



Sustainable or greenwash? An analysis of how fast fashion brands use Social Media Marketing

Christiane Schwenk Lagun

Dissertation submitted under the supervision of professor Marta Bicho

Dissertation submitted in partial fulfilment of requirements for the MSc in Business, at

Universidade Católica Portuguesa

June 2022

Abstract

Title: “Sustainable or greenwash? An analysis of how fast fashion brands use Social Media Marketing”

Author: Christiane Schwenk Lagun

This thesis examines how fast fashion brands use Social Media Marketing to promote their sustainable initiatives. Drawing on a content analysis study, Instagram posts of a sample of four fast fashion brands were analyzed. The findings from this thesis suggest that there is a high level of evidence of greenwashing in all mentioned brands, mainly regarding vagueness of green communication. A survey was also conducted as a support to understand how consumers perceive the brands’ CSR advertising on social media. The results indicate that the participants had a *potential* change of perception after seeing the posts, perceiving the brands as more eco-friendly. However, they still agree that the green communication used in the posts was broad and misleading. By providing insights on how brands’ use recent digital platforms to promote their sustainable communication, the present study enriches the theoretical understanding on CSR advertising and greenwashing in the fast fashion industry. Additionally, it also gives managerial recommendations for the brands to have a more effective communication and raise societal awareness so consumers can identify signs of greenwashing on social media.

Keywords: sustainability, CSR, greenwashing, fast fashion, social media marketing

Resumo

Título: “Sustentável ou lavagem verde? Uma análise de como marcas de moda rápida utilizam Social Mídia Marketing”

Autor: Christiane Schwenk Lagun

Esta tese examina como as marcas de moda utilizam Social Media Marketing para promover as suas iniciativas sustentáveis. Com base num estudo de análise de conteúdo, foram analisados os posts Instagram de uma amostra de quatro marcas de moda rápida. Os resultados desta tese sugerem que há um elevado nível de evidência de lavagem verde em todas as marcas mencionadas, principalmente no que diz respeito à imprecisão da comunicação verde. Foi também realizado um questionário como apoio para compreender como os consumidores percebem a publicidade de RSE das marcas nos meios de comunicação social. Os resultados indicam que os participantes tiveram uma potencial mudança de percepção após terem visto as postagens, percebendo as marcas como mais ecológicas. No entanto, continuam a concordar que a comunicação verde utilizada nas postagens era ampla e falaciosa. Ao fornecer informações sobre como as marcas utilizam plataformas digitais recentes para promover a sua comunicação sustentável, o presente estudo enriquece a compreensão teórica sobre publicidade RSE e lavagem verde na indústria da moda rápida. Além disso, também fornece recomendações de gerenciamento para as marcas, a fim de terem uma comunicação mais eficaz bem como aumentar a consciência social para que os consumidores possam identificar sinais de "greenwashing" nas mídias digitais.

Palavras-chave: sustentabilidade, RSE, lavagem verde, moda rápida, marketing nas redes sociais

Table of Contents

Abstract.....	i
Resumo	ii
List of Tables	iv
List of Figures.....	iv
List of Abbreviations	v
1. Introduction.....	1
1.1 Introduction to the topic.....	1
1.2 Academic and Managerial Relevance.....	2
1.3 Outline of the thesis	2
2. Literature review	3
2.1 The grey line between CSR and Greenwashing	3
2.2 Social Media Marketing and CSR	6
2.3 Fast fashion industry	8
2.3.1 Fast Fashion Industry, SMM, CSR and Greenwashing	10
3. Methodology	12
3.1 Part one: Secondary data.....	12
3.1.2 Research design	12
3.1.3 Data collection	14
3.1.4 Data analysis	16
3.1.5 Findings	17
4.2. Part two: Online Survey.....	36
3.2.2 Sample Characterization	37
3.2.3. Scale Reliability	38
3.2.4. Descriptive statistics and One-way ANOVA	39
4. Discussion	44
5. Conclusion	45
References.....	48
Appendix.....	55

List of Tables

Table 1: Information about the four sample brands	14
Table 2: Instagram posts of the four fast fashion brands	15
Table 3: Examples of buzzwords related to sustainability	25
Table 4: Evidences of Greenwashing.....	36
Table 5: Gender.....	38
Table 6: Age range.....	38
Table 7: Country of residence	38
Table 8: Descriptive statistics	40
Table 9: ANOVA's results	40
Table 10: Post hoc test	41
Table 11: Descriptive statistics	42
Table 12: ANOVA's results	42
Table 13: Post hoc test	43
Table 14: ANOVA's results	43

List of Figures

Figure 1: Post of Zara’s official Instagram account	19
Figure 2: H&M's official Instagram page	21
Figure 3: SHEIN's official Instagram page.....	24
Figure 4: H&M – Sin of Vagueness.....	26
Figure 5: MOFT (SHEIN) – Sin of Vagueness.....	27
Figure 6: Zara – Sin of Vagueness.....	28
Figure 7: Mango - Sin of Vagueness	28
Figure 8: H&M - Sin of No Proof.....	29
Figure 9: Mango - Sin of No Proof.....	30
Figure 10: SHEIN/MOTF - Sin of Hidden Trade-Off	32
Figure 11: SHEIN's official website	32
Figure 12: Mango - Evidence of Greenwashing	33
Figure 13: Mango's official website.....	34
Figure 14: SHEIN - Sin of Fibbing.....	35
Figure 16: Cronbach's Alpha	39

List of Abbreviations

CA	Norwegian Consumer Authority
CSM	Corporate Social Marketing
CSR	Corporate Social Responsibility
KPI	Key Performance Indicator
LMICs	Low and Middle-Income Countries
NGO	Non-Governmental Organisation
PETA	People for the Ethical Treatment of Animals
SMM	Social Media Marketing
SU2C	Stand Up To Cancer
TBL	Triple Bottom Line
WCED	United Nations' World Commission on Environment and Development
WOM	Worth of mouth

1. Introduction

1.1 Introduction to the topic

Fast fashion and ultra-fast fashion companies are among the world's most polluting industries. The textile industry is one of the most chemically intensive industries and is considered the number one polluter of clean water, after agriculture (Kant 2012). In order to produce clothes an alarming quantity of raw material is required, leaving a significant carbon footprint and generating an incalculable level of waste (Brewer 2019). Paradoxically, these fast fashion and ultra-fast fashion companies are the ones that intensively invest on digital marketing strategies to advertise their sustainable causes. This thesis will focus on specific organizations, such as the Chinese ultra-fast fashion company called SHEIN that offer garments for alarmingly low prices and dubious origin. The company is often being exposed for their labor conditions, as well as the environmental harm that it causes. However, on their social media platforms Corporate Social Responsibility initiatives regarding Corporate Philanthropy and Socially Responsible Business Practices appear quite often.

CSR is a hot topic, and it is intensively being discussed by different authors in the academy. It's common to find different definitions around that concept and the majority are based on an economic or a managerial perspective (Crifo and Forget 2015). The thesis will focus on the CSR definition that was proposed by the European Commission (EC 2011), where the CSR concept is defined as the process whereby enterprises integrate social, environmental, ethical, and human rights concerns into their core strategy, operations and integrated performance. The main two objectives of implementing a CSR into the organizations are, according to the EC definition, to maximize the creation of shared value for their shareholders and society at large, as well as preventing their possible adverse impacts.

On the other hand, several companies have adopted CSR as a greenwashing method, where social media is used as a tool to persuade users. There is a gap between what companies promotes on their social media platforms and their actual actions in order to make real changes – and “green talks” are often promoted through statements that have the intention to please the stakeholder sustainable demands, however without promoting any particular actions (Siano et al. 2017). Thus, the main objective of this thesis is to understand how fast fashion industry use Social Media Marketing (SMM) to promote their sustainable efforts and how consumers perceive it.

Therefore, the Research Questions that this study will aim to answer are as follows:

RQ1: How do fast fashion brands use SMM to be perceived as more sustainable?

RQ2: How consumer perceive these sustainable promotions?

The first research question will bring clarity on how organizations use Social Media Marketing to promote sustainability measures. The goal is to understand how they communicate their CSR initiatives, through Instagram posts of four fast fashion brands (types, objectives, and signs of greenwashing). The second research question will be used as a support to understand the sensitiveness of the consumer regarding the sustainable promotions of the fast fashion industry.

For this study, to answer RQ1, secondary data will be analyzed in form of a content analysis of the Instagram posts of four fast fashion brands. For RQ2, quantitative data will be extracted from an online survey.

1.2 Academic and Managerial Relevance

This study presents an academic and practical relevance since it contributes to the existing literature by enriching the understanding of how brands communicate their sustainability initiatives on social media and how it is perceived by the consumer. Not many studies were conducted to assess the CSR advertising on social media, since most of the research focused on offline media, for instance print magazines (Segev, Fernandes, and Hong 2016). By analyzing SSM, the thesis will have a theoretical contribution by exploring the conventional perspective of CSR communication and the grey area of greenwashing. Alongside its theoretical implications, this thesis also contributes to the managerial environment as it offers potential practical implications, for instance on how organizations can improve their online communication regarding sustainability promotion.

1.3 Outline of the thesis

The present study will be organized in six chapters. The first chapter covers the introduction to the topic, as well as research questions and academic and managerial relevance. The second chapter reviews the literature on CSR, Greenwashing, Social Media, and Fast Fashion Industry. Chapter 3 covers the methodology and includes a comprehensive summary of the research findings. Chapter 4 present the discussion regarding the empirical findings of the two parts of the methodological study. Finally, chapter 5 provides a conclusion, describing its limitation and future research.

2. Literature review

2.1 The grey line between CSR and Greenwashing

The concept of sustainability has become a buzzword in business (Fuxman et al. 2022) and has been having diverse interpretation. The word *Nachhaltigkeit* – German term for sustainability – was first used in 1713 with the original essence coined in silviculture, meaning “never to harvest more than what the forest produces in new growth” (Kuhlman and Farrington 2010). In 1987, the concept was officially defined by the United Nations' World Commission on Environment and Development (WCED) in the Brundtland Report (also known as Our Common Future) as following: “sustainability means being able to satisfy current needs without compromising the possibility for future generations to satisfy their own needs” (Brundtland 1987). More recent conceptions of sustainability consider the relationship between three dimensions: social, economic, and environmental (Bansal 2002). This notion derives from the Triple Bottom Line (TBL) concept coined by John Elkington in 1997, which provides a reference for measuring the performance of organizations according to the three mentioned lines that are used by Elkington respectively as people, profit, and planet (Elkington 1997). Together with the traditional bottom line (profit), there must be an addition of concern for the environment (planet), as well as of caring for social dimension, for example by hiring minorities (people) (Kuhlman and Farrington 2010). According to Kotler and Lee (2005), corporations should demonstrate their commitment to be socially responsible and announce they will embrace and comply Corporate Social Responsibility (CSR) with new business practices and contributions.

CSR is a subject that is constantly under discuss. Since the literature about CSR in the academia is broad, the definition that will be used is the one proposed by the European EC (2011), where CSR stands for the process by which businesses integrate social, environmental, ethical and human rights concerns into their core strategy, operations and integrated performance, in close collaboration with their stakeholders. With a more socially conscious market environment, companies are using CSR as their differentiation strategy and competitive advantage (Aggerholm, Andersen, and Thomsen 2011; Siegel and Vitaliano 2007). Adopting CSR approaches can also be seen as a form of advertising to create or to sustain brand loyalty (Siegel and Vitaliano 2007), as well as to protect the firm's reputation (Bénabou and Tirole 2016; Crifo and Forget 2015). According to Siegel and Vitaliano (2007), Baron (2001) and McWilliams and Siegel (2001) were the first two papers to

explicitly model “profit-maximizing” CSR and the term “strategic CSR” pioneeringly applied by Baron (2001). Thus, CSR is considered by many authors a key component of a strategic business approach. To meet the growing CSR demands of stakeholders, organizations have pursued CSR by taking various types of initiatives (Kotler and Lee 2005). According to Kotler and Lee (2005) corporate social initiatives can be defined as the “major activities undertaken by a corporation to support social causes and to fulfill commitments to corporate social responsibility”. Furthermore, the two authors have categorized six main CSR business initiatives as follows: cause promotion, cause-related marketing, corporate social marketing, corporate philanthropy, community volunteering, and socially responsible business practices. Cause marketing concerns a corporation donating a percentage of revenue from the sale of its products for a specific time, to a specific cause. In a nutshell, cause promotion initiatives refer to an organization providing funding, in-kind contributions, and/or other resources to raise awareness of a social cause. Cause marketing concerns a corporation donating a percentage of revenue from the sale of its products for a specific time, to a specific cause. Corporate Social Marketing (CSM) is related to a promotion of certain behavior change intended to improve safety, public health, the environment, or the community well-being. Corporate philanthropy entails directly making distributions to a social cause or charity through cash grants, donations, or in-kind services. Community volunteering refers to a company’s encouragement of its employees to volunteer their time to support local community organization and causes. Lastly, through socially responsible business initiatives, organizations conduct ethical business practices and investments that support social causes. Numerous organizations invest in advertising of their CSR practices to create a perception of greater corporate sustainability. Because of this contradiction between socially responsible corporate approaches and profit maximization, many organizations use greenwashing to appear more sustainable towards the consumer (Yang et al. 2020). According to Delmas and Burbano (2011) greenwashing is the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service. By adopting greenwashing approaches, the organization clearly demonstrates two types of ideologies – one for external perception and one for internal use (Brunsson 1993; Scheidler et al. 2018). According to Nyilasy, Gangadharbatla, and Paladino (2014), a greenwashing effect occurs when an internal CSR claim and actual corporate environmental performance are conflicting.

Some of the reasons behind the increase of greenwashing are connected to market opportunities, low competitive pressure, and restricted regulations (Yang et al. 2020). In

regard to market opportunities, it is clear that customers have become more aware towards environmental and social responsibilities (Chen and Chang 2012), therefore organizations are using greenwashing to attract this green segment of the market (Laufer 2003). Similar to the strategic CSR, some organizations use greenwashing as a technique to gain competitive advantage and increase their market share (Testa et al. 2018). Finally, due to governmental policies, many corporates erroneously use greenwashing to be perceived as environmentally amicable (Yang et al. 2020).

The TerraChoice Group, environmental marketing firm, has created a classification named “The Seven Sins of Greenwashing” that can assist in detecting instances of firm-based or product-based greenwashing. This framework was discussed in different papers (Baum 2012; de Freitas Netto et al. 2020; Delmas and Burbano 2011) and the definition is as follows:

1. The Sin of the Hidden Trade-Off: a statement which suggests that a product is "green" based on a limited set of attributes with no consideration for other important environmental issues. Examples are energy and gasoline companies advertising the advantages of new energy sources while some are drilling in unexploited fields for oil and thereby destroying natural habitats and depleting biodiversity.
2. The Sin of No Proof: an environmental claim that is not supported by easily accessible information or reliable third-party certification. This sin occurs, for instance, when a brand advertises products that are made of a percentage of post-consumer recycled content without any concrete evidence for this claim.
3. The Sin of Vagueness: a statement that uses broad or not well-defined terminology to imply environmental compliance. For example, when brands use buzzwords like “eco-friendly”, “sustainable” or “green”, and provide little detail about how they are sustainable or the precedence of the used materials.
4. The Sin of Worshipping False Labels: a product that, by means of a false suggestion or dubious image of certification, misleads consumers into believing that it is supported by a third-party legitimate green certification (e.g.: “guaranteed ethical product”)
5. The Sin of Irrelevance: an environmental or social claim that is true, however is not relevant to the consumer. An example is when a brand states that their product is free of a harmful substance that is banned by law.
6. The Sin of Lesser of Two Evils: an environmental claim that might be truthful inside the product category or in comparison to a competing product, but risks distracting the consumer from the greater environmental impacts of the category as a whole. An

example within the fast fashion industry is when brands claim that their collections are sustainable, failing to acknowledge the unsustainability of their business model.

7. The Sin of Fibbing: statements of environmental benefits that are factually false. E.g.: claiming that a product is 100% recycled, but in the reality, it is only 80%.

The rise of greenwashing fosters CSR skepticism (de Jong, Huluba, and Beldad 2019), mainly driven because of the confusion of consumers to identify truly responsible initiatives. The profusion of CSR claims, regardless of if it is well-grounded or not, makes it difficult for consumers to distinguish between companies that are truly ethical and companies that take an opportunistic advantage of trends in sustainability development (Parguel, Benoît-Moreau, and Larceneux 2011). Social media is one factor of the profusion of CSR communication. One way thought which firms are actively engaging in greenwashing/CSR in through Social Media Marketing (SMM). The reasons for this are mainly the low cost and the proximity with the end consumer. The next chapter will explore the main concepts of SMM.

2.2 Social Media Marketing and CSR

Social media became an important part of people's daily life and gained recognition as a crucial factor in the success of an organization (Hawkins and Vel 2013). By the beginning of 2022, social media platforms were used by 4.62 billion users, showing an increase of more than 10% in comparison with the year before (DataReportal 2022). There was also an increase of 1,4% in the amount of time spent using social media (users aged 16 to 64) resulting in 2 hours and 27 minutes per day in 2022. The increase in time of media usage states that people are exposing themselves progressively more to digital and social media. Users adopt these platforms for different purposes and purchasing products is an example of it. Consumers search for information about the products and communicate with other users about their experiences (Felix, Rauschnabel, and Hinsch 2017). In this way, the power in shaping the brand image of a company was shifted to the consumers' only content (Nijssen and Ordanini 2020).

Organizations have responded to this remarkable boost in the use of social media by increasing their use of digital marketing channels (Felix, Rauschnabel, and Hinsch 2017). Some of the social media platforms that are eagerly used by companies are Facebook, Instagram, YouTube, and Twitter (Angella J. Kim and Ko 2012). Existing research in the academy regarding Social Media Marketing (SMM) showed that investing in SMM can generate more and better customer relationships, customer trust, brand equity, and brand

awareness (J. Kim and Lee 2019; Angella Jiyoung Kim and Ko 2010). Other benefits found in the literature review are an increase in worth of mouth (WOM), brand loyalty, willingness to pay a premium price, and others (Lipsman et al. 2012; Bazi, Filieri, and Gorton 2020). The main objectives of SMM were highlighted by different studies and are stated as follows: increase in brand awareness and improvement in brand image, generation of traffic to online platforms, reduction in marketing costs, creation of user interactivity, and lastly but probably the most important is stimulating sales (Bazi, Filieri, and Gorton 2020). Together with these proactive goals, organizations can also use SMM in a reactive way, e.g., by monitoring and analyzing conversations between users to understand how consumers perceive a brand and/or its actions (Felix, Rauschnabel, and Hinsch 2017). As a result of the multitude of social media platforms, organizations need to decide how to build their social presence by choosing different social media sites (Arrigo 2018). Each digital channel has its particular functionality and can be understood in different ways. Kietzmann et al. (2011) identify seven different functional blocks of social media such as identity, conversations, presence, relationships, reputation, groups, and sharing. Each of them shows a specific facet of social media user experience and its implications for the organizations (Kietzmann et al. 2011). According to the author's mentioned framework, firms should first recognize and understand the different social media landscapes and develop strategies that are congruent with them and with the objectives of the organization. Apart from that, firms should act as a curator of social media interactions and content to develop an understanding of when and how often a company should enter a conversation on a social-digital platform. Lastly, firms should constantly chase for information about a social media activity, understanding the velocity of online conversations and other information flows that could potentially affect their position in the market (McCarthy, Stock, and Verma 2010).

A growing number of companies started not only to advertise their general corporate activities, but also their CSR initiatives on social media. Apart from disclosing CSR efforts through different channels such as print magazine or TV, a growing number of organizations have adopted social media as their main platform for corporate communication (Kwon and Lee 2021). When comparing with traditional media, SMM has become a reliable advertising tool to promote CSR campaigns specially because it is an easy channel to interact with consumers directly at a low cost (Reilly and Hynan 2014). However, there is still a lack of research in the literature regarding advertising on SMM, especially Instagram due to the social media site's brief history (McNely 2012).

2.3 Fast fashion industry

The fashion industry is one of the world's most polluting industries, accounting for 8-10% of the world's carbon emissions and nearly 20% of wastewater (Brewer 2019). According to UN Sustainable Development, the apparel industry consumes more energy than the aviation and shipping industry combined and ca \$500 billion of value is lost every year due to clothing underutilization and lack of recycling (UNEP 2019). This industry is responsible for polluting ca 79 trillion liters of water per year with textile treatment and dyeing, besides contributing 35% of oceanic primary microplastic pollution (Niinimäki et al. 2020).

When comparing with the beginning of the century, the fashion industry is now producing almost twice the amount of garments (Niinimäki et al. 2020). This extreme increase can be explained by the appearance of fast fashion in the late 1990s. According to Fletcher (2010), fast fashion is a fast-response system that encourages disposability by having low-cost clothing collections that are based on recent high-cost luxury trends. Fast cycles describe this industry: quick clothing prototype, large variety and agile supply chain (Christopher, Lowson, and Peck 2004). Providing mass-produced clothing with a lower price and in an incredible fast pace evidently comes with a high cost: social and environmental damages.

When analyzing the social and environmental impacts of the fast fashion industry, it's necessary to observe the stages of the supply chain. Textile production is the first step and corresponds to the process by which natural and synthetic fibers are produced (Bick, Halsey, and Ekenga 2018). Cotton is the most used natural fiber, accounting for about 35% of all fibers on the market (Roos et al. 2016) - other natural fibers in the market include wool, sisal, silk and more. If not grown under sustainable conditions, cotton can be very harmful to the environment, since it requires intense resource of water, pesticides, insecticides, and fertilizers, contributing for a large toxic footprint (De Brito, Carbone, and Blanquart 2008). Synthetic fibers, derived from oil, are the most used fiber, representing 60% of the fibers on the market. Innumerable types of man-made fibers can be found, but the most common are polyester, followed by polyamide, elastane, polyacrylic, and aramid (Sinclair 2015). It is already a common sense that polyester is extremely polluting, contributing to various impacts, such as greenhouse gas emissions, depletion of resources, non-renewable energy use, land use, water use, and reduced ecosystem quality (Palacios-Mateo, van der Meer, and Seide 2021). Synthetic fibers are non-biodegradable. They can stay in the environment for many years. Also, given that fibers are small (micron size), they are more detrimental than centimeter-scale plastics. For example, washing synthetic clothing tends to nano and

microfibers into waterways causing immeasurable damage to marine life and vital ecosystem and cannot easily be traced (Young 2021).

The second step of the global textile supply chain is the garment assembly. Due to the growth of the global economy and the development of fast fashion industry, supply chains were shifted to international areas, mainly to low and middle-income countries (LMICs), that currently produce 90% of the world's clothing (Bick, Halsey, and Ekenga 2018). Manufacturing of textiles, growth of fibers and construction of garments are examples of activities that were displaced to LMICs mainly due to cheaper labor (Bick, Halsey, and Ekenga 2018). Various fast fashion companies were also associated to poor working conditions. Low salaries, extremely long working hours, child labor and deteriorating working conditions are some of the abuses that are committed by the fast fashion industry (Fletcher 2010). Poor working conditions are even worse in sub developed countries such as Bangladesh, Indonesia and Cambodia, since they lack decent manufacturing infrastructure and sometimes, are even based next to chemically polluted production places, affecting their workers' health (Taplin 2014). Fatalities in the poorly regulated garment industry are not uncommon. The deadliest garment-factory accident in history happened in Dhaka, Bangladesh, in 2013, when the building at the Rana Plaza complex collapse, killing more than 1134 people (Hobson 2013). Almost 9 years later, garment workers are still compromising their health and lives while producing clothes to fast fashion companies. Gujarat (India), Cairo (Egypt), Gazipur (Bangladesh) are examples of cities that garments workers lost their lives in the factories caused by explosion, fires, and collapses.

The last step of the textile supply chain ends when the garments are getting finished to the customers. The environmental and social harms, however, continue long after the clothing is sold. Due to the characteristic of disposability of the fast fashion business model astonishing amounts of textile waste are generated. In the USA, for example, ca 30 kgs of clothing is thrown away by each individual annually, contributing to the occupancy of nearly 5% of landfill. Clothes that don't end up in the landfill are generally sent to second-hand stores. USA exports approximately 500.000 tons of used garments each year and mostly end up in LMICs (Bick, Halsey, and Ekenga 2018). These clothes are then sorted and categorized by workers in LMIC and sold in second-hand markets. For example, 40% of the clothing traded at Kantamanto Market in Accra (Ghana) ends up in landfill almost immediately, becoming solid waste and obstructing rivers, greenways and parks.

Approximately 150 billion garments are produced by the fashion industry annually and more than 50% of these are thrown away in less than a year (Rudenko 2018). The intense

production, consequence of an over-consumption, can be correlated with the fast fashion trends where consumers want new clothing practically every week (Palacios-Mateo, van der Meer, and Seide 2021). Big retailers in the fast fashion industry adopt designs from high fashion runways rapidly in order to attract consumers and implement these designs in the store in a minimum of three weeks (Barnes and Lea-Greenwood 2006). Authors claim that fast fashion industry practice the same strategy as technology industry where they plan an obsolescence practice to the product and advertise a constant stream of ever-improved, ever more attractive products (Guiltinan 2009; Joy et al. 2012). Fashion, more than any other industry in the world, embraces obsolescence as a primary goal; fast fashion simply raises the stakes. That is why the term “fast fashion” can also be replaced by “throwaway fashion” (Bhardwaj and Fairhurst 2010).

The perception regarding disposability in fast fashion consumerism varies according to different generations. Generation Z and Millennials would prefer a higher number of unexpensive, low-quality and fashionable clothing, whereas Baby Boomers would buy a lower number of higher quality clothes (Bhardwaj and Fairhurst 2010). With the raise of digital platforms, consumers rely on social media to discover or research product or services. Thus, fast fashion brands use social media marketing tactics to persuade the user and encourage them to purchase their products, contributing to an unbridled consumption.

2.3.1 Fast Fashion Industry, SMM, CSR and Greenwashing

To address these incalculable environmental and social damage of the fast fashion industry, many companies in the textile sector are adopting sustainable practices. The concept of sustainability has become a buzzword in business (Fuxman et al. 2022) and has been having diverse interpretation. There is an inconsistency usage of the term “sustainability” in the literature – some studies, for example, used the term to refer primarily to the environmental line (Yan, Chen, and Chang 2009), other used it to associate it to the social line (Bibri 2008), while other papers showed an imbalance in the TBL level of importance (Alhaddi 2015). The lack of a rigid framework for sustainability not only results in a challenge in the academy, but also in the managerial environment. The widespread of the term contributed to a shifting in its meaning, obscuring the real contradiction that exists between long-term sustainability and short-term welfare (Kuhlman and Farrington 2010) impacting the perception that consumers may have about a brand, organization, or product. Peirson-Smith and Evans (2017) conducted a preliminary study about the consumer perception regarding misused eco-related terms of a green lexicon created by Thomas (2008) (Exhibit 2) in the fashion context, such as *eco*,

ethical, organic, and green. The study concluded that there was a confusion and lack of engagement regarding these concepts, especially sustainability.

This disengagement and misunderstanding can be related to the broad use of the sustainable terms, as well as the oxymoron that exists between the fast-fashion industry and sustainability. The sustainability factor within the fashion industry is cited by different authors as “fashion’s paradox”, since it seems irreconcilable to bring together two opposites: the business model that constantly changes its goods, producing uncountable negative implications and – a term that is understood as continuity and resourcefulness (Fletcher 2010). A concrete example is the Swedish clothing retail company H&M that is considered one of the biggest retailers in the fast fashion industry. In 2010 they have launched a collection named “Conscious” that refers to sustainable practices regarding its garments. Nevertheless, the H&M group is constantly criticized for creating a new collection that disappears as a trend (continuing with the polluting cycle), instead of motivating customers to sustain their existing clothes, for instance (Kaner 2021). This is not the only criticism – the group is also seen as contradictory by having a collection that claims to be sustainable and, at the same time, having the majority of their products as ordinary fast fashion (Kaner 2021). In 2019, the Norwegian Consumer Authority (CA) called H&M out for greenwashing, claiming that the brand provides insufficient information about the sustainable nature of the *Conscious* Collection. According to the CA’s director, Elisabeth Haugseth, customers need to have concrete description of the product and should know if a garment is based on 5% or 60% recycled material, for instance. Regarding advertising, the director also added that the focus should be on what the organization is actually doing to become more sustainable and avoid using broad terms as “sustainable”, “environmentally friendly” and “green” (Hitti 2019). H&M and other fast fashion companies tend to use broad terms for their sustainable collections such as *Conscious* by H&M, *Committed* by Mango, and *JoinLife* by Zara. H&M’s Conscious Collection, for example, has never been very specific about its name – the company doesn’t provide deeper details in its marketing materials and the individual product description doesn’t add much to the consumer (Segran 2021). Some studies consider this collection to fit into the “Sin of Hidden Trade-off”, since the company is not being transparent regarding the composition of the materials (e.g.: organic materials) (Alexa, Apetrei, and Pislaru 2021).

There is a grey line between CSR efforts and greenwashing and how they are communicated in social media platforms. Therefore, the main goal of this study is to understand how do fast

fashion brands use SMM to communicate their sustainable effort. The methodology will be discussed in the next chapter.

3. Methodology

As claimed before, the purpose of this study is to understand how the fast fashion brands use Social Media Marketing, mainly Instagram Marketing, to promote their sustainable initiatives, as well as to understand how consumers perceive these efforts.

This dissertation involved two types of data collection methods: quantitative and qualitative methods. Hence, a two-part study was conducted. The reason for the two-part study was to first have a better understanding of how the fast fashion brands use their Instagram accounts to promote sustainable initiatives and then to understand how the consumer perceive these promotions. Thus, in the first part, secondary data was discussed in a form of a qualitative content analysis of Instagram posts and reports of four fast fashion companies. In the second part, quantitative primary data was gathered in form of an online survey using a small sample of the analyzed posts. This thesis is considered majority qualitative, since the quantitative method was only applied to understand the sensitiveness of the consumers regarding the sustainability promotions. Therefore, the main goal of using primary data is grounded in the effort to obtain reliable primary information to support the assumptions and findings that were drawn from the secondary data. The following methodology sections develop in more details how data was collected for this dissertation.

3.1 Part one: Secondary data

3.1.2 Research design

To understand the role of Social Media Marketing in the process promoting sustainable initiatives within the fast fashion industry, a case study design was adopted. The conduct of a case study enables the identification of differences, similarities, and some patterns through the selected samples (Eisenhardt 1989). The sample of this study is in alignment with Eisenhardt's (1989) recommendation of selecting between four and ten cases. Therefore, to perform a suitable comparison, four sample of fast fashion brands that are actively promoting sustainable practices in their businesses were chosen. Regarding the sampling strategy, a purposive and convenience-based sampling technique was applied to efficiently aim for a

proper sample of interest for the research (Miles and Huberman 1994). Four criteria of selection were adopted in this study, as follows:

- i. **Affiliation to the fast fashion sector:** since fashion is a broad industry and contains different segments (e.g.: luxury fashion as haute couture, designer brands, premium brands, fast fashion retailers and so on) it is necessary to define which firms are indeed belonging to the fast fashion sector. To do so, the list provided by Caro and Martínez-de-Albéniz (2015) was adopted. The research was based on a frequency count using the Factiva database and documents PDF documents on Google that contained the exact phrase “fast fashion”. Three selected sample brands were ranked in the list except for SHEIN, that is probably because the company had its exponential growth only from 2017 onwards (see Exhibit 1).
- ii. **Size:** for the sake of having samples with an effective sample size suitable for the fast fashion industry, companies that are operating on a global scale and have a yearly revenue of more than 2.0 billion dollars were chosen.
- iii. **Social media presence:** since the aim of the study is to analyze the sustainability efforts of companies within social media, it is required that all four brands have a presence in, at least, one type of social media platform. For this research, Instagram was the digital platforms selected because of its leading reach in global audience and due to its several visual formats. Only the official pages of the companies were taken into consideration for this study.
- iv. **Sustainability efforts:** along with digital media presence, brands that actively communicate their sustainability activities through sustainability reports, for instance, were selected. For the selection, also agencies that rank global companies by their sustainability efforts were taken into consideration, for example Good On You and Rank a Brand.

The four fast fashion brands that were selected for this study are: Zara, SHEIN, H&M and MANGO.

Brand	Parent Company	Sustainable Collection	Size of group/brand	Revenue of the group
Zara	Inditex	JoinLife	Inditex is one of the world's largest fashion retailers, with seven brands (Zara, Pull&Bear, Massimo Dutti, Bershka, Stradivarius, Oysho and Zara Home) selling in 215 markets through its online platform or its 6,477 stores in 95 markets.	€27.7 billion in 2021
SHEIN	Shein Group / Nanjing Lingtian Information Technology Co	MOTF Eco	SHEIN is Chinese online fast fashion retailer with operations in Singapore, Guangzhou and Los Angeles, along with other key global markets. The company sells to 195 countries.	\$15.7 billion in 2021
H&M	H&M Group	Conscious	H&M Group is a fashion retailer that includes eight brands (H&M, H&M Home, COS, & Other Stories, Monki, Weekday, Cheap Monday, and ARKET). The group has 54 online markets and stores in 75 markets.	\$23.18 billion in 2021
MANGO	-	Committed	MANGO is a multinational fashion retailer that operates in 110 countries globally.	€2.2 billion in 2021

Table 1: Information about the four sample brands

3.1.3 Data collection

In terms of data collections, a two-step process was adopted. Firstly, the available public data from the four sampled brands were collected. This included not only the latest sustainability reports, but also annual report and, publications on company websites. The first step of data collection enabled an overview of the fast fashion industry, the brands, and their sustainability strategies used within the social media platforms. Furthermore, to get different perspectives about the context, publicly available data from third-party sources were also

collected, including online newspaper articles, research reports from NGOs, and others. This step was of utmost importance to compare the data disclosed by four companies with external publicly data. The material collected in the first part was a support to check the information posted by the brands on their Instagram accounts. The last and more important step of data collection was to closely analyze content posted by the four brands on their Instagram pages between the timeframe of the 1st of January of 2021 until the 31st of December of 2021. The thesis seeks to analyze an entire year to guarantee that patterns and ordering of posts are thoroughly reviewed. Instagram was the social media platform selected for this study due to its visual component that connects in a perfect matter with fashion brands (Bonilla, del Olmo Arriaga, and Andreu 2019). The platform has different visual formats that includes videos, images, boomerangs, hyper lapse, stories, lives, and others (Leaver and Highfield 2018). The sample size includes 237 total posts published by the official Instagram pages of Zara, SHEIN, H&M and MANGO (Table 2):

Brand	Number of posts related to sustainability
Zara	12
H&M	65
SHEIN	61
Mango	99
Total	237

Table 2: Instagram posts of the four fast fashion brands

Most of the analyzed posts were connected to the brands’ sustainable collection, respectively: JoinLife, MOTF Eco, Conscious and Committed. SHEIN is the only brand that possesses a separately Instagram account for its sustainable collection (MOFT Eco), therefore both accounts were considered for this study. The analyzed content consists of the Instagram posts’ visual (e.g.: videos and static image) and textual (e.g.: text in captions or on slides elements). The selection of the data for the content analysis was based on two motives: (1) It includes Instagram posts that were chosen to be the most recently published ones at the time of the conducted thesis. The starting date choice is based on the purpose of capturing the most up-to-date events as well as the strategic goals of the brands’ communication approach at the time of this research. Moreover, it avoids the possibility of bias and subjectivity since the researcher is not randomly selecting data from different time periods. (2) Only posts

regarding sustainability communication were chosen. The criteria of selection were based on the attachment with the brands' sustainable collection and on the analysis of the posts (e.g.: visual insinuations) in connection with eco-related terms of Thomas' lexicon (2008) that was cited in chapter 2.3.1 and is attached in the Appendix – Exhibit 2.

3.1.4 Data analysis

Data analysis focused on the thematic content of the brand's Instagram posts to examine how the four fast fashion brands advertise their sustainability efforts on the social media platform. Different authors conducted studies using content analysis to assess the existing conditions of sustainability advertising practiced by organizations (Farache and Perks 2010; Mögele and Tropp 2010; Segev, Fernandes, and Hong 2016). Performing a content analysis allows researchers to describe and analyze the content of written, spoken and illustrated communication in a methodical and measurable way (Neuendorf 2002).

To categorize the content, different classification systems were combined, and the most relevant categories were extracted and used by the author to create her own classification system. The models focused in three main themes that are the pillars of this thesis: social media marketing, CSR, and greenwashing. The first template was designed by Kwon and Lee (2021) which took into consideration variables measuring the CSR advertising on Instagram based on previous research from Eiseman (2006), Kotler and Lee (2005), Wagner and Hansen (2002) and others. The second template was developed by Sailer, Wilfing and Straus (2022) where Instagram ads of sustainable fashion brands were categorized based on prior research on greenwashing. All classification systems were used as an inspiration for the thesis and therefore were adapted to be able to fit in the purpose of the master's study.

As stated before, the main aim of this analysis is to describe and interpret the Instagram posts of four fast fashion brands. Therefore, the main category analyzed in the classification system was the structural template communication. This category refers to the structure of the post and can be categorized into two topics of analysis: visual type and message type. Both types take into consideration the features surrounding the brand and/or its products that emphasize an environmentally or socially friendly orientation. Visual type includes the visual approach – photos, videos, or both. Message type included the text that was utilized in the slides, as well in the caption. It includes eco-related keywords, such as ecofriendly, organic, recycled etc. These two types offer insights on how the fast fashion brands use their overall post structure to promote their sustainable efforts.

Within this macro block, 6 categories were selected to further analyze CSR and greenwashing aspects of the brand's Instagram marketing posts:

- i. **Type of content:** This block is connected to the type of content that is promoted by the four brands. It can be related to (a) promotion of corporative initiatives, (b) promotion of product, (c) promotion of eco-labels and (d) influencer marketing. The topic *a* refers to the promotion of a sustainable – or partially – product (e.g.: 20% recycled polyester t-shirt). Promotion of corporative initiatives is related to the internal initiatives of the organization regarding sustainable topics, e.g., launch of an eco-friendly collection. The third point regarding eco-labels relate specially to the brands that promote eco-label guarantee. Lastly, d refers to the use of an influencer or celebrity to the advertisement of the brand, a product and/or a sustainable initiative.
- ii. **CSR initiative types and objectives:** The six variables regarding CSR practice types were adopted from the study of Kotler and Lee (2005) and are as follows: Cause-related marketing, corporate social marketing, community volunteering, cause promotion, corporate philanthropy, and corporate socially responsible practices. The goals of the advertisement of CSR claims of the four fashion brands were categorized into three different variables based on the concepts shared by the Triple Bottom Line (TBL) coined by Elkington (1997) that were previously analyzed in the literature review: promotion of social dimension (e.g.: humans rights), promotion of environmental dimension (e.g.: protection of environmental resources) and promotion of both environmental and social dimensions together.
- iii. **Sin of Vagueness:** Using buzzwords and vague terminology to imply positive environmental performance. Examples are “eco-conscious”, “green”, “non-toxic” and so on.
- iv. **Sin of no proof:** The sin of no proof describes environmental claims not supported by either factual evidence or third-party certification.
- v. **Sin of the Hidden Trade Off:** The hidden trade-off is about classifying a product as being green based on a restricted set of information or characteristics

3.1.5 Findings

This chapter has the goal to examine how the four fast fashion brands use Social Media Marketing, more specifically Instagram marketing, to promote their sustainable efforts. The findings of the analysis are described below in the order of the 6 categories mentioned in the last chapter.

i. Type of content

Evidence regarding the four main content types (promotion of product, promotion of corporative initiatives, promotion of eco-labels and influencer marketing) were found in the four brands online communication on Instagram. Promotion of corporative communication was the topic that was most exploit by the four brands, since all the have eco-friendly collections or sustainable projects. Zara focused most of its posts towards **(a) corporative sustainable initiatives** by promoting mainly **(i) sustainability goals** (e.g.: “Our goal is that by 2022, 10% of the energy in all our headquarters logistics centers and stores will come from renewable sources”) and **(ii) their partnership** with Lanzatech, startup that converts carbon emissions into new materials such as polyester. This partnership is part of the brand’s initiative called Sustainability Innovation Hub which consists of an open innovation platform based on collaborative technological monitoring (Figure 1). According to the group’s annual report of 2020, this initiative was created to drive relevant impacts on the Inditex’s strategy on raw materials and/or circularity, assuming that it is required to comply with our sustainability commitments. All the 12 analyzed posts were related to another macro initiative of the brand called JoinLife. As stated in the last chapters of this study, this initiative is a label identifies the brand’s garments made of sustainable raw materials and environmentally friendly production processes. The CSR communication adopted through the JoinLife initiative will be analyzed in the next categories.



Figure 1: Post of Zara's official Instagram account

Following a similar trend, H&M also focused a great amount of its content on **(a) corporative sustainable initiatives** by promoting (i) **brand collaborations** that used eco-friendly material (e.g.: *Wired x H&M*, *Good News x H&M* and *Lee x H&M*), (ii) **internal programs** (e.g.: Garment Collection, where the consumer can give away the clothes in the recycling boxes present in the physical stores of the brand), (iii) **partnerships with innovation companies** (e.g.: We aRe SpinDye, Swedish fashion tech company that has developed a sustainable coloring method for synthetic textiles which reduces the environmental impact compared to the traditional dyeing process), (iv) **educational projects** (“The Small Things”, series on Youtube that talk about sustainable topics within the company, for instance what is H&M doing about circularity in fashion) and (v) **educational gamification** (H&M created an island in Animal Crossing: The “H&M Loop Island” where you can interact with the brand and share opinions). SHEIN focus its CSR-driven posts almost entirely into **(a) corporative sustainable initiatives** by promoting a **(i) philanthropy program** called #SHEINCares where they support organizations that empower women, children, communities, and the environment. According to the brand’s last publication of 2021 on Instagram, SHEIN Cares has contributed over 1 million dollars to charitable organizations. Along with the philanthropy program, SHEIN also promotes **(ii) gamification** through their app where users can play a game, where the user can earn medals and share them on social media to spread awareness towards the cause having the possibility to win

gifts from the brand. Lastly, the brand also promotes its **(iii) eco-friendly collection**. As mentioned in the last chapter, SHEIN is the only brand that has an Instagram account for its sustainable collection (MOTF Eco) and therefore was also analyzed in the study. MOTF is a premium collection and, according to the collection's page in the official website of the brand, "sustainability has been a primary consideration in SHEIN brand and naturally incorporated in all processes". In MOTF's Instagram page, only 7 posts regarding sustainability were tracked and all of them were referring to corporate initiatives, mainly regarding the recycled materials used in their clothes (e.g.: "MOTF eco collection of commodity fabrics are fully sustainable, such as those made from recycled PET bottles, plastic production leftovers (...)"). In 2021, Mango published posts regarding its internal corporate sustainability by promoting **(i) philanthropy program** called #MangoTogether, **(ii) brand collaboration** using recycled material (e.g.: Pernille x Mango) and **(iii) employee engagement** by posting a series of videos of their employees talking about their work towards implementing sustainable material into the eco-collection called Mango Committed (e.g.: Outerwear Designer and Buyer employees). Regarding the second topic **(b) promotion of products**, the four brands promoted their sustainable products. Zara was the brand who promoted less their product and focused on corporate initiatives, as stated before. One way of promoting their product was to mention their JoinLife Collection, where they stated that the brand uses Join Life label to classify all garments that have been produced using more sustainable processes and raw materials. In the 2021 posts, the brand informed that more than 30% of our products are classified as Join Life, and their goal is to obtain all our cotton, linen, and polyester by 2025 from more sustainable sources. H&M was the brand that promoted their products at most. In the visual part of the post, they presented models wearing their clothes and, in the caption, they explained more about the sustainable process (e.g.: "made from solely one material to enable easier recycling"), together with the product's reference so the user could browse on the website. SHEIN presented a similar promotion of its products by showing the model wearing the promoted garment together with green-related terms such as "recycled" and "eco-friendly", claiming that the fabric is more sustainable, and the production process is greener. The brand also promotes products that are related to their philanthropic initiative *SHEINCares* and is part of the Wild Heart Collection. Mango has a similar approach of promoting its sustainable products by connecting it to green terms (e.g.: sustainable proprieties) and adding the number of references in the end of the caption. Regarding **(c) promotion of eco-labels**, Zara and H&M were the only ones that promoted eco-labels as a guarantee of sustainability. Zara cited EU Ecolabel to promote the utilization

of Ecovero, viscose produced by Lenzing, Austrian company that produces wood-based viscose fibers, modal fibers, lyocell fibers and filament yarn, which are used in the textile industry. Zara stated in the post's caption that the EU Ecolabel guarantees they are fibers that comply with the European Union's environmental standards from the raw materials stage through production. H&M used PETA (People for the Ethical Treatment of Animals) label as an endorsement for their vegan collection named "Co-exist Story" (Figure 2). In their official website, H&M states that in addition to animal-friendly materials, materials from sustainable production were also used, such as natural rubber, recycled nylon and recycled polyester. The 6 posts of the brand included images and videos that showed models using the collection's clothes together with animals (goose, horse, cow and camel) in one of the UK's largest sanctuaries for rescued farm animals and horses. According to the post, PETA was present during the entire shoot both overseeing and approving content.

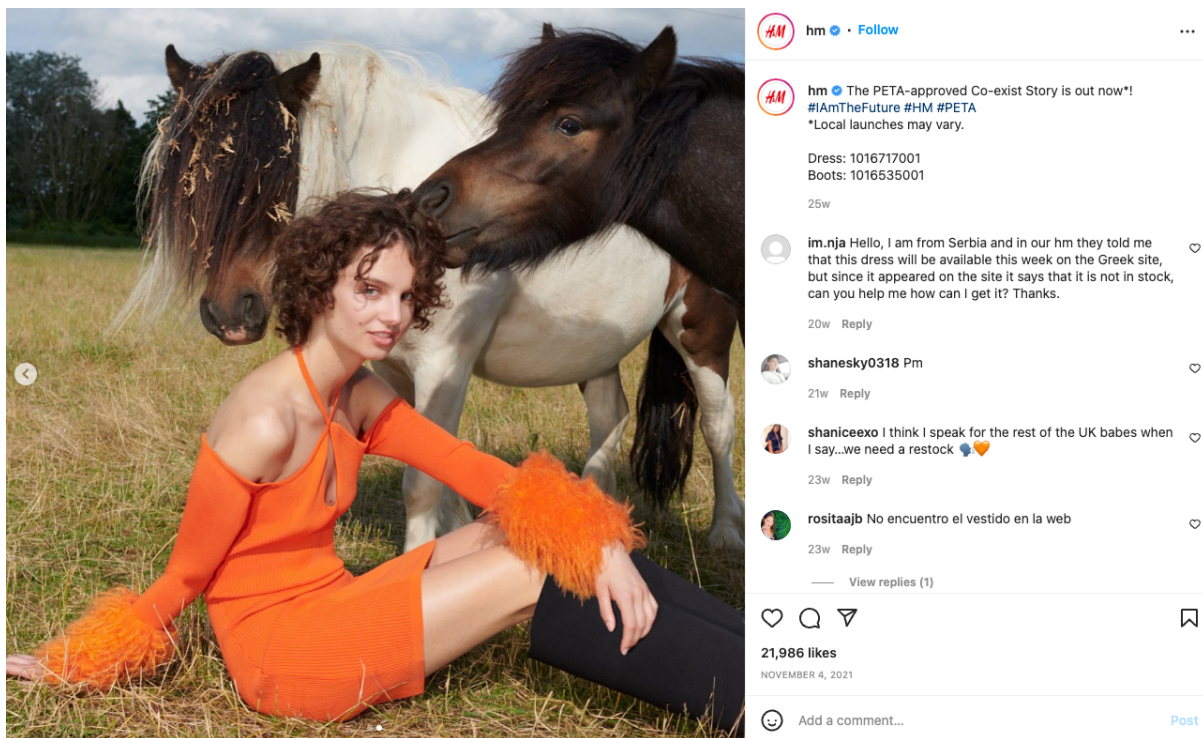


Figure 2: H&M's official Instagram page

Lastly, regarding **(d) influencer marketing**, H&M was the brand that promoted their products and collections with influencers the most. The Swedish brand promoted small, medium, and mega influencer, as well as celebrities (e.g.: Rita Ora). The brand has an initiative called "#HMxME" where users can tag their pictures with the official Instagram page of the brand and use the mentioned hashtag and then be featured on hm.com and on their social media platforms. For small and medium influencers, the brand made brief

comments in the caption about the product, tagging the influencer and indicating the product's reference (e.g.: "@mesyeuxsurtoi in harmony with nature, wearing our conscious puffer. Oversized down jacket: 1011879001). For celebrities, the brand did a similar approach, but mentioning the name of the promoted collection as a hashtag (e.g.: "Fierce and animal-friendly. @ritaora in our upcoming innovation collection (...) #IAmTheFuture"). Mango also promoted its products and collections in partnership with influencers by creating a series of posts named "The Sustainable Choice by" where they posted 2 images and 1 video of a selected influencer using some clothing and accessories of Mango's sustainable collection.

ii. **CSR initiative types and objectives**

This category was based on the 6 types of CSR initiatives adapted from Keller and Lee (2005) and was developed in the literature review. The two most common types found in the analysis were Socially Responsible Business Practices and Corporate Philanthropy. All 12 analyzed posts of Zara's Instagram page were promoting Socially Responsible Business Practices, since the communication were directed to the conduction of corporation's activities in a manner that aligns with a generally perceived social good (Kotler and Armstrong 2013). These perceived social goods include the utilization of raw material such as TENCEL, recycled polyester, ecologically grown cotton. Through the Sustainable Innovation Pub initiative, the brand states that they are continuously searching for better processes and materials to reduce their impacts. The main goal of the CSR initiative is the promotion of environmental dimension, given that no evidence regarding social dimension was found on their Instagram page in the timeframe of the analysis. The same trend is perceived for H&M, since also no evidence of promotion of social dimension was found. The brand focused on environmental impacts by promoting mainly Socially Responsible Business Practices and Corporate Social Marketing (CSM). According to Kotler and Lee (2005), CSM refers to a way in which a corporation assists in the development and implementation of behavioral-change campaign aimed at improving public health, the environment, or the well-being of the community. Evidence from H&M was found regarding two main initiatives mentioned before: internal program (Garment Collection) and educational project (The Small Things). By promoting these contents, H&M tries to educate their audience not only regarding the innovations in the fashion industry, but also internal initiatives towards sustainability. Regarding Socially Responsible Business Practices, the brand adopts a similar position as Zara by promoting their innovation projects (e.g.: #IAmTheFuture) where they constantly

state that they are working on cutting-edge materials, technologies and production processes that reduce the environmental impacts of the garment industry. Among the four brands, SHEIN is the one that adopts different types of CSR initiatives and goals. Corporate Philanthropy was the most recurrent initiative. In October 2021 the brand announced on Instagram that they would donate 780.000 US dollars to related organizations to support women around the world, especially to raise awareness about breast cancer. In total 9 NGOs from different countries were benefited – the names and amount donated were shared in the brand’s Instagram profile. The brand also made donations through their specific events (e.g.: #SHEINtogetherfest) and through partnership with influencers (e.g.: Hannah Godwin) where they donated 20.000 US dollars to Girls Who Code. SHEIN also used the Cause Promotion Initiative by creating an event in the US (“LA, We’re Popping Up”) to raise awareness through a fundraising, where 100% of the net proceeds of the reservations were donated to an NGO named *Together We Rise*. Another promotion regarding this CSR initiative was the sponsorship to a social enterprise called Ecologi to plant trees. On the Earth Day (22.04), SHEIN made a post celebrating this day by stating that the brand has helped restore 150 acres of rainforest in Madagascar and has helped created 59 jobs for the local planters. Socially Responsible Business Practices also appeared in the posts’ analysis mainly related to the changes in the utilization of material in the garment’s composition (e.g.: “MOTF Eco is made from recycled materials, which is found in water bottles, nylon fish nets and other plastic waste”). Corporate Social Marketing initiatives also appeared in some posts that were related to the campaign “#SHARECares For the Animals” where the brand created an app to educate the users about animals and raise awareness to the extinction of rare animals. Lastly, Cause-related Marketing (CRM) was found in one post in 2021 where SHEIN collaborated with Stand Up To Cancer (SU2C) and created a collection to raise awareness for cancer. For every item purchased from the collection, the brand donated 10% to the SU2C (Figure 3). Mango also promoted Cause-related Marketing content by creating a collection where all profits were donated to an NGO that promotes the development of women in rural communities in southern India.



Figure 3: SHEIN's official Instagram page

Seven Sins of Greenwashing

As discussed in the Literature Review, TerraChoice, an environmental marketing company, has created a classification called “the seven sins of greenwashing”. The classification has been cited in different articles and it is useful to indicate the key means by which a company can mislead consumers through environmental claims and uses these seven sins as a framework for their advertising analysis (Baum 2012). This qualitative study focused mainly on three greenwashing sins, since most of the evidence found on the Instagram posts were associated to the following sins: Sin of Vagueness, Sin of No Proof, and Sin of the Lesser of Two Evils. The other four sins will be shortly described by the end of the analysis.

iii. Sin of Vagueness

As previously described in the literature review, the sin of vagueness outlines environmental claims that lack specification and are thus considered pointless. This type of greenwashing is committed by using buzzwords like *green*, *sustainable*, and *eco*, without any justification for their use. The sin of imprecision describes environmental claims that lack specificity and are therefore considered meaningless. This sin is committed by using words like *green*, *sustainable*, and *eco*, without specific explanations to justify their use. Examples of green buzzwords found in the four brands' accounts can be found in Table 3:

Mango	SHEIN	H&M	Zara
“sustainable propriety/wardrobe/collection”	“eco-friendly”	“consciously crafted goodies”	“more sustainable process”
“environmentally-friendly material”	“sustainable green living”	“conscious garment”	“holistic approach”
“conscious mind”	“non-toxic”	“totally vegan”	
“match the environment”		“more sustainable collection”	
“eco-friendly garment”		“sustainable choices”	
“eco-wash” “feeling mother earth”			

Table 3: *Examples of buzzwords related to sustainability*

The excessive usage of these terms and the lack of clear definitions has led to making them meaningless and increasingly more interchangeable, a so-called dilution of terms. Consequently, public comprehension of environmental issues is diminished. Evidence of this type of greenwashing was found in the four brands Instagram account. H&M is the brand with highest incidence, followed by Mango, SHEIN and Zara. A clear example of a vague statement published by H&M can be seen in Figure 4:

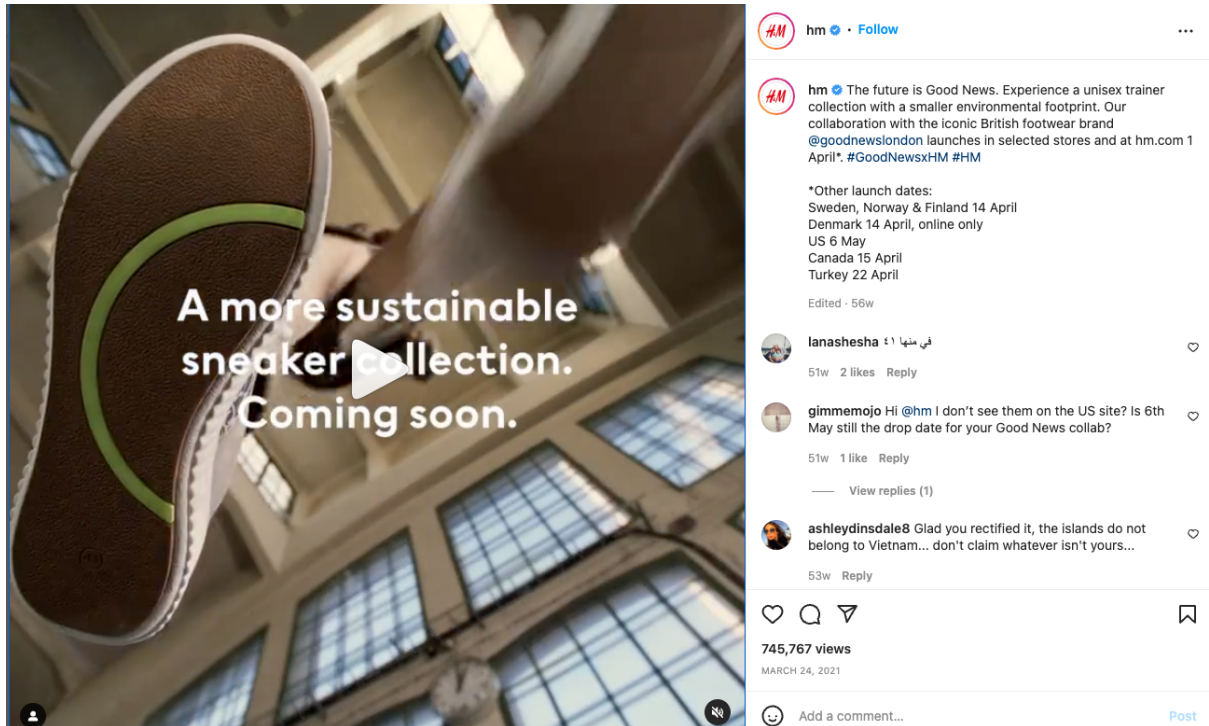


Figure 4: H&M – Sin of Vagueness

This post contains a video containing a broad text “A more sustainable sneaker collection” and “Great Shoes. Smaller Footprint” together with a vague caption: “Experience a unisex trainer collection with a smaller environmental footprint”. No concrete data (e.g.: material used in the collection or percentage of recycled/organic content) was attached to this post explaining why this collection is considered sustainable and presents a smaller footprint. Evidence of this type of greenwashing was found in several posts of SHEIN and MOFT (SHEIN’s collection) accounts. Figure 5 exemplifies it:



Figure 5: MOFT (SHEIN) – Sin of Vagueness

Similar as for H&M, here there are also no concrete data regarding the “sustainable green living” mentioned by the brand. There is also no clear connection between what the brand is currently doing in terms of decreasing its environmental impact and the non-defined “green living” term that is being advertised. Vague terms were also encountered in Zara’s and Mango’s accounts and are exemplified in Figure 6 and Figure 7.

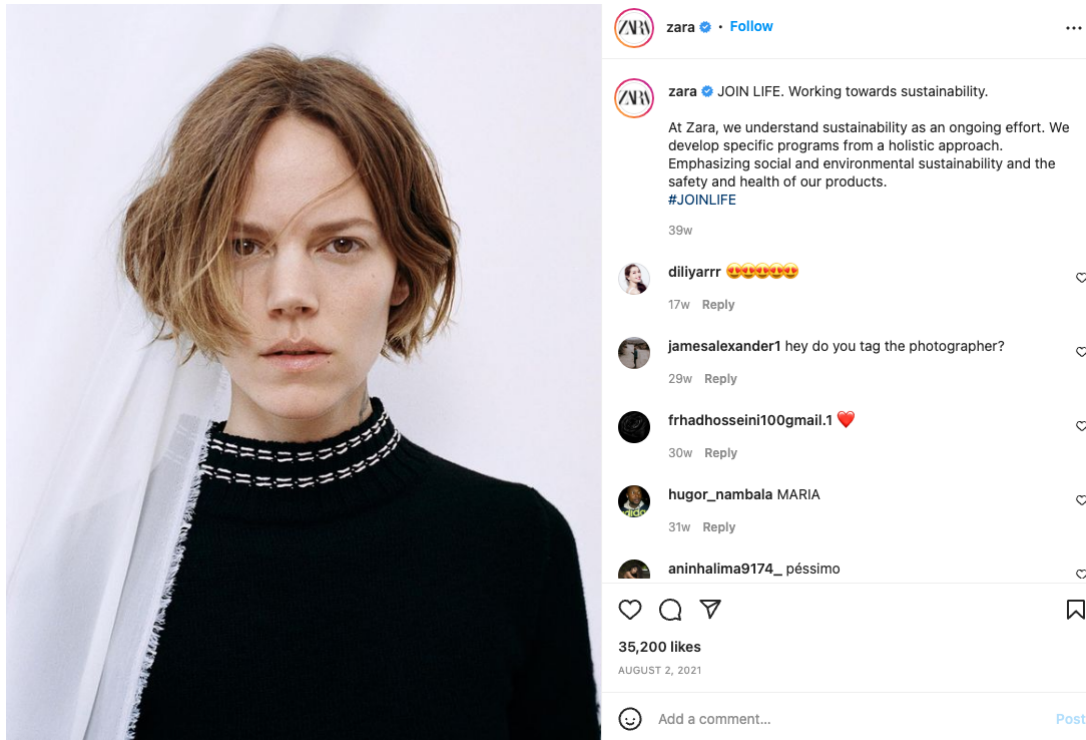


Figure 6: Zara – Sin of Vagueness

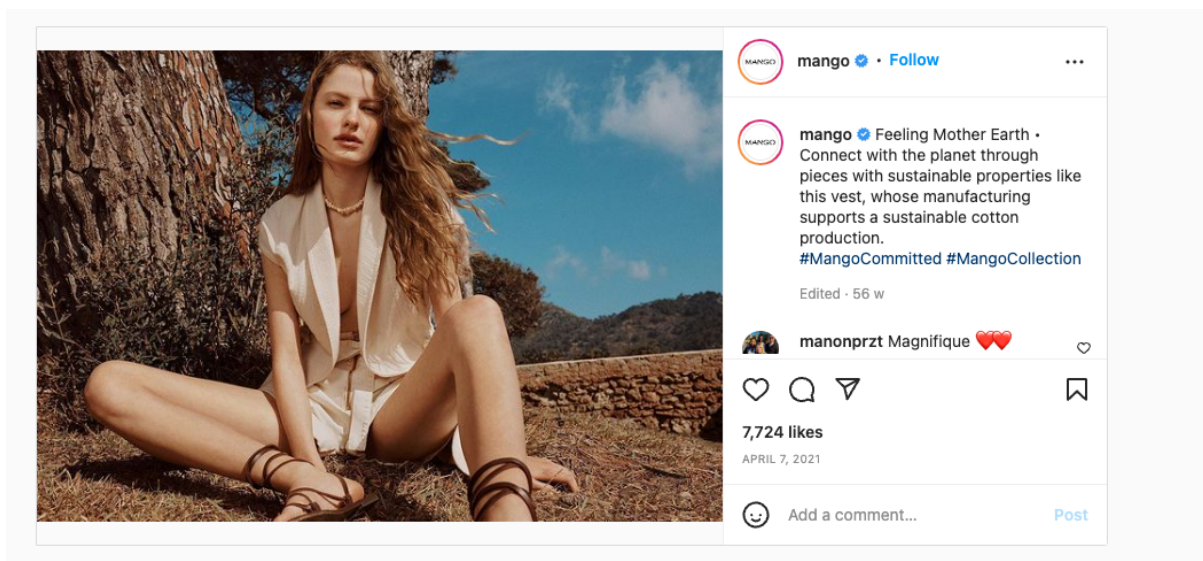


Figure 7: Mango - Sin of Vagueness

iv. Sin of No Proof

The Sin of No Proof describes environmental claims not supported by either factual evidence or third-party certification. An example would be to say that a certain percentage of a product

is made from consumer recycled content, without providing any actual supporting data or more details. For instance, if a company is making a claim that includes some sort of percentage or statistical information that is not verified with anything that could prove it, such as a URL to lead to more information, the claim is considered unprovable (de Freitas Netto et al. 2020). Evidence regarding this type of greenwashing was found mostly in H&M and Mango posts and they were related mainly about the recycling of products, since some brands like H&M have recycling based on consumer waste. The first topic is regarding the brand's initiative of Garment Collection of H&M, where the consumer can donate their used clothing in one of H&M stores. Figure 8 and **Error! Reference source not found.** exemplify one of many Instagram posts that are related to this initiative:

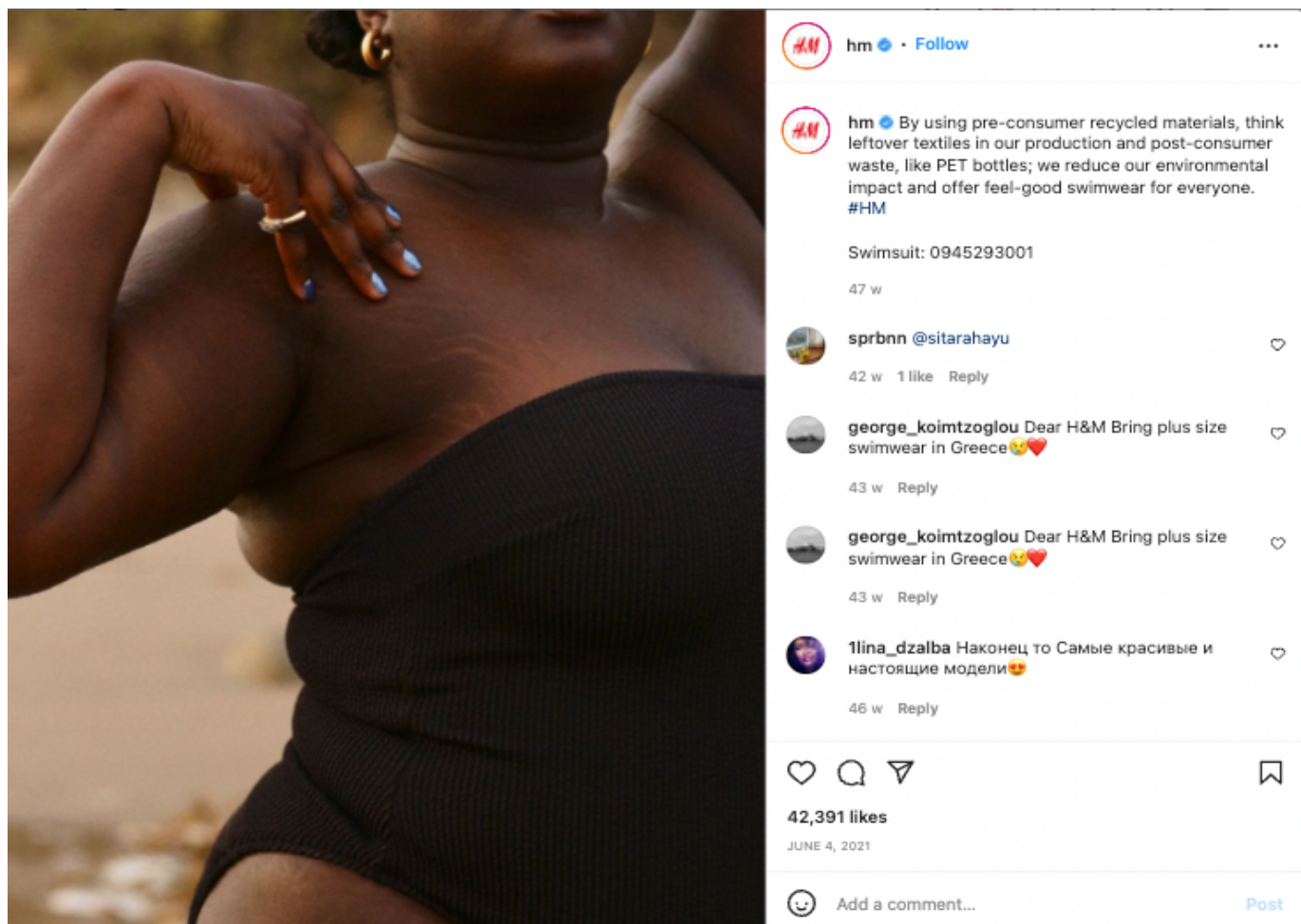


Figure 8: H&M - Sin of No Proof

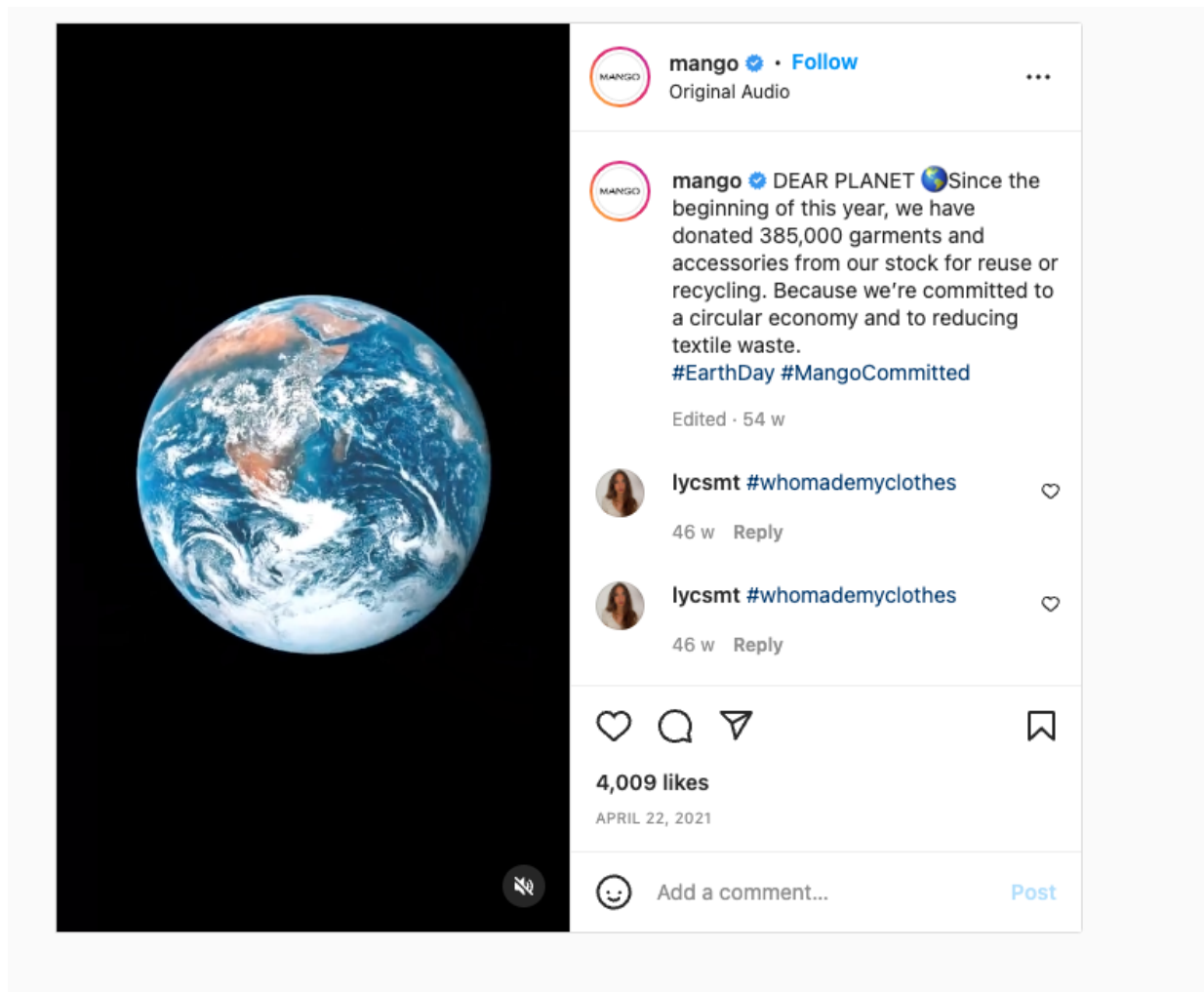


Figure 9: Mango - Sin of No Proof

However, it is hard to find concrete data released by the companies about these initiatives. Taking H&M as an example, four official documents and the brand’s official website were analyzed. In H&M official website and in the Group’s Annual and Sustainability Report of 2021, the brand claims are that in 2021 they have collected 15,944 tones of textiles for reuse and recycling. They also informed that they have a partnership with I:CO, circular solutions provider for collection and sorting, to collect and sort the garments, with 50-60% sorted for re-wear and reuse and 35-45% recycled to become products for other industries or made into new fibers. H&M also claims that: “We continued collaborating with partners to make use of the remaining 3-7% that, as a last resort, had to be disposed of another way, prioritizing incineration for energy recovery and never sending textiles to landfill”. However, there is no evidence of validation of any of these few data released by the Group, since no official third-party was mentioned in any of these documents. After checking the Group’s Sustainability

Disclosure of 2021, the Responsible Raw Material Sourcing Policy (updated in 2022) and the H&M Group Material Categorization no additional data regarding the reliability of the material obtained from the Garment Collection initiative was found.

v. Sin of Hidden Trade-Off

The hidden trade-off is about classifying a product as being green based on a restricted set of information or characteristics. An example would be a good made from recycled materials: it might appear sustainable whilst disregarding the manufacturing process with high-energy, polluting factories or the usage of toxic chemicals. Evidence of this kind of greenwashing could be found in all four fast fashion brands, as they all have products and/or collections that claim to be sustainable, even though these garments have been produced in massive amounts in factories powered by fossil fuels and were designed to be out-of-season in just a few months. Zara, H&M, Mango and SHEIN focus on their Instagram posts mostly about advertising products that are supposedly eco-friendly, disregarding other more important topics, such as initiatives to reduce excess of water use (since fast fashion is one of the industries that most uses water) or excess of waste that is sent to LMIC's landfills. An example to illustrate this type of greenwashing was evidence found in SHEIN's Instagram (Figure 10):



Figure 10: SHEIN/MOTF - Sin of Hidden Trade-Off

In this post, SHEIN claims that the MOTF Eco Collection is made from recycled materials, giving the impression that the whole collection is sustainable. However, by checking their website, a few products that are not recycled could be found, for instance the MOTF Eco recycled polyester neck top (Figure 11):

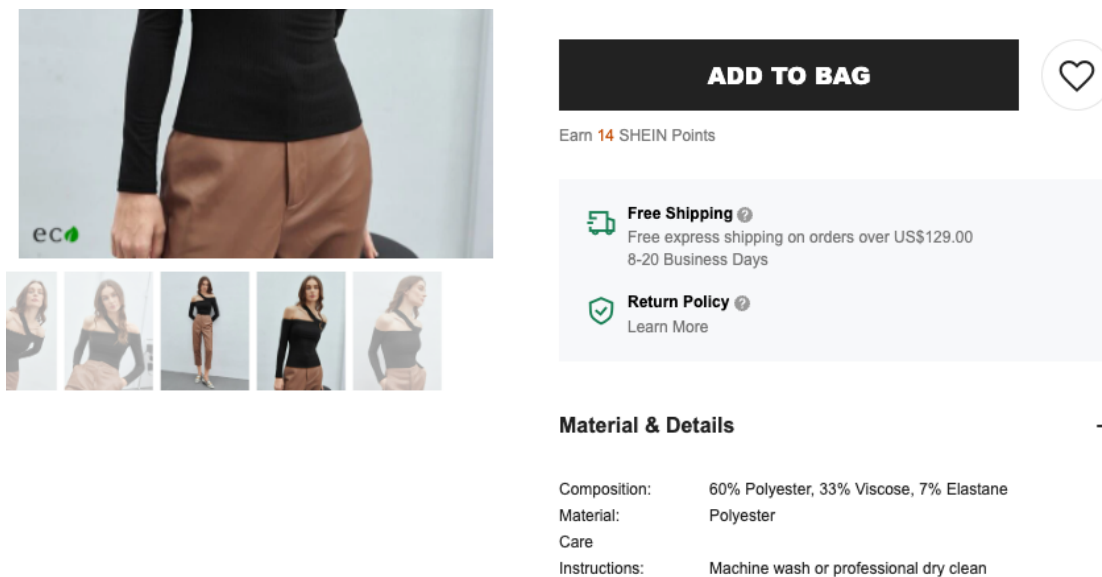


Figure 11: SHEIN's official website

In the composition of the product, however, no evidence of recycled material was found.

Other types of greenwashing

Evidence of more of two and more types of greenwashing in a single Instagram post could be found. An example is the following post published by Mango (Figure 12):



Figure 12: Mango - Evidence of Greenwashing

In this post, Mango claims that the collection is sustainable (“Find more about our sustainable collection”) (Sin of Hidden Trade Off), however they still have a lot of products that are not sustainable or contain very little of recycled or organic materials. For instance, the coat presented in the post, doesn’t inform the user how the “cellulose fibers were sourced from traceable forests” (Sin of No Proof) and in their official website the user can’t get concrete data about the sustainability of the product. In fact, the composition of the product doesn’t seem sustainable at all (Figure 13).



DESCRIPTION

Fabric with wool. Houndstooth design. Straight design. Long design. Lapel-collar V-neck collar. Long buttoned sleeve. Decorative pockets on the front. Back slit. Double button fastening. Inner lining.

The garments labelled as Committed are products that have been produced using sustainable fibres or processes, reducing their environmental impact. Mango's goal is to support the implementation of practices more committed to the environment, and therefore increase the number of sustainable garments in the collection.

Women Coats Coats

MATERIAL AND WASHING INSTRUCTIONS

Composition: 54% wool,31% polyester,10% acrylic,5% polyamide. Lining: 100% viscose. Piping: 100% polyester



Figure 13: *Mango's official website*

The entire composition of the coat is very unsustainable since its majority of material is composed of wool and polyester. This type of greenwashing is classified as Sin of Fibbing and is committed by making environmental claims that are simply false. Evidence of this type of greenwashing was only found in one post of Mango and one of SHEIN (MOTF account). Figure 14 illustrates it:



Figure 14: SHEIN - Sin of Fibbing

The brand claims that MOTF eco collection of commodity fabrics are fully sustainable, however by checking their website it is very clear that this claim is false (see Figure 11). Evidence of The Sin of Less of Two Evils could be found in all four brands since they made claims that might be true within the overall product category but risk to distract the consumer from the larger environmental impacts of the category as a whole (Baum 2012). By advertising their so-called sustainable collections, the brands fail to acknowledge the unsustainability of their business model.

No evidence of Sin of Worshipping False Labels and Sin of Irrelevance were found in the four brands' posts. Table 4 summarizes the evidences of different types of greenwashing found on the Instagram posts:

	Sin of No Proof	Sin of Vagueness	Sin of Hidden Trade-Off	Sin of False Labels	Sin of Irrelevance	Sin of Fibbing
Zara	0	3	2	0	0	0
H&M	5	12	4	0	0	0
SHEIN	4	8	5	0	0	2
Mango	6	9	6	0	0	3

Table 4: Evidence of Greenwashing

4.2. Part two: Online Survey

To answer the second research question (*How do consumer perceive these sustainable promotions?*), an online survey was conducted using Qualtrics Survey Software. The selected technique allows high flexibility and convenience for the participants, guarantying the complete anonymity and confidentiality of the information that was shared. The survey was running during a period of 12 days from April 20th to May 1st. The responses obtained from the online survey were analyzed using SPSS version 28.0.

This quantitative study worked as a support to gain a better understanding of the perception of the consumer regarding the sustainability efforts of the fast fashion brands on Instagram. Thus, the aim of this primary data collection was to gather insights about the sensitiveness of the consumer to this promoted content and to understand if there was an indicator of perception of greenwashing, for instance. Hence, the objective was to understand if the perception of the consumer would change after seeing an Instagram post with sustainable promotion of the fast fashion brands (H&M, Zara, SHEIN and Mango). The survey was structured in a way that in the beginning the four brands were mentioned and the user was asked about his perception about them (e.g.: “I would recommend these brands”). After answering some questions about the awareness of the impact of the fast fashion industry and about sustainability within this specific industry, the user was introduced to a stimulus containing four Instagram posts of the mentioned brands and their respective captions (Exhibit 3).

The questionnaire was divided into several sections to have a better understanding not only about the participant’s consumption habits, but also the impact of sustainability claims in

Instagram posts on consumers' perception and behaviors. The first section focused on getting an overview of user buying habits in fast fashion. Five questions were applied focusing mostly on frequency of purchase of fast fashion in general. The second section was intended to evaluate the user awareness of environmental and social impacts of fast fashion industry using a 5-point-Likert scale being 1- "strongly agree" and 5- "strongly disagree" (e.g.: I do not buy products from fashion brands that I know has a forced labor, child labor or any type of poor working conditions"). The third section was meant to gather more information regarding the awareness of the consumers regarding sustainable collection within fast fashion and their perception of it (e.g.: If a famous fast-fashion brand advertises sustainable fashion initiatives, I would be more likely to choose these brands). The aim of the fourth part of the survey was to understand how the consumer perceive the promotion of sustainability initiatives by displaying four Instagram posts of the respective brands. The users were directed to questions and were asked to rate their level of agreement (e.g.: "After seeing the posts, I believe that the brands are taking actions to become more sustainable" and "I think the provided information in the advertisement helps to better understand the necessity of purchasing sustainable clothing"). To finalize the survey, some demographics questions were asked, mainly regarding gender, age, nationality, and occupation.

Results analysis

3.2.2 Sample Characterization

During the data collection period (April 20th to May 1st), 275 responses were recorded, with a dropout rate of 31.6%, which implies a total of 188 fully completed responses. To have a characterization of the attributes of the analyzed sample, a descriptive statistical analysis was performed to all the demographics indicators. From the 188 participants who completed the survey, female was the majority (almost 69%) (Table 5) and most predominant age range was between 25 and 34 years (58%) (Table 6). Regarding level of education, the degree with the highest incidence was Bachelor's (46%). Almost half of the participants were employed (49%) and 35% of the whole sample of participants declared that they earn less than 1000 euros net monthly.

#	Answer	%	Count
1	Male	28.72%	54
2	Female	68.62%	129
3	Non-binary / third gender	2.13%	4
4	Prefer not to say	0.53%	1
	Total	100%	188

Table 5: Gender

#	Answer	%	Count
1	18 – 24 years	28.72%	54
2	25 – 34 years	58.51%	110
3	35 – 44 years	6.91%	13
4	45 – 54 years	3.72%	7
5	55 – 64 years	0.00%	0
6	65 years and over	2.13%	4
	Total	100%	188

Table 6: Age range

#	Answer	%	Count
1	Germany	30.85%	58
2	Austria	0.53%	1
3	Italy	2.13%	4
4	France	4.26%	8
5	Portugal	6.91%	13
6	Brazil	20.21%	38
7	Other	35.11%	66
	Total	100%	188

Table 7: Country of residence

Please, consult Appendix – Exhibit 4 for more detailed data and SPSS table regarding the sample characterization.

3.2.3. Scale Reliability

Since the scales used in this research weren't derived from the literature, it is crucial to assure the reliability and consistency of the used items. To assess the reliability of the data, Cronbach's alpha was adopted:

Reliability Statistics

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.858	.851	32

Figure 15: Cronbach's Alpha

There are different studies that states that the acceptable values for Cronbach’s alpha should range from 0.70 to 0.95 (Tavakol and Dennick 2011), confirming the reliability of the data.

3.2.4. Descriptive statistics and One-way ANOVA

To understand if there was a difference in perception of the participants, three groups were created, and their differences in behavior were analyzed using One-way ANOVA. The groups were split in SPSS 28.0 and were created based on the following question using a 5-Points-Likert-Scale regarding the four mentioned brands “I see these brands as sustainable and ethical” that was displayed before the stimuli of the Instagram posts. As mentioned before, the scale was displayed as follows: 1-strongly agree and 5-strongly disagree. Groups were therefore created based on their beliefs and were named “Believer” (people who answered strongly agree and somewhat agree), “Non-believer” (strongly disagree and somewhat disagree) and “Neutral” (neither agree nor disagree). The groups were analyzed according to specific questions so that the research could understand if there was an indicator of change of perception regarding sustainability efforts of the brands. All the questions analyzed were taken from the fourth part of the survey after the users saw the Instagram posts. One of the most important questions related to the perception is as follows: “After seeing the posts, I believe that the brands are taking actions to become more sustainable”. When observing the descriptives, it is apparent that the most impacted groups were “Non-believers” and “Neutral”. Looking at the means and standard deviation of each group (Table 8), it is notable that people who didn’t think that the brands were ethical and sustainable before seeing the posts (“non-believers”), after answering the analyzed question tend to believe that the mentioned brands are taking actions to become more sustainable (N=129, M=2.78, SD=1.226). Believers remained the same. The group that was neutral regarding the four brands, now also show an inclination towards believing the same (N=88, M=2.26,

SD=0.860). Results of the ANOVA indicates that there is a significant difference between the means of the three groups (sig <0.001) (Table 9). Turkey HSD post hoc test (Table 10) reveals that there was a significant difference among the groups believer vs non-believer (sig <0.001) and neutral vs non-believer (sig =0.037). There was no significant difference between neutral vs believer (sig=0.297).

"After seeing the posts, I believe that the brands are taking actions to become more sustainable"	Group	Mean	SD	N
		Believers	1.81	0.760
	Non-Believers	2.78	1.226	129
	Neutral	2.26	0.860	38

Table 8: Descriptive statistics

One Way ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	21.147	2	10.573	8.465	<.001
Within Groups	231.087	185	1.249		

Table 9: ANOVA's results

Post hoc test (Turkey HSD)

(I)Groups	(J) Groups	Mean difference (I-J)	Std. Error	Sig
Believer	Non-believer	-0.966	0.263	<0.001
	Neutral	-0.454	0.304	0.297
Non-believer	Believer	0.966	0.263	<0.001
	Neutral	0.512	0.206	0.037
Neutral	Believer	0.454	0.304	0.297
	Non-believer	-0.512	0.206	0.037

Table 10: Post hoc test

When observing if the perception of the consumer changed regarding sustainable efforts of the fast fashion companies, another question was analyzed as follows: “After seeing the posts, I perceive the brands as more eco-friendly”. In this particular question, the group that thought that the brands were ethical and sustainable before seeing the post (believers) remained inclined to think the same (M=1.76, SD=0.786, N=21), whereas the group that didn’t think the brands were sustainable now have an inclination to neither agree or disagree (M=3.06, SD=0.935, N=129) and finally the “Neutral” group after seeing the Instagram posts tend to perceive the brands as more sustainable (M=2.13, SD=0.935, N=38) (Table 11). The One-Way ANOVA test certifies that the difference in the means between the three groups are significant (sig <.001) (Table 12) and the post hoc test (Turkey HSD) confirms that the significance difference occurs in believer vs non-believer (sig <0.001) and neutral vs non-believer (sig <0.001), excluding again neutral vs believer (sig=0.443) (Table 13).

Descriptive statistics				
	Group	Mean	SD	N
“After seeing the posts, I perceive the brand as more eco-friendly”	Believers	1.76	0.768	21
	Non-Believers	3.06	1.204	129
	Neutral	2.13	0.935	38

Table 11: Descriptive statistics

One Way ANOVA					
	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	47.509	2	23.755	19.136	<.001
Within Groups	229.656	185	1.241		

Table 12: ANOVA's results

Post hoc test (Turkey HSD)

(I)Groups	(J) Groups	Mean difference (I-J)	Std. Error	Sig.
Believer	Non-believer	-1.300	0.262	<0.001
	Neutral	-0.370	0.303	0.443
Non-believer	Believer	1.300	0.262	<0.001
	Neutral	0.930	0.206	<0.001
Neutral	Believer	0.370	0.303	0.443
	Non-believer	-0.930	0.206	<0.001

Table 13: Post hoc test

Other questions regarding the consumers’ perception of the four fast fashion brands after seeing their Instagram posts were analyzed (Exhibit 4) and the only one that didn’t present a statistically significant difference in the ANOVA test (sig= 0.073) was regarding the communication used in the posts “I think the green communication used by the brands are broad and misleading” (See Table 14).

One Way ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	6.301	2	3.151	2.652	0.073
Within Groups	219.757	185	1.188		

Table 14: ANOVA's results

4. Discussion

This chapter will discuss the findings obtained by analyzing secondary data (qualitative content analysis study) and primary data (quantitative statistical analysis study). As stated before, the focus of this thesis mainly qualitative, meaning that the quantitative results were used as a support to have a better understanding of the consumer perception regarding the sustainability efforts of the four mentioned brands on Social Media (Instagram). Therefore, the overall aim was to answer the following research question: *How fast fashion brands use Social Media Marketing (focus: Instagram) to be perceived as more sustainable?* This question was explored through RQ1 by doing an intensively content analysis of the Instagram posts of all four brands in the timeframe of the entire year of 2021. To understand how the brands promoted CSR initiatives and if this promotion could show evidence of greenwashing, a content analysis was done in different steps. First, the general type of content promoted by the brands was analyzed. The main result extracted from this analysis is that all four brands focused its posts on corporative sustainable initiatives by promoting their sustainability goals, internal initiatives, brand collaborations, eco-collections, and others (see chapter 4.1.5). The second part was to analyze in a deeper glance the CSR initiative types and objectives that were promoted. The major outcomes were that Socially Responsible Business Practices and Corporate Philanthropy were the most common types found in the analysis. All the four brands promoted the first type of CSR, and SHEIN and Mango were the brands that focused the most on Corporate Philanthropy. The last part of the analysis was to understand if these CSR promotions could have any indicators of greenwashing. Different types and levels of evidence of greenwashing were found in all four mentioned brands, mainly regarding vagueness of communication, no proof of sustainable claims and generalizing a collection/product as being green based on a restricted set of information. Other isolated types were found in less quantity in some of the brands, for instance making a false sustainable statement.

The second research question was added to this study as an extra data to understand the sensitiveness of the consumer regarding those sustainable promotions discussed in the previous paragraphs. The findings of this research indicates that consumers show an inclination to have a better perception of the brands after seeing an Instagram post as seen in Table 8 and Table 10 of chapter 3.2.4. As seen in the previous chapter, the group of people who thought that the brands were sustainable before seeing the posts (“believers”) kept the same level of agreement after seeing the posts, unlike the other groups that showed difference

in agreement, inclining to a positive agreement. The results of these two groups (“non-believers” and “neutral”) are the most interesting for this study, because it highlights that social media posts have indeed an influence on how consumers perceive sustainability in fast fashion brands. Not only have the posts change perception of the neutral group, that is a group that is still undecided, but also changed the perception of the non-believer group. Other questions regarding the perception of the participants (information obtained from the post, purchase intention, trust regarding the brands) were also analyzed and show the same trend, where all groups were inclined to a positive agreement regarding perception of sustainability. As mentioned in the last chapter, the only question that didn’t have a statistically significant difference was regarding the perception of broad and misleading green communication adopted in the posts (see Table 14). This question was added to the survey to understand if consumers would associate the brands’ green communication as greenwashing. According to the statistic descriptives, all three groups presented a positive inclination to this claim. It was expected that the groups “non-believer” and maybe “neutral” would show a positive agreement for this question, but “believer” was a surprising outcome. The main interpretation that could be drawn from this result is that the participants, even though they now perceive the brands as more eco-friendly and taking actions to become more sustainable, they still perceive the communication of the Instagram posts as broad and misleading, and they also feel that the posts could have more concrete information about the sustainable initiatives (Exhibit 4). These findings can be associated with the findings of the content analysis of secondary data since most of the posts that were analyzed in the study contained high evidence of “Sin of Vagueness”, meaning that the brands used buzzwords related to green vocabulary without adding any concrete relevant information to it.

5. Conclusion

The main objective of this thesis was to understand how the fast fashion brands use Social Media Marketing (mainly Instagram) to promote their sustainable efforts. In conjunction, the perception of the consumers regarding these sustainable efforts was also analyzed. For this purpose, a two-part study with mixed methodology was conducted, where primary and secondary data were collected and analyzed. Firstly, a content analysis of four fast fashion brands (Zara, H&M, SHEIN and Mango) was done by collecting Instagram posts of an entire year (2021) and analyzing them according to a block of categories. The second step of the study was to conduct a survey where participants would answer a determinate number of

questions regarding fast fashion brands before and after seeing their Instagram posts related to sustainability.

The empirical findings of RQ1 (*How do fast fashion brands use SMM to be perceived as more sustainable?*) show that there is high level of evidence of greenwashing in all four mentioned brands, especially regarding vagueness of green communication. This type of greenwashing could be confirmed when exploring RQ2 (*How do consumer perceive these sustainable promotions?*) by rolling out a survey where participants could indicate their level of agreement with some statements regarding sustainability in the fast fashion industry. After seeing the posts, all three analyzed groups were inclined towards agreeing that the green communication used in the posts were broad and misleading. However, the groups also were inclined to a positive agreement regarding the perception of the sustainable efforts of the brands, perceiving them as more eco-friendly after seeing the posts.

This study contributes to the literature in that it enriches the understanding of how companies use Social Media Marketing (Instagram) to advertise their CSR efforts. As mentioned before, there is a lack in literature about CSR advertising on social media, since most of the research focused on offline media, for instance print magazines (Segev, Fernandes, and Hong 2016). This study also provides managerial recommendations for fast fashion brands to communicate sustainability initiatives in a more effective manner. Results of both content analysis and survey, respectively, show evidence that firms use vague communication and consumers perceive it. Therefore, the main recommendation would be to publish concrete sustainable outcomes and avoid vague buzzwords on Social Media. Finally, this thesis also has a societal obligation with the consumers since it raises awareness towards evidence of greenwashing mechanisms adopted by fast fashion brands to be perceived as more sustainable. As mentioned before in the case of H&M, it is very hard to find evidence of sustainable claims, making it easy for the brands to exaggerate or provide unfounded deception about their green initiatives. By using the Seven Sins of Greenwashing consumers will be able to recognize these kinds of mechanisms more clearly and, consequently, have a more critical understanding of the sustainable initiatives promoted by the brands.

Several limitations could be found in the thesis. First, regarding the sample of the primary study, even though it contained 1xx responses and it's sufficient for the present thesis to conduct valid research, future research could focus on gathering more precise data by letting the survey run for more time. Still regarding the survey, the Instagram posts that were showed could have impacted the results, since the user was only seeing one post per brand,

causing an effect of generalization and possible bias. Another limitation is qualitative nature of the study.

By adopting a content analysis, the researcher was the only one gathering and analyzing all the posts of the selected brands. The analysis and interpretation of results in qualitative research is very limited by the researcher's own personal reading of the data. Since the researcher was aware of H&M, Zara and SHEIN accusations of practicing greenwashing it was expected to find inconsistencies not only on Instagram posts, but also in sustainable reports and official websites.

Regarding future research, the primary data, future research could expand and collect data about the Seven Sins of Greenwashing to understand if the consumer would be able to identify any of these mechanisms. To get even more insights about the consumer perception of CSR advertising and greenwashing, it would be very valuable to go through all analyzed posts and extract engagement KPIs on Instagram such as likes and comments. Other digital platforms could also be analyzed, such as TikTok and Twitter to have a better understanding of the consistency of the CSR advertising. Another interesting point for future research is to analyze the brands' posts in a bigger timeframe, mainly before and/or after a greenwashing scandal (e.g.: H&M's case that was mentioned before), to understand if the tactic of CSR communication would have changed.

References

- Aggerholm, Helle Kryger, Sophie Esmann Andersen, and Christa Thomsen. 2011. "Conceptualising employer branding in sustainable organisations." *Corporate Communications: An International Journal*.
- Alexa, Lidia, Andreea Apetrei, and Marius Pislaru. 2021. "Fast Fashion – An Industry at the Intersection of Green Marketing with Greenwashing."
- Alhaddi, Hanan. 2015. "Triple Bottom Line and Sustainability: A Literature Review." *Business and Management Studies* 1 (2): 6. <https://doi.org/10.11114/bms.v1i2.752>.
- Arrigo, Elisa. 2018. "Social media marketing in luxury brands." *Management Research Review* 41 (6): 657-679. <https://doi.org/10.1108/mrr-04-2017-0134>.
- Bansal, Pratima. 2002. "The corporate challenges of sustainable development." *Academy of Management Perspectives* 16 (2): 122-131.
- Barnes, Liz, and Gaynor Lea-Greenwood. 2006. "Fast fashioning the supply chain: shaping the research agenda." *Journal of Fashion Marketing and Management: An International Journal*.
- Baron, David P. 2001. "Private politics, corporate social responsibility, and integrated strategy." *Journal of economics & management strategy* 10 (1): 7-45.
- Baum, Lauren M. 2012. "It's Not Easy Being Green ... Or Is It? A Content Analysis of Environmental Claims in Magazine Advertisements from the United States and United Kingdom." *Environmental Communication* 6 (4): 423-440. <https://doi.org/10.1080/17524032.2012.724022>.
- Bazi, Saleh, Raffaele Filieri, and Matthew Gorton. 2020. "Customers' motivation to engage with luxury brands on social media." *Journal of Business Research* 112: 223-235. <https://doi.org/10.1016/j.jbusres.2020.02.032>.
- Bénabou, Roland, and Jean Tirole. 2016. "Mindful economics: The production, consumption, and value of beliefs." *Journal of Economic Perspectives* 30 (3): 141-64.
- Bhardwaj, Vertica, and Ann Fairhurst. 2010. "Fast fashion: response to changes in the fashion industry." *The international review of retail, distribution and consumer research* 20 (1): 165-173.
- Bibri, Mohamed. 2008. "Corporate sustainability/CSR communications and value creation: A marketing approach."
- Bick, Rachel, Erika Halsey, and Christine C Ekenga. 2018. "The global environmental injustice of fast fashion." *Environmental Health* 17 (1): 1-4.

- Bonilla, María Del Rocío, José Luis del Olmo Arriaga, and David Andreu. 2019. "The interaction of Instagram followers in the fast fashion sector: The case of Hennes and Mauritz (H&M)." *Journal of Global Fashion Marketing* 10 (4): 342-357.
- Brewer, Mark K. 2019. "Slow Fashion in a Fast Fashion World: Promoting Sustainability and Responsibility." *Laws* 8 (4): 24. <https://doi.org/10.3390/laws8040024>.
- Brundtland, Gro Harlem. 1987. "What is sustainable development." *Our common future* 8 (9).
- Brunsson, Nils. 1993. "Ideas and actions: Justification and hypocrisy as alternatives to control." *Accounting, Organizations and Society* 18 (6): 489-506.
- Caro, Felipe, and Victor Martínez-de-Albéniz. 2015. "Fast fashion: Business model overview and research opportunities." In *Retail supply chain management*, 237-264. Springer.
- Chen, Yu-Shan, and Ching-Hsun Chang. 2012. "Greenwash and Green Trust: The Mediation Effects of Green Consumer Confusion and Green Perceived Risk." *Journal of Business Ethics* 114 (3): 489-500. <https://doi.org/10.1007/s10551-012-1360-0>.
- Christopher, Martin, Robert Lawson, and Helen Peck. 2004. "Creating agile supply chains in the fashion industry." *International Journal of Retail & Distribution Management*.
- Crifo, Patricia, and Vanina D. Forget. 2015. "The Economics of Corporate Social Responsibility: A Firm-Level Perspective Survey." *Journal of Economic Surveys* 29 (1): 112-130. <https://doi.org/10.1111/joes.12055>.
- DataReportal. 2022. "Digital 2022: Global Overview Report." Data Reportal. Accessed 26/04/2022. <https://datareportal.com/reports/digital-2022-global-overview-report>.
- De Brito, Marisa P, Valentina Carbone, and Corinne Meunier Blanquart. 2008. "Towards a sustainable fashion retail supply chain in Europe: Organisation and performance." *International journal of production economics* 114 (2): 534-553.
- de Freitas Netto, Sebastião Vieira, Marcos Felipe Falcão Sobral, Ana Regina Bezerra Ribeiro, and Gleibson Robert da Luz Soares. 2020. "Concepts and forms of greenwashing: a systematic review." *Environmental Sciences Europe* 32 (1). <https://doi.org/10.1186/s12302-020-0300-3>.
- de Jong, Menno D. T., Gabriel Huluba, and Ardion D. Beldad. 2019. "Different Shades of Greenwashing: Consumers' Reactions to Environmental Lies, Half-Lies, and Organizations Taking Credit for Following Legal Obligations." *Journal of Business and Technical Communication* 34 (1): 38-76. <https://doi.org/10.1177/1050651919874105>.

- Delmas, Magali A., and Vanessa Cuerel Burbano. 2011. "The Drivers of Greenwashing." *California Management Review* 54 (1): 64-87. <https://doi.org/10.1525/cm.2011.54.1.64>.
- EC, European Commission. 2011. Corporate social responsibility: A new definition, a new agenda for action. In *MEMO/11/730*.
- Eiseman, Leatrice. 2006. *Color-messages & meanings: A PANTONE color resource*. North Light Books.
- Eisenhardt, Kathleen M. 1989. "Building theories from case study research." *Academy of management review* 14 (4): 532-550.
- Elkington, John. 1997. "The triple bottom line." *Environmental management: Readings and cases* 2: 49-66.
- Farache, Francisca, and Keith J Perks. 2010. "CSR advertisements: a legitimacy tool?" *Corporate Communications: An International Journal*.
- Felix, Reto, Philipp A. Rauschnabel, and Chris Hinsch. 2017. "Elements of strategic social media marketing: A holistic framework." *Journal of Business Research* 70: 118-126. <https://doi.org/10.1016/j.jbusres.2016.05.001>.
- Fletcher, Kate. 2010. "Slow fashion: An invitation for systems change." *Fashion practice* 2 (2): 259-265.
- Fuxman, Leonora, Iris Mohr, Ali B Mahmoud, and Nicholas Grigoriou. 2022. "The new 3Ps of sustainability marketing: The case of fashion." *Sustainable Production and Consumption*.
- Guiltinan, Joseph. 2009. "Creative destruction and destructive creations: environmental ethics and planned obsolescence." *Journal of business ethics* 89 (1): 19-28.
- Hawkins, Kerrie, and Prakash Vel. 2013. "Attitudinal loyalty, behavioural loyalty and social media: An introspection." *The Marketing Review* 13 (2): 125-141.
- Hitti, Natashah. 2019. "H&M called out for "greenwashing" in its Conscious fashion collection." Accessed 21/04/2022. <https://www.dezeen.com/2019/08/02/hm-norway-greenwashing-conscious-fashion-collection-news/>.
- Hobson, John. 2013. *To die for? The health and safety of fast fashion*. Oxford University Press UK.
- Joy, Annamma, John F Sherry Jr, Alladi Venkatesh, Jeff Wang, and Ricky Chan. 2012. "Fast fashion, sustainability, and the ethical appeal of luxury brands." *Fashion theory* 16 (3): 273-295.

- Kaner, Gül. 2021. "Greenwashing: How Difficult It Is to Be Transparent to the Consumer—H&M Case Study." In *Green Marketing in Emerging Markets*, 203-226. Springer.
- Kant, Rita. 2012. "Textile dyeing industry an environmental hazard." *Natural Science* 04 (01): 22-26. <https://doi.org/10.4236/ns.2012.41004>.
- Kietzmann, Jan H., Kristopher Hermkens, Ian P. McCarthy, and Bruno S. Silvestre. 2011. "Social media? Get serious! Understanding the functional building blocks of social media." *Business Horizons* 54 (3): 241-251. <https://doi.org/10.1016/j.bushor.2011.01.005>.
- Kim, Angella J., and Eunju Ko. 2012. "Do social media marketing activities enhance customer equity? An empirical study of luxury fashion brand." *Journal of Business Research* 65 (10): 1480-1486. <https://doi.org/10.1016/j.jbusres.2011.10.014>.
- Kim, Angella Jiyong, and Eunju Ko. 2010. "Impacts of Luxury Fashion Brand's Social Media Marketing on Customer Relationship and Purchase Intention." *Journal of Global Fashion Marketing* 1 (3): 164-171. <https://doi.org/10.1080/20932685.2010.10593068>.
- Kim, Juran, and Ki Hoon Lee. 2019. "Influence of integration on interactivity in social media luxury brand communities." *Journal of Business Research* 99: 422-429. <https://doi.org/10.1016/j.jbusres.2017.10.001>.
- Kotler, Philip, and Gary Armstrong. 2013. *Principles of Marketing (16th Global Edition)*. Harlow: Pearson.
- Kotler, Philip, and Nancy Lee. 2005. "Best of breed: When it comes to gaining a market edge while supporting a social cause, "corporate social marketing" leads the pack." *Social marketing quarterly* 11 (3-4): 91-103.
- Kuhlman, Tom, and John Farrington. 2010. "What is sustainability?" *Sustainability* 2 (11): 3436-3448.
- Kwon, Kyeongwon, and Jaejin Lee. 2021. "Corporate social responsibility advertising in social media: a content analysis of the fashion industry's CSR advertising on Instagram." *Corporate Communications: An International Journal* 26 (4): 700-715. <https://doi.org/10.1108/ccij-01-2021-0016>.
- Laufer, William S. 2003. "Social accountability and corporate greenwashing." *Journal of business ethics* 43 (3): 253-261.
- Leaver, Tama, and Tim Highfield. 2018. "Visualising the ends of identity: pre-birth and post-death on Instagram." *Information, Communication & Society* 21 (1): 30-45.

- Lipsman, Andrew, Graham Mudd, Mike Rich, and Sean Bruich. 2012. "The power of "like": How brands reach (and influence) fans through social-media marketing." *Journal of Advertising research* 52 (1): 40-52.
- McCarthy, Laura, Debra Stock, and Rohit Verma. 2010. "How travelers use online and social media channels to make hotel-choice decisions."
- McNely, Brian J. 2012. "Shaping organizational image-power through images: Case histories of Instagram." 2012 IEEE International Professional Communication Conference.
- McWilliams, Abigail, and Donald Siegel. 2001. "Corporate social responsibility: A theory of the firm perspective." *Academy of management review* 26 (1): 117-127.
- Miles, Matthew B, and A Michael Huberman. 1994. *Qualitative data analysis: An expanded sourcebook*. sage.
- Mögele, Bastian, and Jörg Tropp. 2010. "The emergence of CSR as an advertising topic: A longitudinal study of German CSR advertisements." *Journal of Marketing Communications* 16 (3): 163-181.
- Neuendorf, Kimberly A. 2002. "Defining content analysis." *Content analysis guidebook*. Thousand Oaks, CA: Sage.
- Niinimäki, Kirsi, Greg Peters, Helena Dahlbo, Patsy Perry, Timo Rissanen, and Alison Gwilt. 2020. "The environmental price of fast fashion." *Nature Reviews Earth & Environment* 1 (4): 189-200.
- Nijssen, Edwin J, and Andrea Ordanini. 2020. "How important is alignment of social media use and R&D–Marketing cooperation for innovation success?" *Journal of Business Research* 116: 1-12.
- Nyilasy, Gergely, Harsha Gangadharbatla, and Angela Paladino. 2014. "Perceived greenwashing: The interactive effects of green advertising and corporate environmental performance on consumer reactions." *Journal of Business Ethics* 125 (4): 693-707.
- Palacios-Mateo, Cristina, Yvonne van der Meer, and Gunnar Seide. 2021. "Analysis of the polyester clothing value chain to identify key intervention points for sustainability." *Environmental Sciences Europe* 33 (1): 1-25.
- Parguel, Béatrice, Florence Benoît-Moreau, and Fabrice Larceneux. 2011. "How Sustainability Ratings Might Deter 'Greenwashing': A Closer Look at Ethical Corporate Communication." *Journal of Business Ethics* 102 (1): 15-28. <https://doi.org/10.1007/s10551-011-0901-2>.

- Peirson-Smith, Anne, and Susan Evans. 2017. "Fashioning Green Words and Eco Language: An Examination of the User Perception Gap for Fashion Brands Promoting Sustainable Practices." *Fashion Practice* 9 (3): 373-397. <https://doi.org/10.1080/17569370.2017.1366688>.
- Reilly, Anne H., and Katherine A. Hynan. 2014. "Corporate communication, sustainability, and social media: It's not easy (really) being green." *Business Horizons* 57 (6): 747-758. <https://doi.org/10.1016/j.bushor.2014.07.008>.
- Roos, Sandra, Bahareh Zamani, Gustav Sandin, Greg M Peters, and Magdalena Svanström. 2016. "A life cycle assessment (LCA)-based approach to guiding an industry sector towards sustainability: the case of the Swedish apparel sector." *Journal of Cleaner Production* 133: 691-700.
- Rudenko, Olena. 2018. "The 2018 apparel industry overproduction report and infographic." *Sharecloth.com [online]*.
- Scheidler, Sabrina, Laura Marie Edinger-Schons, Jelena Spanjol, and Jan Wieseke. 2018. "Scrooge Posing as Mother Teresa: How Hypocritical Social Responsibility Strategies Hurt Employees and Firms." *Journal of Business Ethics* 157 (2): 339-358. <https://doi.org/10.1007/s10551-018-3788-3>.
- Segev, Sigal, Juliana Fernandes, and Cheng Hong. 2016. "Is your product really green? A content analysis to reassess green advertising." *Journal of Advertising* 45 (1): 85-93.
- Segran, Elizabeth. 2021. "H&M is one of fashion's biggest polluters. Now its foundation is on a \$100 million quest to save the planet." <https://www.fastcompany.com/90596456/hm-is-one-of-fashions-biggest-polluters-now-its-on-a-100-million-quest-to-save-the-planet>.
- Siano, Alfonso, Agostino Vollero, Francesca Conte, and Sara Amabile. 2017. "'More than words': Expanding the taxonomy of greenwashing after the Volkswagen scandal." *Journal of Business Research* 71: 27-37. <https://doi.org/10.1016/j.jbusres.2016.11.002>.
- Siegel, Donald S., and Donald F. Vitaliano. 2007. "An Empirical Analysis of the Strategic Use of Corporate Social Responsibility." *Journal of Economics & Management Strategy* 16 (3): 773-792. <https://doi.org/10.1111/j.1530-9134.2007.00157.x>.
- Sinclair, R. 2015. "Understanding textile fibres and their properties: what is a textile fibre?" In *Textiles and fashion*, 3-27. Elsevier.
- Taplin, Ian M. 2014. "Who is to blame? A re-examination of fast fashion after the 2013 factory disaster in Bangladesh." *Critical perspectives on international business*.

- Tavakol, M., and R. Dennick. 2011. "Making sense of Cronbach's alpha." *Int J Med Educ* 2: 53-55. <https://doi.org/10.5116/ijme.4dfb.8dfd>.
<https://www.ncbi.nlm.nih.gov/pubmed/28029643>.
- Testa, Francesco, Ivan Miroshnychenko, Roberto Barontini, and Marco Frey. 2018. "Does it pay to be a greenwasher or a brownwasher?" *Business Strategy and the Environment* 27 (7): 1104-1116.
- Thomas, Sue. 2008. "From “green blur” to ecofashion: Fashioning an eco-lexicon." *Fashion Theory* 12 (4): 525-539.
- UNEP. 2019. "UN Alliance For Sustainable Fashion addresses damage of ‘fast fashion’." Accessed 22/04/2022. <https://www.unep.org/news-and-stories/press-release/un-alliance-sustainable-fashion-addresses-damage-fast-fashion>.
- Wagner, Ernesto R, and EN Hansen. 2002. "Methodology for evaluating green advertising of forest products in the United States: a content analysis." *Forest Products Journal* 52 (4): 17.
- Yan, Wei, Chun-Hsien Chen, and Wunching Chang. 2009. "An investigation into sustainable product conceptualization using a design knowledge hierarchy and Hopfield network." *Computers & Industrial Engineering* 56 (4): 1617-1626.
- Yang, Zhi, Thi Thu Huong Nguyen, Hoang Nam Nguyen, Thi Thuy Nga Nguyen, and Thi Thanh Cao. 2020. "Greenwashing Behaviours: Causes, Taxonomy and Consequences Based on a Systematic Literature Review." *Journal of Business Economics and Management* 21 (5): 1486-1507. <https://doi.org/10.3846/jbem.2020.13225>.
- Young, Sarah. 2021. "The fabrics with the worst environmental impact revealed, from polyester to fur." Accessed 22/04/2022. <https://www.independent.co.uk/climate-change/sustainable-living/fast-fashion-sustainable-worst-fabrics-b1855935.html>.

Appendix

Exhibit 1: Fast fashion frequency count by Caro & Martínez-de-Albéniz (2015)

Specialty apparel retailer	number of appearances in Factiva search		number of appearances in PDF online search	
	rank	% appearances	% appearances	rank
H&M	1	31.7%	41.0%	2
Zara/Inditex	2	29.2%	45.9%	1
Gap	3	11.9%	18.2%	3
Uniqlo/Fast Retailing	4	9.9%	9.4%	8
Topshop	5	9.3%	13.7%	4
Forever 21	6	7.5%	11.2%	6
Mango	7	4.3%	12.4%	5
Wet Seal	8	3.2%	0.6%	16
Benetton	9	3.1%	10.1%	7
New Look	10	2.8%	6.2%	9
Esprit	11	2.8%	4.7%	10
C&A	12	1.9%	4.7%	11
American Apparel	13	1.2%	2.6%	13
Urban Outfitters	14	0.9%	2.8%	12
Peacocks	15	0.5%	1.1%	15
Charlotte Russe	16	0.5%	0.2%	17
Armani Exchange	17	0.3%	1.5%	14

Exhibit 2: Lexicon of green words and their meanings adapted from Thomas (2008)

Eco:	Short of ecology; the story of the interaction of people with their Environment.
Ethical:	It has a quasi-religious inference, in which ethical referred to philosophically guided actions and behaviours as determined by their impact on others. Thus, ethical fashion refers to the positive impact of a designer, a consumer choice, or method of production as experienced by workers, consumers, animals, society, and the environment. Environmental: It is an adjective that refers to habitat, or the earth.
Environmental:	It is an adjective that refers to habitat, or the earth.

Fair Trade:	Based on a philosophy and a method of trading with developing countries, it enables the growers and makers of goods to receive fair payment or a living wage. Fair trade used to be related to food products and craftwork, but it now includes fibers such as cotton.
Green:	The term refers to a product or service identified positively with the environment, although it need not be verified. Similar to eco, it is a preface for environmental issues, products, organisations, and behaviours.
Greenwash:	Paraphrased from the whitewash, or the cover-up of unpleasant environmental facts or actions, greenwash refers to a marketing ploy. It is often voiced in a scathing manner by organisations and individuals allied to the environmental movement, especially when describing policy or outcome implemented to divert or to assuage environmentalists' critique.
Natural:	As terms, natural or organic are interchangeable and used to relate mainly fibers. Natural has no real credence here since the term refers to how the staples of the thread, or fiber came into existence. It does not necessarily infer that no chemicals (herbicides, or pesticides, or fungicides) were used in their propagation and growth.
Organic:	Organic correctly relates to fibers and fabrics, specifically referring to the organic standard of Soil Association Certification Limited (OSA) that was established in 1973 in the United Kingdom. The standard means that the subject (cotton, for example) or fiber process has received its accreditation.
Recycled:	When a garment is of no further use to the first owner, it is recycled, after which it may have a second life as

	second-hand/vintage clothing [or as new].
Upcycled:	Upcycling is when discarded garments have their value increased through altering or customising. Similarly, it may be redeployed: altered, deconstructed or dyed, or customised and sold back into the clothing system.
Downcycling:	is clothing that is transformed into rags, blankets, or fiber stuffing, which is the exit from the supply-chain or fashion design production loop.
Sustainability:	The word, Sustainability is often used in a casual manner when, in fact, it could serve as a valuable umbrella term to identify proactive practices. The word appeared in the work on Our Common Future (Brundtland Report) in 1987 (World Commission on Environment and Development, 1987) and was defined as “development which meets the needs of the present without compromising the ability of future generations to meet their own needs”. A more contemporaneous interpretation of sustainability refers to both sustaining and contributing more than has been used.

Exhibit 3: Online Survey

Dear Participant,

I would like to thank you in advance for filling in this survey for my Master Thesis at Católica Lisbon School of Business and Economics. Your participation is very important for this research!

All data collected will remain anonymous and confidential. They will serve the purpose of this academic research only. There are no right or wrong answers, so please be as honest as possible.

The estimated duration of the survey is 5 minutes.

If you have any doubts or questions, please contact me via lagunchristiane@gmail.com.

Thank you very much in advance for your collaboration,

Do you have an Instagram or Facebook account?

Yes (1)

No (2)

The fashion industry is one of the world's most polluting industries, accounting for 8-10% of the world's carbon emissions and nearly 20% of wastewater. In order to address these incalculable environmental and social damage, many companies in the textile sector are adopting sustainable practices.

1. Have you purchased any fast-fashion brand product (e.g.: clothing, shoes, bags) in the last year?

Yes (1)

No (2)

I don't remember (3)

2. How frequently do you buy a fashion product?

Every week (1)

Once every two weeks (2)

Once a month (3)

Just once in a while (4)

3. What is your most frequently-purchased fast-fashion brand?

- H&M (1)
- Zara (2)
- Mango (3)
- SHEIN (4)
- NA-KD (5)
- Forever21 (6)
- C&A (7)
- Esprit (8)
- Boohoo (9)
- Urban Outfitters (10)
- Other (11) _____

4. Have you purchased one of the following brands before?

- H&M (1)
- Zara (2)
- SHEIN (3)
- NA-KD (4)
- None (5)

5 Now think about fast fashion brands like H&M, Zara, SHEIN, Mango and NA-KD and indicate to what extent do you agree or disagree with the following statements:

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I enjoy purchasing items from these brands. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I would recommend these brands. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think these brands and I share similar values (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I see these brands as sustainable and ethical. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know sustainable initiatives of these brands. (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

6 On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements:

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I am informed about environmental impacts in the fashion industry. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When there is a choice, I choose products with less environmental impacts if they are in the same price range. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have purchased sustainable clothes before. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not buy products from fashion brands that I know has a forced labor, child labor or any type of poor working conditions. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do not buy products from fashion brands that don't offer a sustainable option (e.g.: recycled clothing). (5)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that fast-fashion retailers do not adopt eco-friendly production practices. (6)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I think fast-fashion retailers generally do not state clearly on garment labels the material that was used.
(7)

I think fast-fashion retailers generally do not state clearly on garment labels the origin of the material that was used.
(8)

“Eco-friendly” collections are clothing lines created by fast fashion retailers that are supposed to be more sustainable than the rest of the brand’s products. These collections are usually related to term as ‘conscious’, ‘eco’, ‘committed’, ‘renew’, and other ‘green’ terms.

Do you know any eco-friendly collection? If yes, state the brand(s):

Did you know any of the following eco-friendly collections?

- Committed (Mango) (1)
- JoinLife (Zara) (2)
- Conscious (H&M) (3)
- MOTF (Shein) (4)
- Reborn (Na-kd's) (5)
- None (6)

On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements:

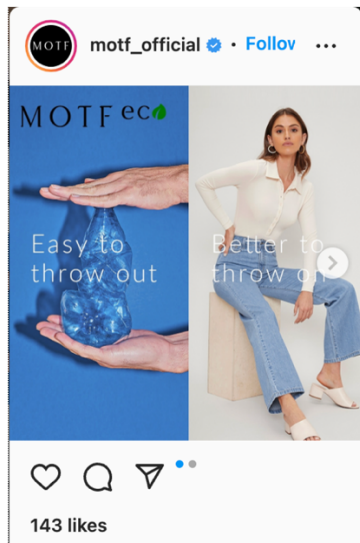
	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I think these collections are sustainable. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that consumption of eco-friendly alternatives clothing will prevent environmental damage. (2)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about the origin of the clothing I buy. (3)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I check the clothing's composition before purchasing to understand if they are sustainable. (4)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would purchase a product from one of these brands because of its sustainable collections. (5)

○ ○ ○ ○ ○

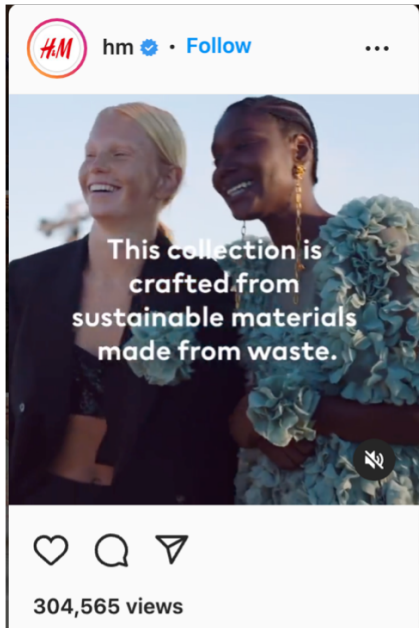
If a famous fast-fashion brand advertises sustainable fashion initiatives, I would be more likely to choose these brands. (6)

○ ○ ○ ○ ○



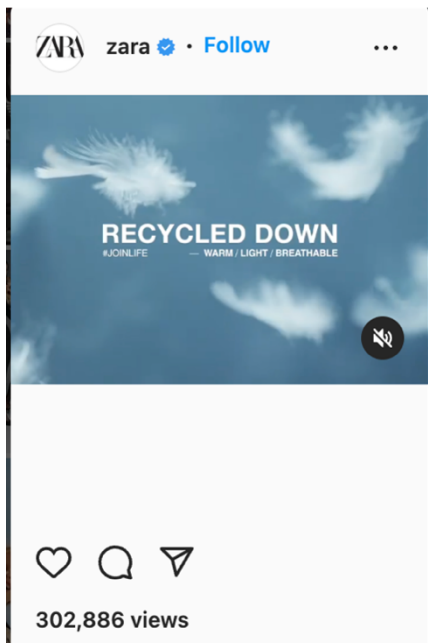
<https://www.instagram.com/p/CPvPBa6B2ka/>

Caption: “MOTF ECO Collection is made from recycled materials, which is found in water bottles, nylon fish nets and other plastic waste. Care for our planet wIth @motf_official #Ecofriendly #MyMOTF #MOTFECO #environmentday”



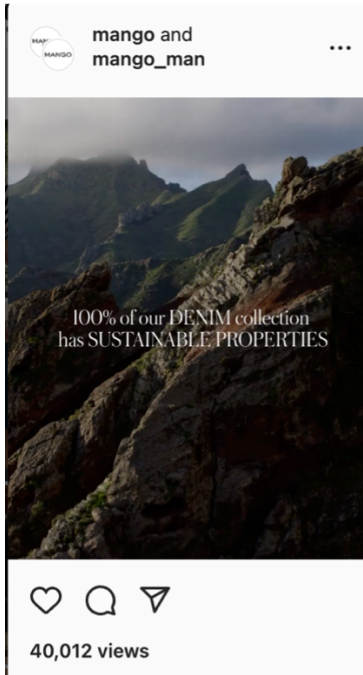
<https://www.instagram.com/p/CIIdzn3hKrQ/>

Caption: “Can waste be beautiful? #HMConsciousExclusive A/W20 is made from waste. The poetic collection launches online from 1 December. @zinniakumar @selmapaulsen_ @saptieu #HM”



<https://www.instagram.com/p/B5JGIPWCyQ2/>

Caption: “JOIN LIFE. RECYCLED DOWN. Recycling processes consume less water and energy, helping us take care of the environment #recycle #joinlife!”



https://www.instagram.com/p/CZ_372Bo1EJ/

Caption: MORE SUSTAINABLE DENIM • We continue moving forward to reduce our impact on the planet 🌍 Find out all the details about the denim collection with sustainable properties at mango.com #MangoCommitted

Based on the advertisement you have just seen, please rate your level of agreement with the following statements:

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
I perceive these advertisements as informative. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After seeing the posts, I believe that the brands are taking actions to become more sustainable. (9)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
After seeing the posts, I perceive the brands as more eco-friendly. (8)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I consider myself more informed about sustainability topics in fast fashion industry after seeing these posts. (2)

I think the provided information in the advertisement helps to better understand the necessity of purchasing sustainable clothing. (3)

I consider these advertisements relevant for my future potential purchase. (5)

I trust the information given by the brand. (6)

What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements.

	Strongly agree (1)	Somewhat agree (2)	Neither agree nor disagree (3)	Somewhat disagree (4)	Strongly disagree (5)
The Instagram posts captured my attention. (1)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The images provided in the post made me think more about sustainability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

<p>(7)</p> <p>I think that the communication used in the posts (caption and pictures) were clear and straight to the point. (2)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>I think that the advertisements use simple and transparent terms related to sustainability. (4)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>I feel that the posts could have more concrete information about the sustainable initiatives. (5)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
<p>I think the green communication used by the brands are broad and misleading. (6)</p>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q20 What is your gender?

- Male (1)
- Female (2)
- Non-binary / third gender (3)
- Prefer not to say (4)



Q21 What is your age?

- 18 – 24 years (1)
 - 25 – 34 years (2)
 - 35 – 44 years (3)
 - 45 – 54 years (4)
 - 55 – 64 years (5)
 - 65 years and over (6)
-

Q22 In which country do you currently reside?

- Germany (1)
 - Austria (2)
 - Italy (3)
 - France (4)
 - Portugal (5)
 - Brazil (6)
 - Other (7) _____
-

Q23 What is the highest level of education you have completed?

- High School (1)
- Bachelor's degree (2)
- Master's Degree (3)
- Doctoral Degree (PhD) (4)
- Other (5)

Q24 What is your current occupation?

- Student (1)
 - Employed (2)
 - Self-Employed (3)
 - Unemployed (4)
 - Retired (5)
 - Other (6)
-

Q25 What is your monthly net income?

- Less than 1000€ (1)
- 1001€ - 2000€ (2)
- 2001€ - 3000€ (3)
- 3001€ - 4000€ (4)
- More than 4000€ (5)
- Don't feel comfortable answering (6)

Thank you for your time spent taking this survey! Your response has been recorded.

Exhibit 4: Demographics and SPSS outputs (ANOVA)

What is the highest level of education you have completed?

#	Answer	%	Count
1	High School	12.23%	23
2	Bachelor's degree	46.28%	87
3	Master's Degree	36.70%	69
4	Doctoral Degree (PhD)	3.19%	6
5	Other	1.60%	3
	Total	100%	188

What is your current occupation?

#	Answer	%	Count
1	Student	40.43%	76
2	Employed	48.94%	92
3	Self-Employed	6.38%	12
4	Unemployed	2.13%	4
5	Retired	1.60%	3
6	Other	0.53%	1
	Total	100%	188

What is your monthly net income?

#	Answer	%	Count
1	Less than 1000€	34.57%	65
2	1001€ - 2000€	22.34%	42
3	2001€ - 3000€	18.62%	35
4	3001€ - 4000€	5.32%	10
5	More than 4000€	7.98%	15
6	Don't feel comfortable answering	11.17%	21
	Total	100%	188

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – I perceive these advertisements as informative.	Between Groups	44.589	2	22.294	18.929	<.001
	Within Groups	217.895	185	1.178		
	Total	262.484	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – After seeing the posts, I believe that the brands are taking actions to become more sustainable.	Between Groups	21.147	2	10.573	8.465	<.001
	Within Groups	231.087	185	1.249		
	Total	252.234	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – After seeing the posts, I perceive the brands as more eco-friendly.	Between Groups	47.509	2	23.755	19.136	<.001
	Within Groups	229.656	185	1.241		
	Total	277.165	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – I consider myself more informed about sustainability topics in fast fashion industry after seeing these posts.	Between Groups	75.927	2	37.964	26.106	<.001
	Within Groups	269.030	185	1.454		
	Total	344.957	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – I think the provided information in the advertisement helps to better understand the necessity of purchasing sustainable clothing.	Between Groups	47.079	2	23.539	15.051	<.001
	Within Groups	289.326	185	1.564		
	Total	336.404	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – I consider these advertisements relevant for my future potential purchase.	Between Groups	27.924	2	13.962	9.562	<.001
	Within Groups	270.134	185	1.460		
	Total	298.059	187			
Based on the advertisement you have just seen, please rate your level of agreement with the following statements: – I trust the information given by the brand.	Between Groups	52.445	2	26.222	18.875	<.001
	Within Groups	257.018	185	1.389		
	Total	309.463	187			

What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – The Instagram posts captured my attention.	Between Groups	23.635	2	11.817	9.376	<.001
	Within Groups	233.174	185	1.260		
	Total	256.809	187			
What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – The images provided in the post made me think more about sustainability.	Between Groups	12.780	2	6.390	5.942	.003
	Within Groups	198.938	185	1.075		
	Total	211.718	187			
What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – I think that the communication used in the posts (caption and pictures) were clear and straight to the point.	Between Groups	19.893	2	9.947	8.661	<.001
	Within Groups	212.463	185	1.148		
	Total	232.356	187			
What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – I think that the advertisements use simple and transparent terms related to sustainability.	Between Groups	24.353	2	12.176	9.500	<.001
	Within Groups	237.110	185	1.282		
	Total	261.463	187			
What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – I feel that the posts could have more concrete information about the sustainable initiatives.	Between Groups	7.930	2	3.965	4.740	.010
	Within Groups	154.772	185	.837		
	Total	162.702	187			
What is your opinion on the advertising? On a scale from 1 (strongly disagree) to 5 (strongly agree), please indicate to what extent do you agree or disagree with the following statements. – I think the green communication used by the brands are broad and misleading.	Between Groups	6.301	2	3.151	2.652	.073
	Within Groups	219.757	185	1.188		
	Total	226.059	187			