed a mixed-methods approach, integrating qualitative and quantitative techniques to analyze Generation Z's attitudes and behaviors toward sustainable fashion. This design enabled the exploration of both subjective factors, such as perceptions and motivations, and quantifiable consumption patterns.

- Justification for focusing on Galicia, Spain: Galicia was chosen as the study area due to its notable tradition in the textile industry and its increasing emphasis on sustainability within this sector. Moreover, the region provides a unique geographic and cultural context to examine Generation Z's consumption behaviours in a European setting. This focus not only enriches the local understanding but also offers valuable insights for generalising findings to similar contexts in other regions.
- Literature Review: An extensive review of previous studies on sustainable fashion consumption, Generation Z's behavior, and marketing strategies in the textile industry was conducted. The sources included academic articles, market reports, and representative case studies.
- Sampling techniques and participant selection: Questionnaires A purposive sampling method was employed, targeting students and graduates in the textile sector in Galicia. These participants were characterised by their specialised knowledge and high exposure to fashion and sustainability trends. This selection ensured the relevance and suitability of the sample for the study's objectives.
- Data Analysis: The collected data were analyzed using descriptive and inferential statistics to identify key consumption patterns. Additionally, qualitative analysis was employed to interpret open-ended responses, providing deeper insights into the quantitative findings. The integration of both approaches enhances the validity and reliability of the results.

## 3. FAST FASHION AND SUSTAINABILITY: THE CHALLENGE OF CIRCULAR FASHION. A LITERATURE REVIEW

The concept of *fast fashion* can be defined as the "retail strategy that adapts the assortment to current and emerging trends as quickly and efficiently as possible" (Arrigo, 2020). The traditional push strategy of the fashion industry (from the designer to the market) is replaced by a pull strategy, where retailers respond to market changes within a few weeks.

The business model is characterised by low-cost garments that reflect the (increasingly ephemeral) trends of the catwalks and streets (Wojdyla and Chi, 2024). Consumers of this type of fashion are increasingly demanding and fashion-conscious (Barnes and Lea-Greenwood, 2010) and this means a constant updating of their wardrobe.

The shortening of the product life cycle implies the need to reduce process times and lead times, so that the replenishment cycle with new ranges is as short as possible. In this way, production is increased and the textile supply chain becomes more global and decentralised (Muthu, 2020). As a result, the environmental and social impact is increasing.

### 3.1. Generation Z Fashion Consumer

Generation Z (born between 1995 and 2010) stands out for being digital natives. For its members, technology is part of their lives, not an optional tool. This fact has shaped their relationship with information, communication and, of course, consumption (López-Sintas, López-Belbeze and Lamberti, 2020). They are experts in the use of emerging technologies and social platforms; moreover, constant access to information has connected them to global social and environmental challenges (Grigoreva, Garifova and Polovkina, 2021). For this reason, they have developed a strong sense of social responsibility that they demand from the brands they engage with, demanding authenticity and integrity in return for their loyalty. This sensitivity carries over into their purchasing decisions and is manifested in their preference for brands committed to causes they consider important.

As Generation Z moves into adulthood, there is a marked preference for experiences over material possessions. This focus on the experiential translates into their consumption choices, where travel, live events and activities that offer unique and memorable experiences are more valued than the accumulation of tangible goods. This shift in consumer mindset reflects a search for meaning and emotional connection with brands. Generation Z values experiences they can share online, contributing to the construction of their digital identity in an environment where authenticity and transparency are essential (Ao et al, 2023).

All of this has an effect on the fashion consumption of Generation Z individuals, which determines how fashion brands design, promote and market. On the one hand, platforms such as Instagram or TikTok serve as a way for individuals to share their unique styles and discover new trends instantly. Fashion has become a tool for self-expression and a way to build digital identities that need to be constantly updated, leading to a high consumption of ephemeral clothing.

On the other hand, unlike previous generations, Generation Z shows a deep environmental and ethical awareness in their fashion choices (Arora and Machanda, 2022). They value sustainability (Naderi and Van Steenburg, 2018) and seek brands that share their concerns about environmental impact and ethical practices across the value chain.

This consumer is increasingly sensitive to the environmental impact of fashion (Liu, 2022), which leads them to seek more information about the effects of the textile industry on water pollution, greenhouse gas emissions, overproduction of garments or the use of sustainable materials and raw materials (McKernan and Johnson, 2021). This circumstance orients their consumption towards **true brands** and/or **authentic brands** (those that incorporate sustainable objectives in a transparent way) and eco-friendly products, seeking the positive personal impact of their behaviour, in a way that increases their personal satisfaction and their capacity and influence on other social groups.

The sustainable fashion consumer values the quality and durability of the garment, reducing their consumption of ephemeral fashion (Fletcher, 2018), choosing garments that fit their personal style and needs, avoiding the passing trend (Wei and Jung, 2017).

In addition, they introduce ethical and social responsibility variables in the evaluation of their consumption of fashion brands, opting for more transparent choices regarding their value and supply chain (Niinimäki, 2020), as well as brands that reject labour exploitation. This consumer behaviour generates a close identification of the consumer with the values of the chosen brands and increases the level of loyalty towards them.

This responsible or conscious consumer plays a key role in the transformation of the textile industry, creating a growing demand that requires fashion brands to adapt and adopt sustainable practices in order to maintain their position in the market.

Despite the above, Generation Z is used to the rapid turnover of trends thanks to the immediacy of social media. Brands must remain agile to adapt to changing demands and to deliver collections that reflect the latest trends quickly and effectively, which conflicts with sustainability. There is a gap between what they think and what they do: while they are socially and environmentally conscious, Generation Z also fall prey to the speed of trends and consume constantly to try to keep up. If everything is going faster, so is fashion.

Younger generations are aware of the problem and demand changes from fashion brands; in fact, 63% of Generation Z positively value brands having values beyond product and price (Mazinn and Brands with Values, 2021), although there is no clear correlation with purchase or non-purchase decisions.

### 3.2. Main Environmental Impacts of the Fast Fashion Model

The textile supply chain is globally distributed. Fibre production and manufacturing are mostly located in developing countries, while higher value-added processing and consumption is located in developed countries. This decentralisation, together with subcontracting, lax regulations and the loss of control over suppliers, mean that the global industry generates major environmental impacts. These include (Niinimäki, 2020): excessive water consumption and pollution, fossil energy consumption, chemical use and waste generation.

- **Water Consumption and Pollution.** The textile sector is water-intensive and at the same time causes 20% of global wastewater. Attention to the water footprint, an indicator of the amount of water used to produce a good or service, must be complemented with the estimation of discharges and the way in which the consumer uses and washes clothes (consumption and waste: soaps, microplastics, etc.).
- **Energy Consumption and Gas Emissions.** In addition to water, the processes of manufacturing, storage, use and final disposal of the fashion product are energy-intensive and produce large amounts of harmful emissions. According to the European Environment Agency (2017), textile production generates between 15 and 35 tonnes of carbon dioxide for every tonne of textiles produced. Transport is one of the process steps that contributes most to the carbon footprint, especially in fast fashion, as it relies mainly on-air transport in order to serve markets as quickly as possible.
- **Chemical Waste.** The textile industry is chemically intensive, the most common inputs being solvents and dyes, the use of which generates toxic waste that pollutes water.
- **Solid Waste (pre- and post-consumer).** Pre-consumer solid waste is that generated in the production process: fibres, yarns and fabrics, especially in the cutting phase. Post-consumer solid waste is made up of garments discarded by consumers and recycling companies. These used and/or discarded clothes, even new ones, are destined for reuse markets, although more than half of them end up in landfills, rivers or are burned (Cobbing et al, 2022). In addition, the Fast fashion model leads to overproduction and overconsumption of huge quantities of garments that are destroyed or discarded, even before they reach the market in developed countries.

### 3.3. Sustainability in the Fashion Sector

The textile sector is the second most polluting industry worldwide, which means that sustainability becomes one of its most important challenges (Luque, 2019). The demand for sustainability from the fashion consumer and the passing of legislation that promotes sustainability, oblige companies in the sector to take responsibility for reducing their environmental impact (Neumann; Martinez and Martinez, 2020).

The fast fashion model, linked to consumerism, mass production of low quality and low costs, is beginning to incorporate environmental and social sustainability strategies (Modaes, 2016), although these measures have an impact on costs that are usually passed on as an increase in final prices:

- Made to Order and Customisation. Contrary to Fast fashion, this business model is based on production on demand and zero stock. Based on a catalogue and certain customisation possibilities, it is produced upon receipt of an order. These characteristics imply a longer lead time and a higher price than fast fashion.
- Sustainable Design. According to Gwilt (2014), a sustainable design strategy is one that a designer implements that aims to minimise the environmental and social impacts associated with the production, use and subsequent disposal of the garment he or she designs. Accordingly, the designer approaches his or her creative process taking into account:
  - a. Recycling. The garment is designed to be produced with recycled fibres and components and/or with end-of-life recycling in mind. Recycling involves consumption of energy resources and materials in the process but can become a circular economy model (Putruele and Veneziani, 2015).
  - b. Upcycling. The garment is designed in such a way as to use upcycled textile inputs, adding greater added value: higher quality, environmental value, improved perception and branding, and greater economic value. This process involves less energy consumption and eliminates the need for a new product from conventional raw materials (Lewis al., 2018).
  - c. Reconstruction. This is a form of upcycling that involves the prior deconstruction of used garments and their subsequent transformation into new designs (Khandual and Pradhan, 2018).
  - d. Zero Waste. A design technique aimed at cutting and making garments without generating waste. Ideally, this orientation should be transferred to the entire value chain of the industry, including the way the garment is used by the consumer (Rissanen, 2013). At end-of-life, the garment is recovered and recycled.
- Use of Sustainable Fibres. The three fibres most commonly used by the global textile industry are polyester, cotton and viscose, all of which have a high environmental impact. One alternative is to use recycled polyester because of its lower impact: reduction in the use of finite resources (petroleum derivatives), energy savings and lower CO2 emissions (Salcedo, 2104). According to this author, another alternative is organic cotton (produced under organic agriculture standards and certified as such), but it is very expensive and easily counterfeited due to poor traceability. Finally, the production of fibres such as lyocell, from viscose originating from sustainably managed forests and processes with less use of chemicals, is another alternative to be considered.
- Local and Ethical Production. The delocalisation of the fashion industry, in search of supply chain optimisation and cost reduction, generates an imbalance in environmental impact. Environmental risks are greater in places of production (generally developing countries) than in places of consumption (developed countries). On the other hand, the loss of control over labour intensive suppliers can mean the presence of abusive labour practices: an affordable price such as Fast fashion is often achieved with uncontrolled subcontracting, cheap labour and precarious conditions. Local sourcing and production, close to the places of consumption, means less environmental impact (reduction of the carbon footprint associated with transport) and better social viability of workplaces. However, it would call into question the low-cost, high-turnover model of fast fashion.
- Waste Management. The application of circular economy principles in the fashion industry means a paradigm shift in current waste management. Under this approach waste becomes a resource, an input, via upcycling.

### **3.4. Circular Fashion: Challenges and Opportunities**

The application of the circular economy concept has gained importance in the fashion industry in recent years, as it has become evident that the fast fashion model has a significant impact on the environment and society. Waste generation, overexploitation of natural resources, intensive use of transport or precarious working conditions are the challenges to be addressed, orienting fast fashion towards reduction, reuse and recycling of products and materials, promoting a more sustainable fashion industry.

Along this path, fast fashion brands can incorporate design principles that extend the lifespan of garments, such as the choice of durable materials, the elimination of disposable elements and versatility in garments (Grose and Fletcher, 2012). While this provides more durable garments, it conflicts with the need to buy new clothes frequently among the younger part of society (non-repeatability).

Formulas used to address the challenge of increasing garment life extension include used-clothing collection programmes, working on reusing recycled materials in new garments (PwC, 2017) and establishing second-hand as a business model (Bhardwaj and Fairhurst, 2010) if they can reduce the amount of textile waste and the demand for virgin resources.

Local production, which could contribute to reducing the carbon footprint by shortening supply chains, personalisation of garments, which promotes a greater appreciation, care and personal relationship with clothes (Gwilt and Risssanen, 2012) or the implementation of a “made to order” system (Mishra, 2021), however, suggest higher costs, both in implementation and in changing consumer perceptions of fast fashion (Ellen MacArthur Foundation, 2017).

## **4. PRICE (MARKETING MIX) AS AN ELEMENT THAT HINDERS THE CONSUMPTION OF SUSTAINABLE FASHION BY GENERATION Z**

This section will examine the role of price in Generation Z's attitudes towards sustainable fashion. First, a study is made of the main factors shaping the sustainable fashion consumption habits of this group, followed by a more in-depth analysis of the impact of the price variable in this area.

### **4.1. A Review of the Main Drivers of Sustainable Fashion Consumption**

Sustainable fashion consumption, like any other type of sustainable consumption, is influenced by a number of drivers and detractors. These factors can be determinants in the adoption or rejection of more responsible consumption practices in fashion. Overall, the main drivers of sustainable fashion consumption are:

- a. Environmental and social awareness, which encourages consumers to opt for sustainable products (McNeill and Moore, 2020).
- b. Transparency and traceability of the garment, so that the consumer can access detailed information about the supply chain and production of the garments (Preuss, Happaerts and Claes, 2019).
- c. Ethics and social responsibility, particularly in relation to working conditions in manufacturing and adherence to ethical practices (Chen, Lin and Chang, 2021).
- d. Quality and durability, which means a reduction in the need to buy frequently (Bianchi, Birtwistle and Hackley, 2018).
- e. Innovation in materials, adopting those that are sustainable and/or use ecofriendly production processes and techniques (Chen, Lin and Chang, 2021).

However, sustainable consumption faces the challenge of overcoming constraints and detractors that have a negative influence on consumer behaviour:



- a. High costs (and prices) derived from manufacturing processes with higher added value and technological component, use of sustainable materials and ethical processes in terms of labour practices (Bianchi, Birtwistle and Hackley, 2018) that are transferred to the final price of the garment, for the sake of the economic sustainability of the business model.
- b. Lack of access to and availability of sustainable garments in certain markets and geographic areas (Preuss, Happaerts and Claes, 2019).
- c. Lack of awareness or information about what sustainable fashion really is and its benefits can lead to indifference (McNeill and Moore, 2020).
- d. Social pressure and fashion trends, especially in younger and more socially interactive segments of the population, often lead to the consumption of fast fashion rather than sustainable choices (Chen, Lin and Chang, 2021).
- e. Confusing or misleading labelling caused by a lack of sustainable regulations can make it difficult for consumers to identify truly sustainable products (Preuss, Happaerts and Claes, 2019).

#### **4.2. To What Extent do Prices Penalize the Consumption of Sustainable Fashion by Generation Z?**

Generation Z individuals are the biggest consumers of fast fashion. They are digital natives, so social networks, fashion influencers and e-commerce platforms contribute to the purchase, often compulsive, of fashion in line with the latest trends, whose rate of obsolescence is increasing. This need to “be fashionable”, as well as to “not repeat models” (characteristic of an intense social life which, at the same time, is relayed on social networks) and to self-express a constantly evolving identity in an immediate way make fast fashion their first choice, as it is the one that allows them to satisfy all these needs in a way that is appropriate to the limited budget of this consumer profile.

Despite being a generation with a high level of social and environmental awareness, aware of the impact of fast fashion, however, Generation Z cannot afford the “premium price” associated with sustainable brands. This consumer prioritises low cost, as their budget does not allow them to pay for more ethical options. The price variable overrides their sensitivity to sustainability, presenting a clear contrast between environmental concerns and actual purchasing decisions, where sustainable garments are perceived as expensive and difficult to access.

It follows that the low cost of fast fashion does not reflect the negative environmental impact of mass production of garments. This negative externality is not internalised in the price, which leads to consumers not paying the true cost of the garments. This undervaluing of sustainable products distorts price signals and discourages the adoption of more responsible practices, so it is useful to determine how much Generation Z members would be willing to pay (what value they place on) the “sustainable” attribute in a fashion garment.

To carry out the research, a purposive sampling process was designed to identify a prototypical Generation Z fashion consumer. The target population was defined as students or graduates in the textile and fashion sector (specialized knowledge of fashion and sustainability, access to emerging trends, informed consumer behaviour) located in Galicia (Spain) and users of social networks (they know how sustainable fashion is communicated and perceived). This profile was chosen for its relevance and suitability to the objectives of the research, which seeks to understand the dynamics of consumption in a segment that, due to its education and use of digital platforms, is particularly exposed to fashion and sustainability trends.

All tables and figures that follow are of our own elaboration based on field study.

Table 1. Profile of interviewees

		Frequency	
Gender	Man	29	22,0%
	Woman	101	76,5%
	Prefer not to say	2	1,5%
Age	18-20	35	26,7%
	21-23	78	59,5%
	24-25	18	13,7%

As described above, the profile of fashion shoppers is confirmed as that of regular consumers (more than 65% buy fashion at least once a month), who spend more than 400 euros a year on clothes and who estimate that their fashion consumption has been increasing in recent years.

Figure 1. Frequency of fashion purchases

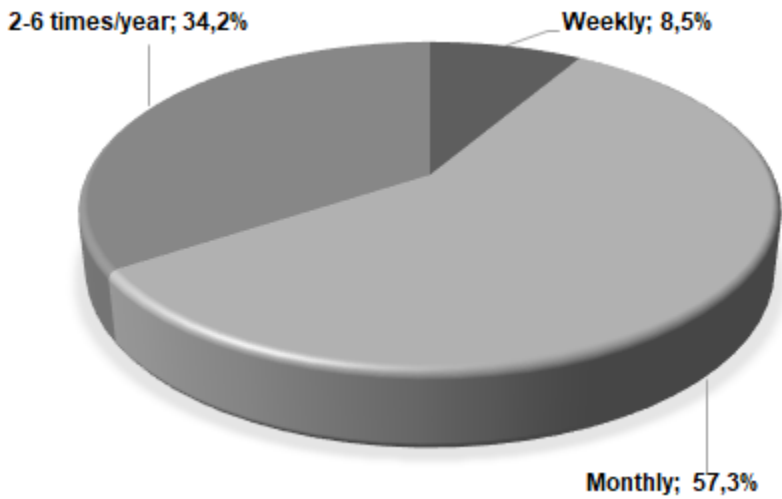




Figure 2. Average annual spending in fashion

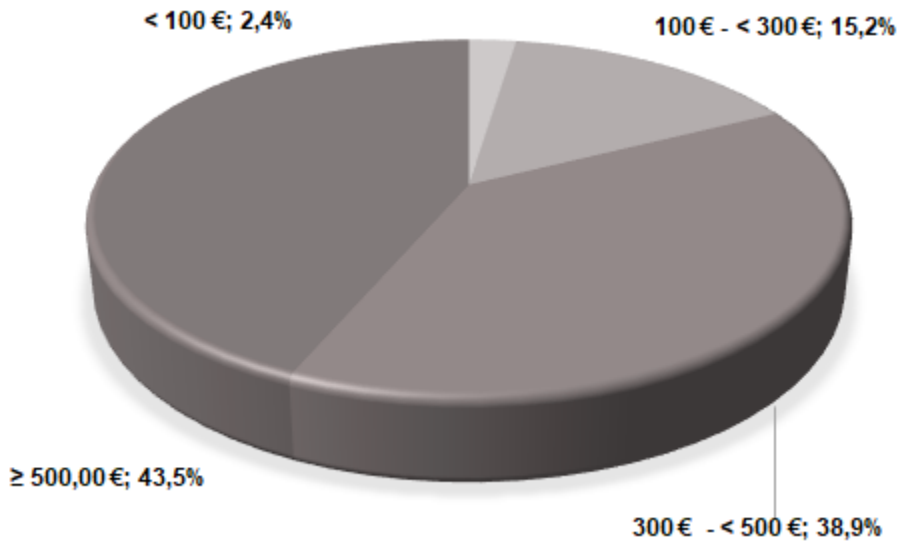
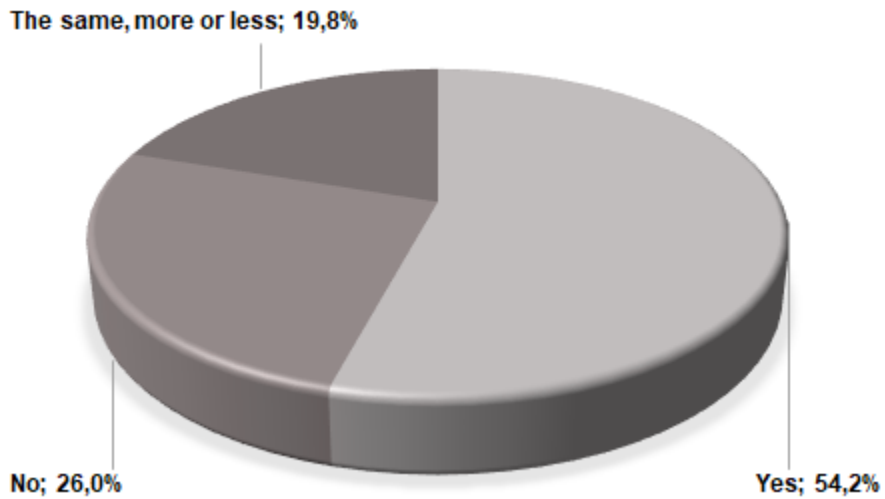
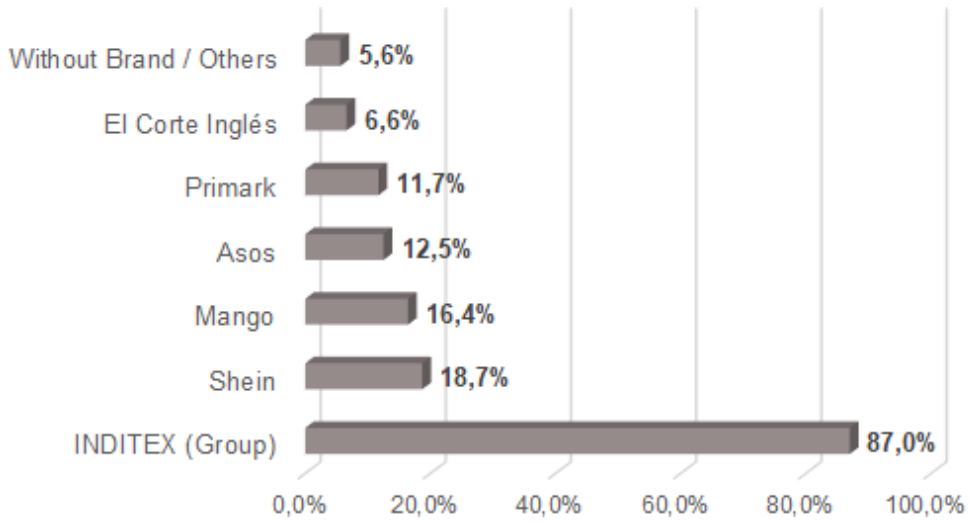


Figure 3. Do you think you consume more fashion than 5 years ago?



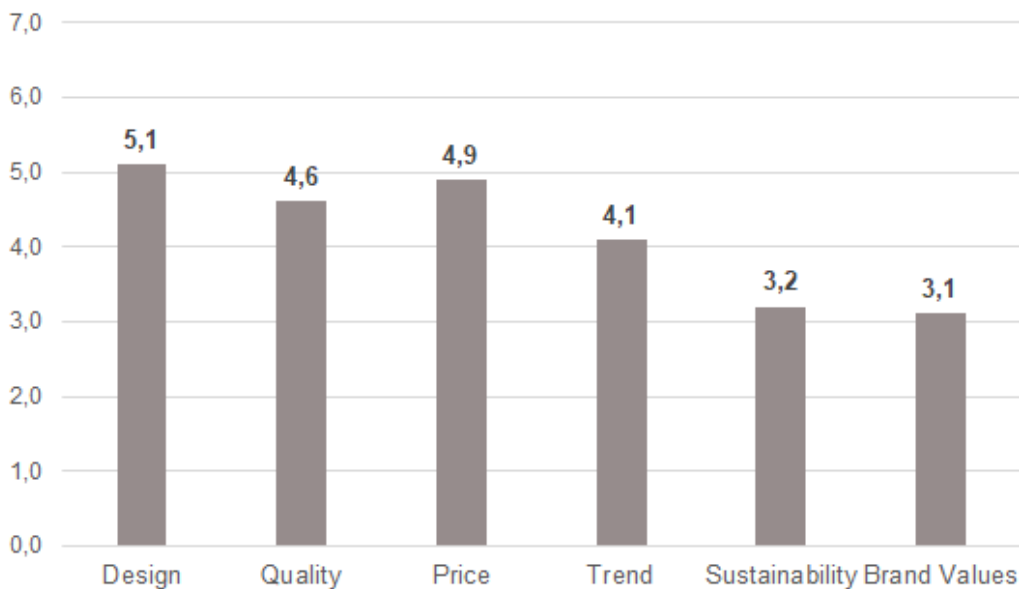
This fashion user, belonging to Generation Z, resorts mainly to fast fashion brands, since design, price, quality and trend are their main requirements in clothing consumption.

Figure 4. In which brands do you invest the most money?



\*INDITEX Group: Zara, Pull&Bear, Berska, Oysho...

Figure 5. Average rating (1= not very important; 7 = very important) of the importance of the following attributes when making a fashion purchase



As can be seen in the figure above, sustainability is an attribute that is not among the most relevant for this consumer when making fashion purchases. In fact, more than half do not check labelling

information and those who do, do so only to check prices and materials (regardless of whether they are sustainable or not).

Figure 6. Do you check the labels in your purchasing process?

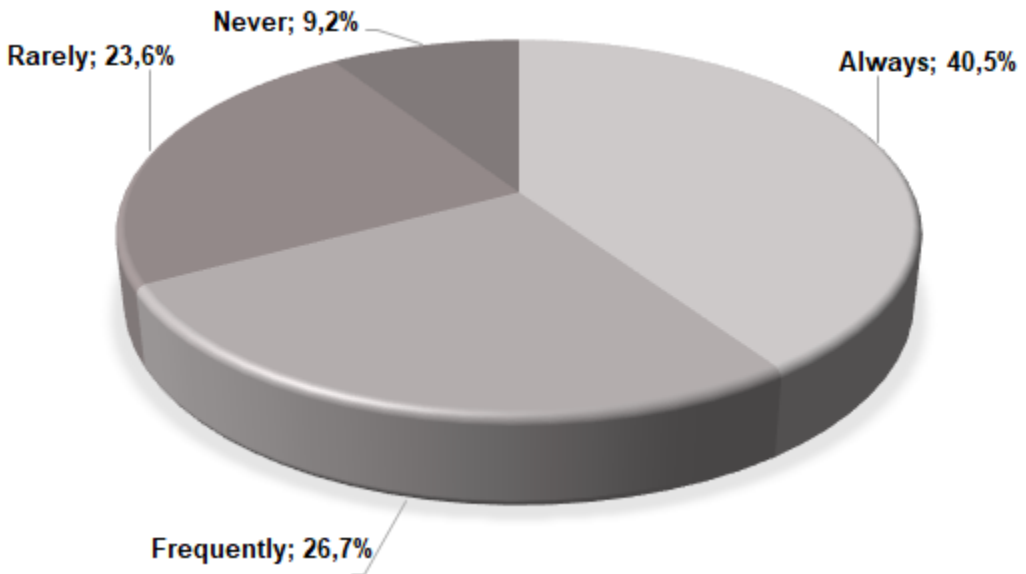
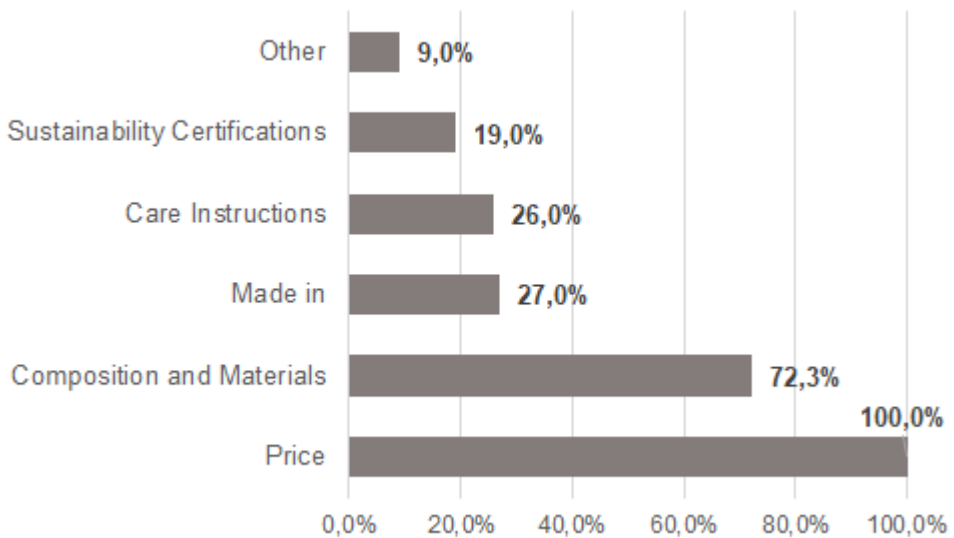


Figure 7. If so, what information do you consult?



However, when asked directly about sustainability as a challenge for the fashion industry, they express their interest and concern (more than 60%), especially with regard to environmental impact (46.40%) and the working conditions of workers in the sector (33.60%).

Figure 8. Are you concerned about the sustainability of the fashion industry

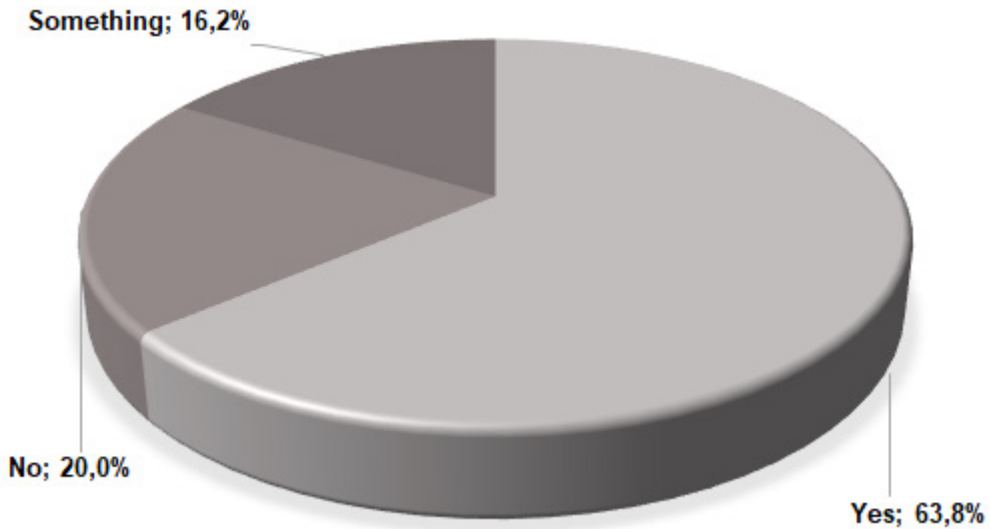
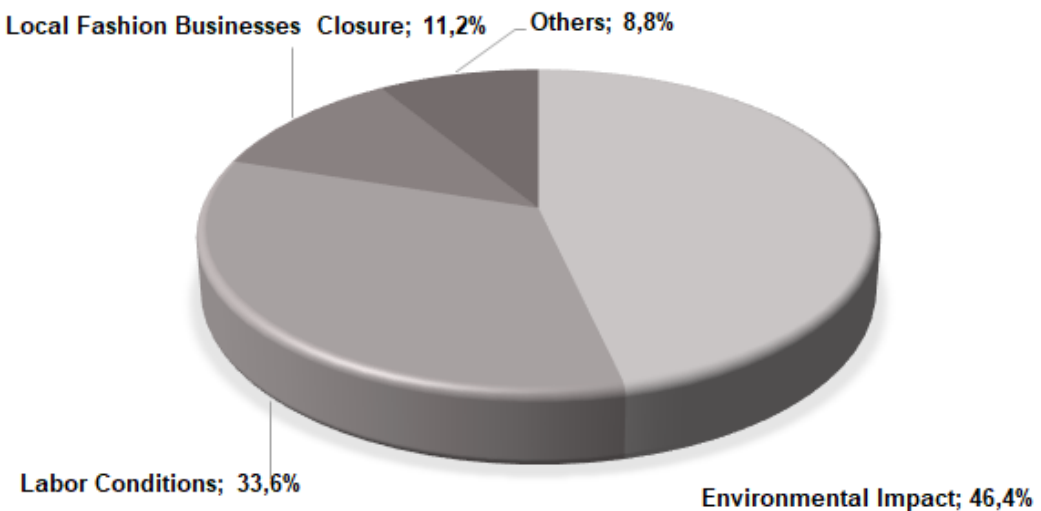


Figure 9. If we talk about fast fashion and sustainability, what worries you the most?



Once the profile of this Generation Z consumer has been confirmed, as well as what determines their behaviour when selecting and/or deciding on certain brands and garments, the aim is to establish

how the sustainability attribute affects their fast fashion purchasing decisions. Thus, more than 70% indicate that they mainly consume fast fashion brands and garments because they offer good value for money (more than 50%) when it comes to satisfying their needs (mainly fashion as an expression of a constantly updated personality), with the (high) price being the variable that makes them exclude sustainable brands and garments from their range of options (in more than 60% of cases).

Figure 10. What type of fashion do you invest most of your money in?

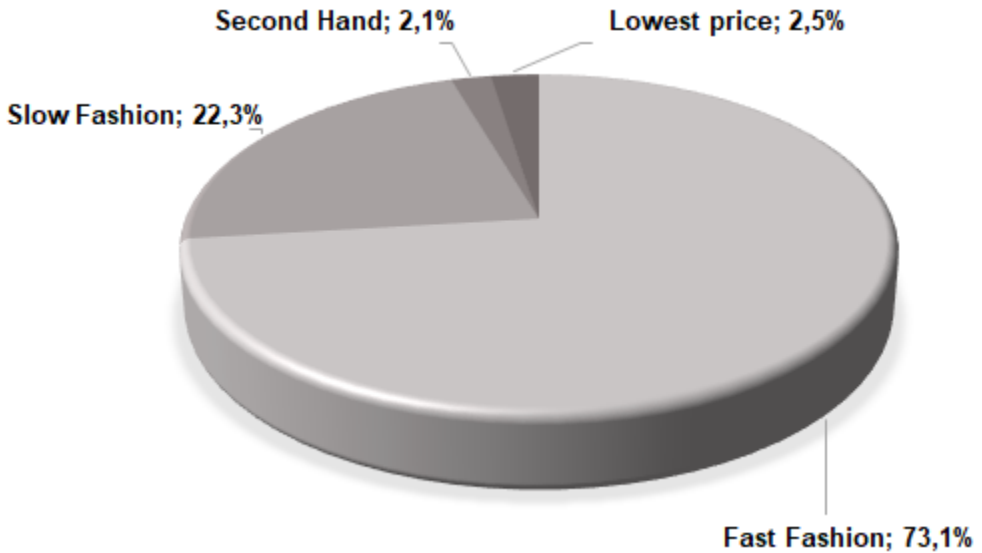


Figure 11. Do you think that the prices of fast fashion clothing are...?

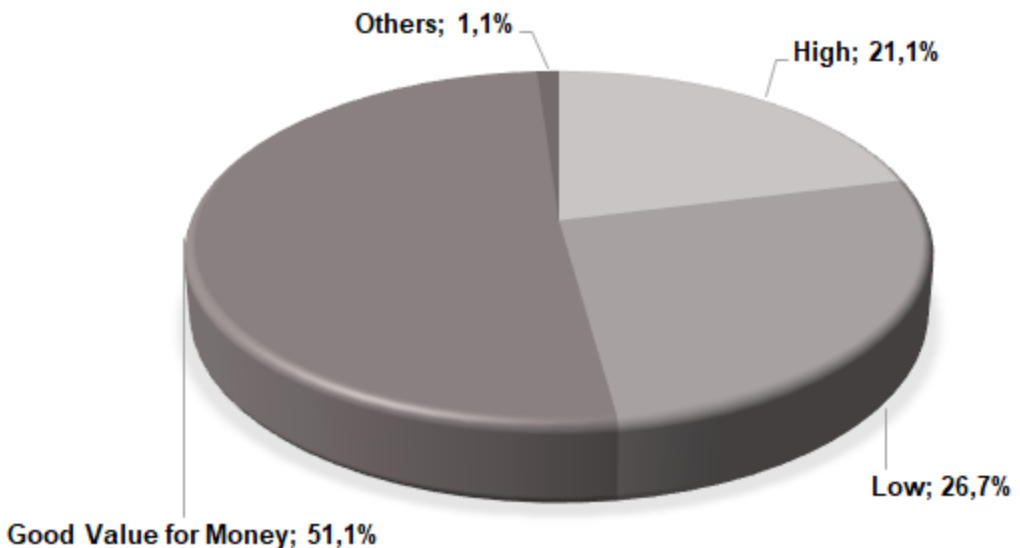
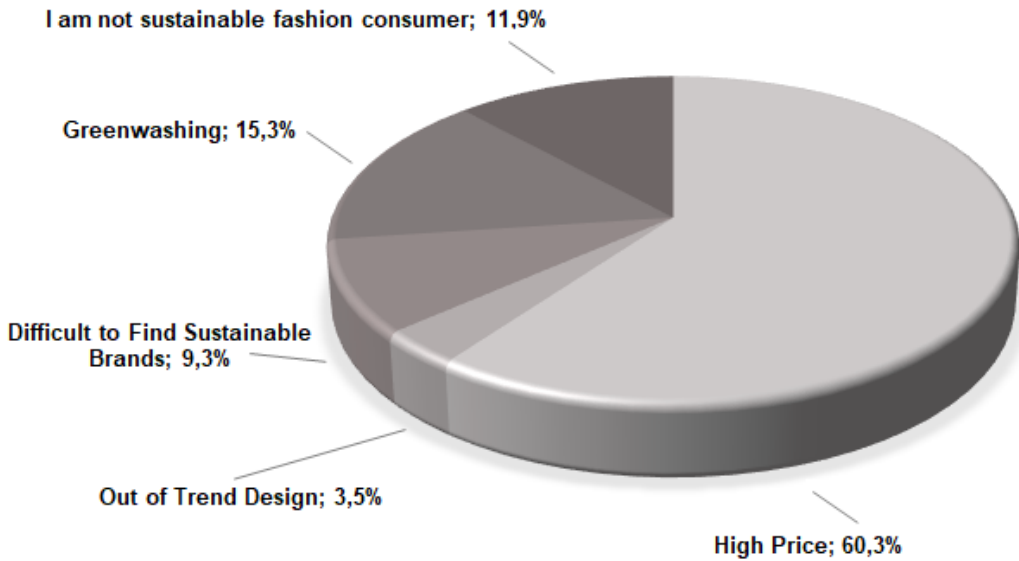


Figure 12. What is your main barrier when deciding on sustainable fashion?



The perception that the sustainability attribute is linked to “premium price” or a price that is too high for their consumer profile is deeply rooted (almost 70% of respondents). Although there is a considerable portion of Generation Z consumers who would be willing to pay more for the sustainability attribute when choosing a fashion brand or garment, more than half of them would not pay a premium of more than 20% for this feature.

Figure 13. Do you believe sustainable garments are linked to a premium price?

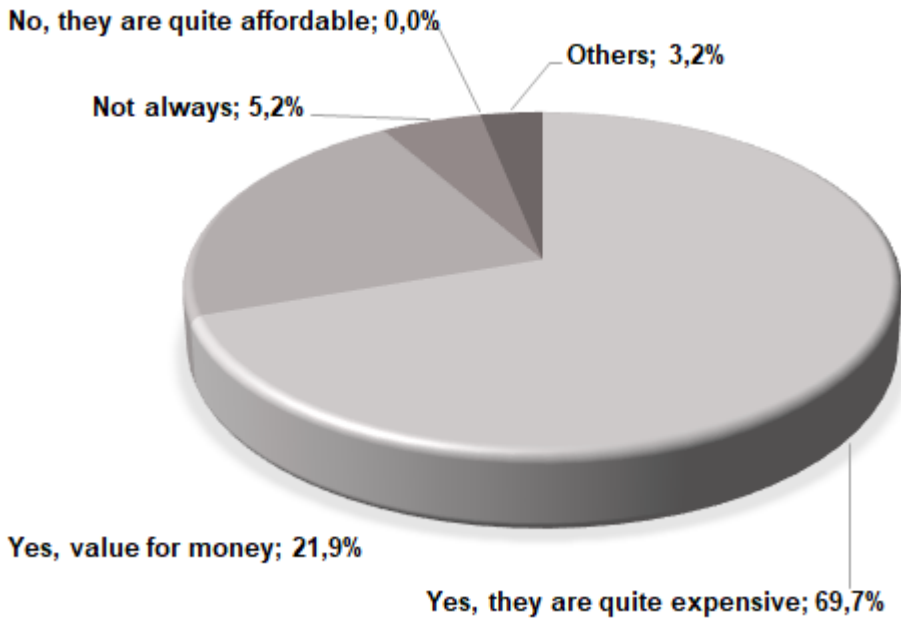
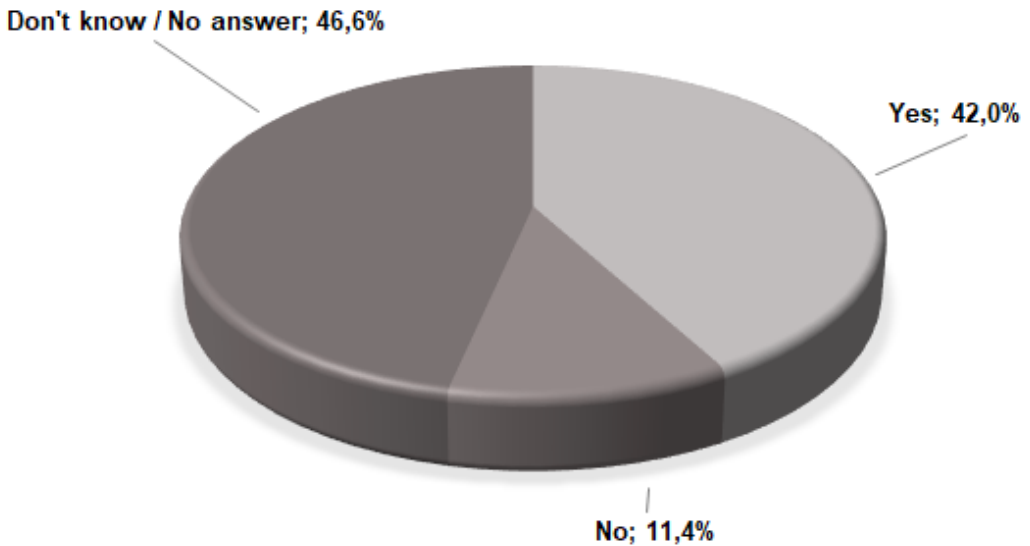


Figure 14. Would you be willing to pay more for a garment when it is sustainable?



The importance of the price factor as a restriction for Generation Z when it comes to consuming sustainable fashion gains relevance when, in addition to the above and demonstrating a certain sensitivity to sustainability, the interviewees believe that the brands they consume in fast fashion do not do enough to be sustainable and that they even accept greenwashing as something inherent to



this type of company, which generates discredit on this attribute and the possibility of valuing it and being willing to pay a premium for it.

Figure 15. If you answered yes to the previous question, what extra percentage would you be willing to pay for the same garment but sustainable?

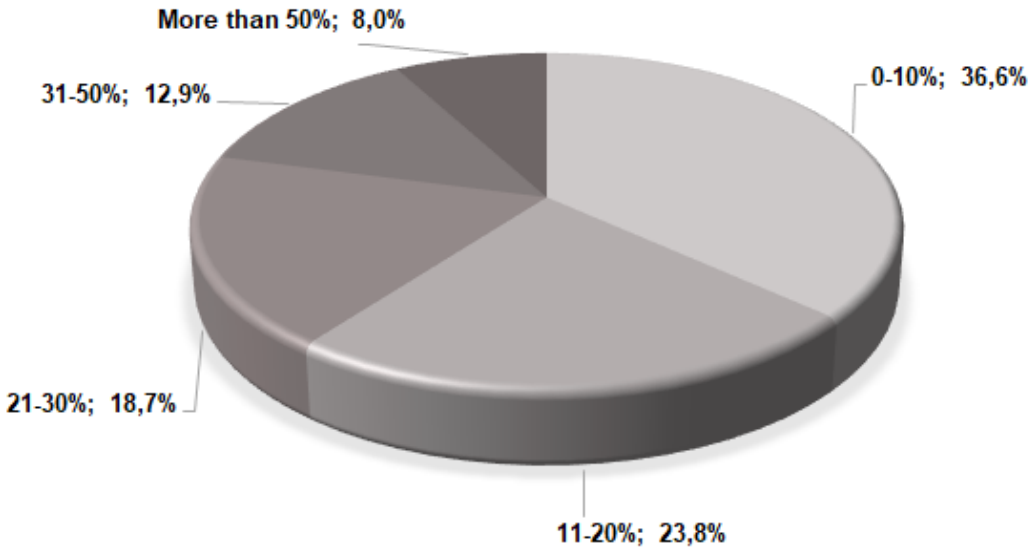


Figure 16. Do you consider that fast fashion companies try to reduce their environmental impact as much as possible?

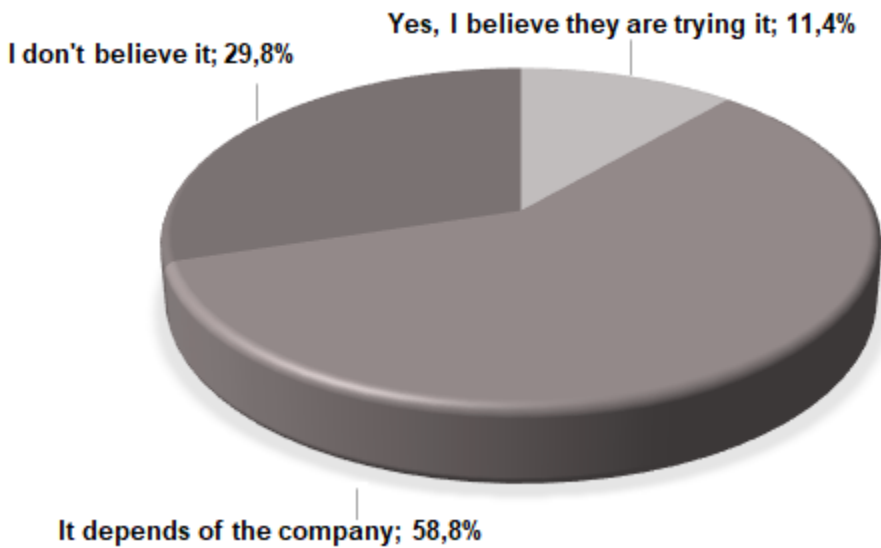
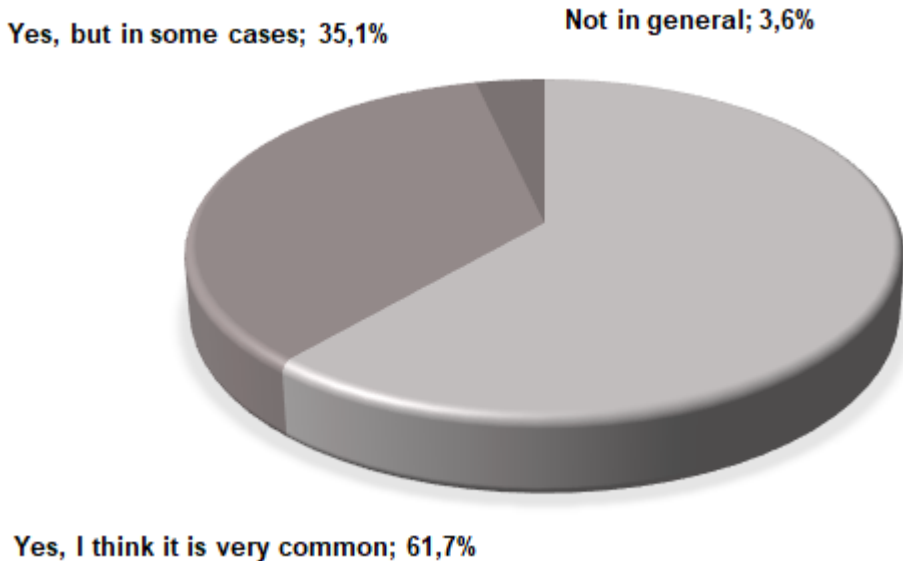


Figure 17. Do you think fast fashion brands resort to greenwashing?



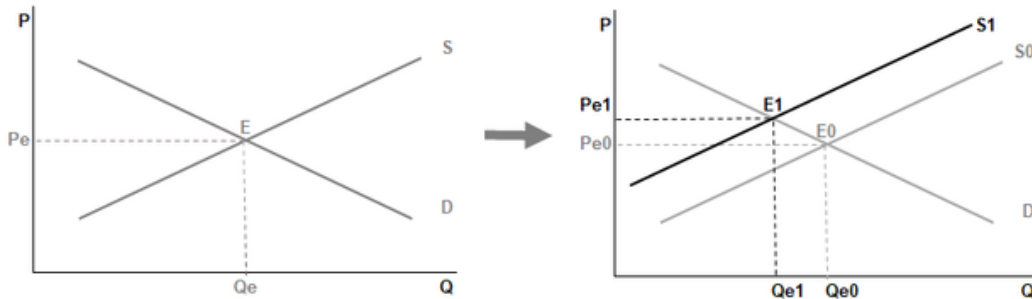
## 5. GENERATION Z'S INTERNALISATION OF THE ENVIRONMENTAL EXTERNALITY IN FASHION CONSUMPTION

The analysis conducted highlights the challenges faced by Generation Z with regard to their inclination towards sustainable consumption practices in the context of the fashion industry. Although this demographic shows greater environmental and ethical sensitivity in their clothing choices, the affordability of sustainable products remains a significant barrier to their widespread adoption. This phenomenon can be interpreted through the prism of the internalisation of externalities (Perman, Ma et al., 2005) in the economics of consumer behaviour.

This market failure, in economic terms, lies in the non-internalisation of externalities, a process whereby the costs or benefits associated with the production or consumption of a good are not fully reflected in its market price. In the context of fashion, this implies that negative environmental impacts are not internalised in the prices of clothing, resulting in an undervaluation of the real cost of products. As a result, consumers do not pay the true cost of production of conventional garments, which distorts price signals and discourages the adoption of more sustainable practices. The lack of internalisation of these externalities creates a market biased towards cheaper but less sustainable products, making it difficult for consumers, including Generation Z, to opt for more environmentally friendly and socially responsible alternatives.

This situation raises the need for solutions at both the private and public level, so that Generation Z understands the dynamics behind the challenges they face in their quest for sustainable fashion and how to address market imperfections to facilitate this transition in their consumption behaviour.

Figure 18. Internalization of the negative environmental externality in the price variable



In the private sector, fashion companies can implement strategies that promote sustainability, internalising the negative environmental externality, such as the adoption of more ethical production practices, the use of eco-friendly and recycled materials (e.g. Asos and H&M) or even develop new business models such as second-hand fashion and the recovery and/or recycling of garments (e.g. Inditex and Mango). In addition, they could employ communication techniques that emphasise the brand's sustainable values and communicate the authenticity of its commitments to social and environmental responsibility.

In this way, the fashion industry is moving towards more sustainable models, where marketing plays a key role in reconciling the preferences of Generation Z with sustainable practices: transparency and credibility for an attractive, affordable and environmentally responsible clothing offer.

At the public level, governments can intervene by implementing regulatory and fiscal policies that promote sustainability in the fashion industry. This could include imposing taxes on unsustainable products or implementing tax incentives for companies that adopt responsible production practices. Authorities could also set minimum sustainability standards that companies must meet in order to operate in the market. This is the case of the recent EU regulation, stemming from its “EU strategy for circularity and sustainability of textile products” (European Parliament, 2023).

## 6. KEY FINDINGS AND DISCUSSION OF RESULTS

The study revealed a pronounced disparity between Generation Z's environmental awareness and their actual consumption behaviors. While over 60% of respondents expressed concern about sustainability in fashion, more than 70% predominantly consumed fast fashion due to its affordability and alignment with rapidly changing trends.

- a. **Economic Barriers:** Price emerged as the most significant deterrent to sustainable fashion consumption. Over 60% of respondents perceived sustainable fashion as tied to a “premium price” that exceeds their purchasing power, with most unwilling to pay more than a 20% premium. This aligns with the study’s objective of uncovering the economic constraints limiting sustainable choices among Generation Z, highlighting the need for more accessible pricing strategies..
- b. **Environmental Awareness vs. behaviour Gap:** While 63% of participants expressed concern about sustainability in fashion, more than 70% admitted to predominantly consuming fast fashion. This contradiction underscores the challenge of translating environmental awareness into ethical purchasing decisions. The research objective of understanding this attitude-behaviour gap is fulfilled by demonstrating how affordability and trend alignment outweigh sustainability concerns in actual consumption patterns.

- c. **Greenwashing and Trust:** A significant proportion of respondents believed that fast fashion brands engage in greenwashing, diminishing trust in their sustainability efforts. This finding aligns with the objective of identifying non-economic barriers to sustainable fashion adoption, highlighting the critical role of perceived authenticity and brand transparency.
- d. **Implications for Sustainable Marketing:** The results indicate that Generation Z values authenticity and transparency but requires affordability to make sustainable fashion viable. This insight directly supports the research objective of proposing strategies to bridge the gap between Generation Z's values and purchasing behaviours.

The evidence underscores the urgency of addressing the overproduction endemic to the fast fashion industry, which exacerbates environmental externalities. This market failure highlights the need for a robust self-regulation framework, which may prove more effective than direct governmental intervention. Such a mechanism would require brands to recalibrate production levels, adopt sustainable practices, and internalize environmental costs into the pricing of garments. By doing so, sustainability could become an accessible and transparent value, thereby fostering its adoption among Generation Z. Engaging Generation Z as an influential cohort capable of driving and valuing sustainable consumption is essential for achieving a meaningful shift in the fashion industry's practices.

## 7. CONCLUSIONS

This study reveals a complex interplay between Generation Z's fashion consumption preferences and their concern for the environmental sustainability of the fashion industry. The findings highlight the necessity of implementing targeted strategies to address the negative externalities associated with fast fashion consumption effectively.

### 7.1. Strategic Recommendations for Behavioral Change

- a. Internalizing environmental costs within business operations emerges as a critical mechanism to realign market incentives and reflect the true cost of sustainable practices.
- b. Educational initiatives focusing on the environmental and social impacts of fast fashion are essential to raising awareness and fostering more responsible consumption behaviors among Generation Z.

### 7.2. The Role of Sustainable Marketing

Sustainable marketing represents a pivotal tool for advancing circular fashion models. This approach can:

- a. Promote sustainability as a paradigm shift in the fashion industry, encouraging Generation Z consumers to incorporate sustainable practices into their purchasing decisions and demand accountability from brands.
- b. Develop brand narratives centered on authenticity and traceability, reducing perceptions of greenwashing and building consumer trust. By doing so, sustainability can be positioned as a key attribute in fashion consumption.

### 7.3. Barriers to Adoption

Despite increasing awareness, Generation Z demonstrates limited willingness to pay significant premiums for sustainable garments. On average, the study indicates a readiness to accept a price

increase of only 10–20% for sustainable attributes. This underscores the need for accessible and to reduce perceived economic barriers and improve the adoption of sustainable options.

#### **7.4. Public-Private Collaboration**

Addressing structural barriers in the fashion market requires coordinated public-private efforts. Regulatory frameworks, fiscal incentives, and minimum sustainability standards can create an environment conducive to aligning consumer preferences with sustainability goals.

#### **7.5. Leveraging Consumer Trust and Engagement**

Communication campaigns that emphasize the environmental responsibility of brands can help recalibrate consumer perceptions. By fostering emotional connections and designing shareable experiences, sustainable marketing has the potential to mitigate price constraints and promote alignment between Generation Z's values and purchasing behaviors.

#### **7.6. Theoretical Contributions**

The findings contribute to the literature on sustainable consumption by expanding the understanding of the attitude-behaviour gap in Generation Z. They suggest that traditional frameworks, such as the Theory of Planned Behaviour, must incorporate economic constraints and trust-building mechanisms to accurately model sustainable purchasing decisions. Future research should explore the interaction between economic, social, and psychological drivers of consumption, with an emphasis on emerging digital behaviours and trends in younger consumers.

In summary, achieving a sustainable transformation in the fashion industry depends on a holistic approach that integrates business innovation, regulatory action, and consumer education. This alignment can enable Generation Z to play an instrumental role in driving the adoption of circular fashion models and mitigating the negative externalities of the fast fashion paradigm.

### **CONFLICTS OF INTEREST**

We wish to confirm that there are no known conflicts of interest associated with this publication and there has been no significant financial support for this work that could have influenced its outcome.

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## REFERENCES

- Ao, L., Bansal, R., Pruthi, N., & Khaskheli, M. B. (2023). Impact of Social Media Influencers on Customer Engagement and Purchase Intention. A Meta-Analysis. *Sustainability (Basel)*, 15(3), 2744. DOI: 10.3390/su15032744
- Arora, N., & Manchanda, P. (2022). Green perceived value and intention to purchase sustainable apparel among Gen Z: The moderated mediation of attitudes. *Journal of Global Fashion Marketing*, 13(2), 168–185. DOI: 10.1080/20932685.2021.2021435
- Arrigo, E. (2020). Global Sourcing in Fast fashion Retailers. Sourcing Locations and Sustainability Considerations. *Sustainability (Basel)*, 12(2), 508. DOI: 10.3390/su12020508
- Barnes, L., and Lea-Greenwood, G. (2010). Fast fashion in the retail store environment. *International Journal of Retail and Distribution Management*, 38(10), 760–772. .DOI: 10.1108/09590551011076533
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion. response to changes in the fashion industry. *International Review of Retail, Distribution and Consumer Research*, 20(1), 165–173. DOI: 10.1080/09593960903498300
- Bianchi, C., Birtwistle, G., & Hackley, C. (2018). Perceptions of Ethical Fashion. Implications for Customer Loyalty and the Role of Sustainability. *Journal of Fashion Marketing and Management*, 22(4), 516–532. DOI: 10.1108/JFMM-08-2017-0079
- Chen, Y. S., Lin, S. Y., & Chang, C. H. (2021). The Influence of Green Innovation and Corporate Sustainability on Customer-based Brand Equity. The Mediation Role of Green Brand Associations and Green Brand Loyalty. *Sustainability*, 13(10), 5495. DOI: 10.3390/su13105495
- Cobbing, M., Daaji, S., Kopp, M., & Wohlgemuth, V. (2022). Poisoned gifts. from donations to the dumpsite - textiles waste disguised as second-hand clothes exported to East Africa. Greenpeace, Hamburg, available at. es.greenpeace.org (accessed 22 April 2022).
- Ellen MacArthur Foundation. (2017). *New Textiles Economy*. Redesigning Fashion's Future. Ellen MacArthur Foundation.
- European Environment Agency. (2019). Textiles in Europe's circular economy. <https://www.eea.europa.eu/publications/textiles-in-europes-circulareconomy/textiles-in-europe-s-circular-economy>, November 19th.
- European Parliament (2023). European Parliament Resolution of 1 June 2023 on an EU Strategy for Sustainable and Circular Textiles. 2022/2171(INI), June.
- Fletcher, K. (2016). *Craft of use. Post-growth fashion*. Routledge. DOI: 10.4324/9781315647371
- Fletcher, K. (2018). *Sustainable Fashion and Textiles. Design Journeys*. Routledge. Gestal, I. P. (2020). Ni reciclar, ni reusar, ni comprar menos. la (no) sostenibilidad del consumidor, recuperado de [www.modaes.es/back-stage/ni-reciclar-ni-reusar-ni-comprar-menos-la-no-sostenibilidad-del-consumidor-de-moda.html](http://www.modaes.es/back-stage/ni-reciclar-ni-reusar-ni-comprar-menos-la-no-sostenibilidad-del-consumidor-de-moda.html), Modaes, May 28th.
- Grigoreva, E. A., Garifova, L. F., & Polovkina, E. A. (2021). Consumer Behavior in the Information Economy. Generation Z. *International Journal of Financial Research*, 12(2), 164. DOI: 10.5430/ijfr.v12n2p164
- Grose, L., & Fletcher, K. (2012). *Fashion and Sustainability. Design for Change*. Laurence King Publishing.
- Gwilt, A. (2014). *Moda sostenible, Colección de Manuales de Diseño de Moda*. Ed. GG, Barcelona. ISBN/EAN. 9788425229190.
- Gwilt, A., & Rissanen, T. (2012). *Shaping sustainable fashion. Changing the way we make and use clothes*. Routledge. DOI: 10.4324/9780203126172
- Khandual, A. and Pradhan, S. (2018). Fashion Brands and Consumers Approach Towards Sustainable Fashion. *Textile Science and Clothing Technology*, 37–54. DOI: 10.1007/978-981-13-1268-7\_3
- Larios, R. (2019). El reto de la sostenibilidad en la industria textil y de la moda. *Mundo Textil*, 159, 36–40.
- Lewis, T. L.; Park, H.; Netravali, A. and Trejo, H. (2016). Closing the loop. A scalable zero-waste model for apparel reuse and recycling. *International Journal of Fashion Design Technology and Education*, 10 (3), 1-10, December. DOI: .DOI: 10.1080/17543266.2016.1227146

- Liu, F. (2022, December). Driving Green Consumption. Exploring Generation Z Consumers' Action Issues on Sustainable Fashion in China. *Studies in Social Science and Humanities*, 1(5), 25–49. Advance online publication. DOI: 10.56397/SSSH.2022.12.03
- López-Sintas, J., López-Belbeze, M. P., & Lamberti, G. (2020). Socially Patterned Strategic Complementarity between Offline Leisure Activities and Internet Practices among Young People. *Leisure Sciences*, 43(3-4), 1–22. DOI: 10.1080/01490400.2020.1782289
- Luque, M. L. D. (2019). Manual de moda sostenible (Estilo de vida). Arcopress Ed., Córdoba (Spain).
- Mazinn and Marcas con Valores (2021). ZShot Report. Sostenibilidad. Cómo conectar con la Generación Z a través de la Sostenibilidad, recuperado de marcasconvalores.com/wp-content/uploads/2021/12/ZShot-Sostenibilidad-Mazinn-21Gramos.pdf
- McKernan, S., & Johnson, K. K. P. (2021). Examining the Use of Sustainable Fashion Products to Influence Purchase Intention in the Luxury Industry. *Journal of Fashion Marketing and Management*, 25(3), 371–387. DOI: 10.1108/JFMM-08-2020-0160
- McNeill, L., & Moore, R. (2015). Sustainable Fashion Consumption and the Fast fashion Conundrum: Fashionable Consumers and Attitudes to Sustainability in Clothing Choice. *International Journal of Consumer Studies*, 39(3), 212–222. DOI: 10.1111/ijcs.12169
- McNeill, L. S., Moore, C. M., & Paladino, A. (2020). The Drivers of Sustainable Apparel Consumption. *Journal of Business Research*, 109, 159–170. DOI: 10.3390/su12072788
- Mishra, R. (2021). An analysis of factors influencing omnichannel retailing adoption using ISM-DEMATEL approach. an Indian perspective. *International Journal of Retail and Distribution Management*, Vol. 49 No. 4, pp. 550-576. DOI: 10.1108/IJRDM-03-2020-0108
- Modaes (2016). Moda sostenible. la nueva hoja de ruta del sector, recuperado de www.modaes.es/visor-online.php?id=58andname=Modaes.es+Dossier+-+MODA+Sostenible#1, March.
- Muthu, S. S. (2014). The textile supply chain and its environmental impact. Assessing the Environmental Impact of Textiles and the Clothing Supply Chain. Woodhead Publishing, 1–31. DOI: 10.1533/9781782421122.1
- Naderi, I., & Van Steenburg, E. (2018). Me first, then the environment. Young millennials as green consumers. *Young Consumers*, 19(3), 280–295. DOI: 10.1108/YC-08-2017-00722
- Neumann, H. L., Martínez, M. L. K. and Martínez, L. F. (2021). Sustainability efforts in the fast fashion industry. Consumer perception, trust and purchase intention. *Sustainability Accounting Management and Policy Journal* 12(3), 571-590, May. .DOI: 10.1108/SAMPJ-11-2019-0405
- Niinimäki, K. (2010). Negotiated meanings in sustainable fashion. *Journal of Fashion Theory*, 14(4), 467–487. DOI: 10.2752/175174110X12732310936518
- Niinimäki, K. (2020). Sustainable fashion in the anthropocene. *International Journal of Environmental, Cultural, Economic and Social Sustainability*, 16(2), 83–98. DOI: 10.18848/1832-2077/CGP/v16i02/83-98
- Pearson, C., & Clare, L. (2020). Sustainable Fashion Consumption and the Fast fashion Consumer, Fashion Practice. *The Journal of Design. Creative Process and the Fashion Industry*, 12(3), 361–386.
- Perman, R., Ma, Y., McGilvray, J., & Common, M. (2005). *Natural Resource and Environmental Economics*, 3rd ed., Pearson Ed., UK.
- Preuss, L., Happaerts, S., & Claes, S. (2019). Fashion System Sustainability. A Qualitative Enquiry. *Journal of Business Research*, 95, 175–186.
- Putruele, J. E., & Veneziani, M. C. (2015). Sustentabilidad, diseño y reciclaje. *Cuadernos del Centro de Estudios en Diseño y Comunicación. Ensayos*, (53), 123–131.
- PwC. (2017). *Cotton to Customer*. Sustainable Fashion, PwC UK.
- Rissanen, T. (2013). Zero-Waste Fashion Design. A study at the intersection of cloth, fashion design and pattern cutting. opus.lib.uts.edu.au/handle/10453/23384
- Salcedo, E. (2014). Moda ética para un futuro sostenible. Colección GGmoda, GG Ed., Barcelona.



Wei, X., & Jung, S. (2017). Understanding Chinese Consumers' Intention to Purchase Sustainable Fashion Products: The Moderating Role of Face-Saving Orientation. *Sustainability (Basel)*, 9(9), 1570. DOI: 10.3390/su9091570

Wojdyla W. and Chi T.(2024). Decoding the Fashion Quotient. An Empirical Study of Key Factors Influencing U.S. Generation Z's Purchase Intention toward Fast fashion. *Sustainability*, 16(12),5116. DOI: 10.3390/su16125116