

UNIVERSIDADE CATÓLICA PORTUGUESA

Sustainability and Gender:

Are sustainable brands inclusive of men?

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Católica Porto Business School May, 2022



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Final Dissertation presented to Universidade Católica Portuguesa to obtain the Master's Degree in Marketing

by

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Católica Porto Business School May, 2022

Acknowledgments

I dedicate this investigation to my mother, who has been with me through all the hardships of life and who has shown me love and support beyond measure.

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Abstract

Environmental sustainability has long been on the top of mind of consumers

and brands. Besides creating a safer planet and ensuring a cleaner environment,

sustainable practices have become an asset for marketers and advertisers across

the globe to develop higher brand equity and to compete for the attention of the

most sustainable customers. However, most of the sustainable fashion and

apparel brands are both owned by women and marketed to the female

population. The literature has tried to gain knowledge on the exclusion of men

through the consideration of personality and core socialization differences

between the genders. New studies have arisen proposing new perspectives,

namely a general association of sustainability and femininity. This study explores

that association and indicates that sustainability may, indeed, affect consumers'

perceptions of masculine brands which embark on the sustainability train. This

research also investigates how sustainability practices impact consumer-brand

gender congruence and, thereby, attitude and behavior towards the brand.

No. of words: 7136

Keywords: brand gender; environmental sustainability; gender identity

differences; gender congruence; brand attitude; purchase intention

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Resumo

A sustentabilidade ambiental está cada vez mais no pensamento coletivo dos consumidores e das marcas. Para além da intenção de criar um planeta mais seguro e garantir que o ambiente se torna mais limpo, as práticas sustentáveis tornaram-se um importante ativo para os marketers e publicitários por todo o mundo, sendo essencial para a criação de brand equity e para ganharem a competição pela atenção de consumidores cada vez mais responsáveis. Todavia, a maioria das marcas sustentáveis na indústria da moda são detidas por mulheres e direcionadas para mulheres. A literatura tem procurado compreender a exclusão da população masculina através da consideração das diferenças de personalidade e da socialização de género. Novos estudos sugerem outras possibilidades, nomeadamente, uma associação geral e nuclear entre a sustentabilidade e a feminilidade. Este estudo explora esta conexão e mostra como, de facto, a sustentabilidade pode afetar a perceção do consumidor quanto às marcas tradicionalmente masculinas que embarcam numa jornada para se atualizarem e se tornarem mais sustentáveis. Adicionalmente, este estudo investiga como as práticas sustentáveis podem afetar a congruência de género entre a marca e os consumidores e, assim, a atitude e o comportamento perante a marca.

Número de palavras: 7136

Palavras-chave: género da marca; sustentabilidade ambiental; diferenças na identidade de género; congruência de género; atitude para com a marca; intenção

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Chapter 1

Introduction

Within the context of the COVID-19 pandemic, the industry of fashion and apparel has suffered a terrible year in 2020, having registered losses in nearly three-quarters of the listed companies (Mckinsey & Company, 2020). The past years have seen an acceleration in the shifts of consumer behavior, either due to supply chain disruption or due to consumer trends. Some of these trends have accelerated with the advent of COVID-19: consumers embracing digital shopping and looking for more sustainable and ethical brands (Mckinsey & Company, 2020).

Fashion's impact on the environment has been a common public subject, with environmental activism increasing in younger generations and the expansion of demand for brands that are more transparent about their processes (Mckinsey & Company, 2020). Executives in the industry place digital (30% of respondents) and sustainability (10% of respondents) as the two top opportunities for the future (Mckinsey & Company, 2020). On the consumer side, as many as 57% of consumers have said that they made significant changes in their lifestyles intending to diminish their environmental impact. Adding to this, more than 60% of the respondents in other enquiries have stated they were making special efforts in recycling and purchasing products in environmentally friendly packaging (Granskog et al., 2020).

Consequently, sustainability has been top of mind for most consumers and brands (Lundblad & Davies, 2015), but the attitude-behavior gap - known as an inconsistency between what consumers report on their concerns regarding the environment and what sustainable efforts they make - has been a challenging

research area (Carrington et al., 2010; ElHaffar et al., 2020). Though ethical consumerism is on the rise, brands still have to understand what drives a consumer to actually buy green (Carrington et al., 2010). This is especially true for the male audience, since literature and practice show that men may avoid green behaviors to safeguard their gender identity because of a higher need in maintaining gender-role identity, which could be called into question with the common association between sustainability and femininity (Zelezny et al., 2000; Brough et al., 2016; Hunt, 2020).

Given this, the main purpose of this study is to understand if fashion and apparel brands may maintain a masculine profile while tackling the sustainable consumption trend. Additionally, we want to better understand how sustainability may affect brand gender perception and, thereby, influence consumer-brand gender congruence. This research also intends to guide brand managers across the industry in re-focusing their efforts on building green brand equity while not alienating the male population. And, on a different note, this study aims to complete the literature on fashion sustainability as most studies on the topic focus almost exclusively on female participants.

The present document is divided into five chapters. The first chapter comprises an introduction to the general themes of this Master's Thesis as well as its main research questions and objectives. Following this, there is an extensive literature review chapter dedicated to showcasing the current state of the art on brand gender, determinants of sustainable behaviors and the femininity associated with these. Afterward, the conceptual model and methodology are discussed in their own chapters, followed by an analysis of the results obtained after the data collection and respective hypothesis testing. Finally, the last chapter covers the study's main conclusion and dives in a discussion on theoretical and managerial implications. The work is finalized with a chapter dedicated to limitations and recommendations for future research.

Chapter 2 Theoretical Background

2.1. Brand Gender

Brand gender is a fundamental concept in this research. First of all, it is important to distinguish sex and gender: while sex is biologically assigned, gender is the result of continuous processes derived from social and cultural interaction, as well as psychological development (West & Zimmerman, 1987). As humans, we look to fulfill what is expected of the gender we identify with through situated, symbolic social interaction (West & Zimmerman, 1987). This study focuses mostly on gender and societal stereotypes related to it.

There is a frequent and general attempt in anthropomorphizing brands by making them animated or humanized through, for example, interactive and addressable communication, which drives consumers to commonly imbue human personality traits in a brand (Aaker, 1997). This process allows consumers to create human-like relationships with brands to facilitate interaction with the nonmaterial world, given that brands have no objective existence except for the assortment of perceptions in a consumer's mind (Fournier, 1998). Since common relationship patterns are defined along gendered lines, it is appropriate to think of a relationship with a brand in the same way, with consumers seizing brand personality traits to express and enhance their degree of masculinity or femininity (Fournier, 1998).

Naturally, a consumer's gender-role identity is a crucial component in self-definition. Even though there has been a change in the understanding of gender, now commonly seen as a spectrum instead of a binary construction, society still shapes conceptions on what is masculine or feminine. Socialization and gender

development allow for the formation of the concept of oneself as one of the infinite combinations of the two types of traits (Freimuth & Hornstein, 1982). This contributes to guiding the consumer towards specific products and brands that are gender-typed and match their self-identity, expressing varying degrees of masculinity or femininity through these choices (Dolich, 1969).

Relationships with brands also exist as a way of enabling this identity exploration, definition, and proclamation, allowing the consumer to express their concept of actual self, as well as their ideal and social selves through their brand choices (Sirgy, 1982; Fournier, 1998). Thus, consumers tend to transfer their gender perspectives to the brands they identify with, associating them with masculine and feminine personality attributes to enhance their gender self-concept. Ultimately, consumers can better express a vital dimension of their self-concept through the brands they identify with (Grohmann, 2009).

Initial studies on brand personality suggested that this concept should be measured along the dimensions of sincerity, excitement, competence, sophistication, and ruggedness, with the last two working as proxies for femininity and masculinity, respectively (Aaker, 1997). Recent studies show we may complement this scale with other gender dimensions within brand personality, distinct from sophistication and ruggedness (Grohmann, 2009). Studies on brand gender are largely based on Grohmann's (2009) gender personality scale for brands. The author mirrored the two-dimensional structure of masculinity and femininity supported by psychology literature, according to which a person possesses both masculine and feminine traits in varying degrees (treating both as completely independent instead of extremes in a spectrum), to create the Masculine Brand Personality (MBP) and Feminine Brand Personality (FBP) scale (Grohmann, 2009). The same study defines four different brand gender profiles: highly masculine or highly feminine brands (ranking high in MBP or FBP and low on the opposite gender), undifferentiated brands (ranking

low on both MBP and FBP), and androgynous brands (scoring high both on MBP and FBP).

Brand gender is especially relevant for brands selling products with a high symbolic value, such as those within the industry studied in this research, though it may also be important for utilitarian, or mixed product category brands (Grohmann, 2009). Congruence between brand personality and consumer's selfconcept regarding gender has been proved to positively influence affective, attitudinal, and behavioral consumer responses to the brand (Sirgy, 1982; Grohmann, 2009; Lieven et al., 2014). Indeed, positive brand-self-congruity is a key determinant of purchase intention, as consumers tend to buy brands to maintain or enhance a positive self-concept. Besides this, incongruence between brand and consumer gender can also affect purchase intention. This is the case of positive self-incongruity, when there is a positive perception of the product conflicting with a negative belief of the self, leading consumers towards products which would enhance traits of their ideal self (Sirgy, 1982). Therefore, consumers avoid purchasing products not congruent with their actual or ideal selves. In particular, this means a man either looking to affirm his identity as being more masculine or to enhancing his masculinity would not buy from a brand evaluated as being more feminine.

Some literature suggests that the historical division between feminine and masculine consumption is less relevant in the post-gender world we currently live in, however, there is still strong evidence that, despite trendy gender-bending consumption, gender remains central as a branding construct (Avery, 2012). Adding to this, studies often highlight how men are more sensitive to the need for self-expression and maintaining their gender identity in order to signal themselves as part of the more masculine group through their gender-congruent choices (Brough et al., 2016). For patriarchal cultures, feminine choices do not only represent high femininity, but also a lack of masculinity (Avery, 2012),

meaning using feminine brands carries a greater stigma for men than women using masculine brands.

2.2. Determinants of Eco-Conscious Behavior

Brand attitude and purchase intention have been commonly used as relevant variables across a variety of previous studies (Spears & Singh, 2004). Thus, researchers have examined the consistency between these to try to understand environmentally conscious consumer behavior (Lee & Holden, 1999). The same studies show attitude is better at explaining behaviors that come at a very low cost for the person, such as supporting regulatory measures (with 31% of variance explained by attitude only) (Lee & Holden, 1999). Moreover, studies show that despite the growth in consumers' concerns about climate change and environmental protection, consumers' behaviors are still not aligned with this attitude (Park & Lin, 2020). Factors such as the price, availability of products, the product's image and style are frequently shown as external determinants to ecoconscious behavior and, as such, commonly seen as a solution to explain this gap (Wiederhold & Martinez, 2018). However, one of the major problems for the attitude-behavior model could be in the fact that it fails to account that some behaviors are performed not only for the self but also for others (Lee & Holden, 1999). In the fashion industry, consumer behavior is highly prosocial with individuals resorting to visual cues as signals to provide and receive information from other people (Johnson et al., 2018). Sustainable behaviors themselves are equally prosocial and highly dependent on societal norms (Lee & Holden, 1999; Johnson et al., 2018). Given this, it is relevant to understand which other independent variables could explain consumer engagement in eco-friendly behavior besides attitude. Lee and Holden (1999) proposed distress and empathy

as possible predictors for an increase in personal eco-conscious consumer behavior, while other authors have highlighted the relevance of factors such as affect (Smith et al., 1994), faith in others (Berger & Corbin, 1992), demographics and culture (Chekima et al., 2016),

Considering consumer behavior as a function of social and personal norms and of awareness of consequences, eco-conscious behavior can either be altruistic or egoistic, originating from empathy to a cause or from the need to reduce distress by avoiding anticipated punishment (the judgment of peers, for example) or guilt (Batson, 1987). It is easy to see this in practice through the increase in the desirability of products that bring social prestige to their owners thanks to the "prosocialness" they project (Johnson et al., 2018). This applies to eco-friendly products since they should fit in the purpose of either reducing a negative impact or provoking a positive impact on the environment (Johnson et al., 2018). This is particularly interesting for the current study, since males should, most likely, show a conflicting relationship between signaling their belongingness to the male group and engaging in sustainable behaviors coherent with their pro-social self-concept and age cohort (with Generations Y and below being highly pro-social) (Johnson et al., 2018), culture (Wiederhold & Martinez, 2018), and the need for status (Brough, et al., 2016; Johnson, et al. 2018).

2.3. Gendered Sustainability

One of the major issues sustainability defenders have to face originates with the eco gender gap between those who identify as high in masculinity and those who, in turn, classify as higher on femininity (Zelezny et al., 2000; Brough et al., 2016). It is common to see brands marketing their products differently according to the sex and/or gender they target (Meyers-Levy & Loken, 2014). These

practices have often sparked interesting and vigorous public debate but have not been studied intensely in marketing research (Meyers-Levy & Loken, 2014).

Most of the literature so far has been using personality traits as the basis to explain this eco gender gap (Brough et al., 2016), and some propositions seem to be relevant when addressing this problem, such as the ones that highlight that males are more self-oriented and females more other-oriented (Zelezny et al., 2000). Besides this, females seem to be more responsive to negative stimuli than males, being, as well, more sensitive to environmental cues and engaging in environmentally-conscious actions (Zelezny et al., 2000). Adding to this, literature has also explored socialization theory as an explanation for the ecogender gap, suggesting that the process of socialization can explain differences between the behavior of females and males, as individuals tend to shape their behavior according to cultural gender expectations and, thus, women tend to be more nurturing, caregiving and cooperative (Zelezny et al., 2000).

At this respect, it is relevant to highlight that recent studies analyzed possible underlying biases between sustainable practices and femininity, and emphasized that these often unconscious associations create conflicts within members of the male group due to their higher need of maintaining self-identity in gender roles (Brough et al., 2016). What was once understood as a consequence of a difference in moral sensitivity - that is awareness of how our actions may affect others - and in which women score higher (You et al., 2011), may be connected to the association we make between eco-friendly actions and traits which are stereotypically feminine. This means that traditional studies on gender demonstrating that men are less empathic have become redundant since it is not only the empathy or community orientation of the person that explains the variance in engagement in environmentally friendly activities but mostly their inherent biases regarding sustainability.

The association between femininity and greenness exists both among men and women, with both judging those who engage in green behaviors as being more feminine. Studies have also shown this association affects the perception of the self: people feel more feminine when engaging in eco-friendly behaviors (Brough et al., 2016). It is possible to see how this underlying bias remains in advertising and branding since most of the eco-friendly brands and campaigns use font styles and colors that are much more feminine (Brough et al. 2016). This makes sense since most of them target women in traditionally feminine areas, namely in products we can find in a household's groceries list, such as cleaning and laundry supplies, food preparation, and hygiene (Brough et al., 2016). However, these cues can be seen as threatening to the gender-identity maintenance of men and, thus, provoke their withdrawal from environmentally friendly purchases and behaviors. This, naturally, depends on each individual's need to maintain their gender identity and on how intensely these cues threaten or enhance this identity (Brough et al., 2016). Nevertheless, prior studies have proven that men tend to be more careful in choosing behaviors congruent with their gender identity since incongruences will be much more penalized than when women engage in masculine behaviors (Avery, 2012).

Chapter 3

Conceptual Model and Hypotheses

3.1. Gendered Sustainability in Branding

Previous studies that explored the green-feminine stereotype regarding sustainable practices suggested that there is a general underlying bias connecting eco-friendly behavior and femininity (Brough et al., 2016). In addition, practice shows women are keener in developing sustainable behaviors, and this is easily seen when looking at female leadership in companies. Indeed, in these companies environmental investment is significantly higher and brings better results in reducing negative environmental externalities (Jiang & Akbar, 2018), and environmental litigations are less prevalent (Liu, 2018).

The fashion and apparel industry is in itself viewed as part of the female domain since women are both the majority of makers and buyers (UNECE, 2018). When exploring the fashion eco brands landscape, we see a majority of businesses owned and led by women (Charpail, 2020) and males tend to escape spaces that are dominated by women (Torre, 2018). Therefore, sustainable fashion is seen primarily as a women's issue (Siegle, 2009), and brands trying to expand their portfolio into environmentally-friendly solutions will likely be seen as more feminine.

Considering the findings of previous studies, we establish our first hypothesis:

H1: A brand with sustainable practices should be perceived as more feminine.

3.2. Sustainability and Gender Congruence

Congruence between brand personality traits and characteristics attributed to the consumer's actual or ideal self has been shown to improve preference for the brand, both attitudinally and behaviorally (Sirgy, 1982; Aaker, 1997; Grohmann, 2009; Lieven et al., 2014).

As stated earlier, consumers tend to avoid products not congruent with their actual or ideal selves (Sirgy, 1982). Thus, a man looking to affirm his identity as being more masculine or to enhancing his masculinity would avoid a brand evaluated as being more feminine. As previous studies have shown, males are careful in choosing behaviors or cues that could threaten their gender identity (Avery, 2012). Because gender identity incongruences will be much more penalized for males engaging in feminine behaviors, they tend to find behaviors and attitudes congruent with their gender identity, improving the actual and/or the ideal self (Avery, 2012). Thus, male consumers are expected to withdraw from environmentally friendly purchases and behaviors (Brough et al., 2016), as sustainability should affect gender congruence in a negative direction for them.

On the other hand, prior studies suggest that the green-femininity association shapes both the perception of others and self-perception, with both males and females feeling more feminine when recalling green behaviors they engaged in (Brough et al., 2016), which would represent an increase in congruity. This is a turbulent terrain, since research provides evidence that consumers have difficulty in distinguishing their feelings about a product and their feelings regarding how they think others will view them (Locander and Spivey, 1978; Sirgy, 1982). Although there is no general agreement in the scarce literature regarding the impact of sustainability practices on male consumer-brand gender congruence, we assume that the perception of sustainability should result in lower gender congruence for males.

This allows us to formulate the following hypotheses:

H2: The sustainable brand practices should originate higher gender incongruence for male consumers.

3.3. Gender Congruence, Brand Attitude and Purchase Intention

According to previous studies, brand gender significantly improves consumers' evaluation of brand equity (Lieven et al., 2014). Moreover, research further shows that when brand gender is congruent with consumers' gender, consumers have a more favorable attitude towards the brand (Sirgy, 1982; Grohmann, 2009). Hence, we assume that consumer-brand gender incongruence will have a negative effect on consumer brand attitude, and formulate the following hypothesis:

H3: The higher the consumer-brand gender incongruence, the lower will be consumer brand attitude.

All types of congruity between self-image and product-image influence purchase motivations (Sirgy, 1982). Since gender is part of these images, there is evidence that gender incongruence should negatively impact purchase intention (Grohmann, 2009). And, so, we formulate the following hypothesis:

H4: The higher the consumer-brand gender incongruence, the lower will be consumer purchase intention.

Having considered the theoretical background previously disclosed in the former chapter and the hypotheses aforementioned, the proposed research model is presented in figure 1.

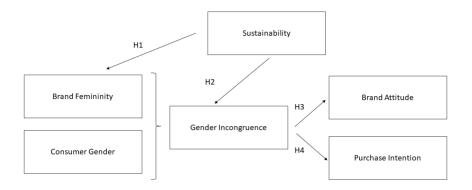


Figure 1: Proposed Research Model

Chapter 4

Methodology

4.1. Research Approach

This study is exploratory, as it seeks to understand connections between variables that have scarcely been studied before (Babbie, 2021). However, it aims to explain the aforementioned phenomenon through cause-effect relationships translated into explanatory and outcome variables, as well as hypotheses (Babbie, 2021).

Because of the goals of this work, a quantitative approach has been preferred to a qualitative one, favoring the conversion of data into a numerical form and subjecting it to a statistical analysis (Babbie, 2021). Thus, to accomplish the research purpose, we conducted surveys to obtain the necessary data. Surveys allow to produce quantitative statistics from the sample that could be used to study the population (Fowler, 2013). The questionnaires employed to collect data were structured, composed only of standardized and close-ended questions.

The first concern of this study was to identify brands that would fit in the masculine brand personality profile. Thus, a pre-test was conducted to understand the gender perceptions of well-known fashion brands. Afterwards, a questionnaire was elaborated to gather the crucial data that would enable the testing of the hypotheses.

The different versions of the questionnaire were self-administered on an online platform. We collected answers from a convenience sample, since the survey was shared through social media, friends and family, and through snowball sampling because respondents were asked to share the questionnaire with other people who might fulfill the conditions to participate in the study.

4.1.1. Pre-test

A pre-test is considered a relevant procedure to identify possible problems and inaccuracies early in the research process (Gershowitz, 1995). In this study, it was fundamental to do a pre-test to ensure that the brands included as representatives of masculine brands are actually perceived as masculine and that respondents are familiar enough with the brands to develop brand gender associations.

This pre-test was designed to test brand gender perception of a sample of well-known brands with the intention to find which of these fit the masculinity criteria and could be further used in the research. Brands such as Levis, Adidas, Nike and Hugo Boss have been proven to be higher on masculinity then in femininity (Lieven et al., 2014). However, there have been no recent studies to fully support these conclusions and sports brands have been increasingly reinforcing their positioning within the feminine public (Jiménez Sánchez et al., 2021). This means Adidas and Nike could be compromised in their masculinity score, and so, they were excluded from the pretest. Levis remained part of this study and was accompanied by three brands which have a strong menswear heritage and rather similar price ranges: Gant (*GANT Heritage*, 2022), Ralph Lauren (*About Ralph Lauren - The World of Ralph Lauren Timeline*, 2021) and Fred Perry (*Community Our Company* | *Fred Perry UK*, 2020).

To reduce time of completion, instead of resorting to Grohmann's (2009) brand gender scale, participants were asked to classify the gender of each of the four brands by choosing one of four sentences to complete the initial statement "if this brand was a person, it would be...". The possible answers were "A man", "A woman", "Both a man and a woman" or "Neither a man, nor a woman".

In order to confirm there were no biases related to a possible lack of knowledge of the brands, the respondents were also asked to evaluate their familiarity with the brands through a semantic differential scale, with 1 being "not familiar" and 5 being "extremely familiar".

Through social media channels and direct request, a total of 91 answers to the online survey were gathered (35.6% male and 64.5% female). Fred Perry was more frequently identified as masculine, followed by Ralph Lauren (see table 1) and none of the four brands showcased a poor result in familiarity as per table 1. Thus, Fred Perry and Ralph Lauren were the brands chosen for the final test.

	A man	A woman	Both a man and a	Neither a man nor a	Familiarity (average)
			woman	woman	. 0,
Levis	26 (28,57%)	9 (9,89%)	51 (56,04%)	5 (5,49%)	3,93
Ralph	49 (53,85%)	13 (14,29%)	25 (27,47%)	4 (4,40%)	3,49
Lauren	,		,	,	·
Fred Perry	57 (62,64%)	5 (5,49%)	22 (24,18%)	7 (7,69%)	2,95
Gant	47 (51,65%)	7 (7,69%)	30 (32,97%)	7 (7,69%)	3,27

Table 1: Pre-test results

4.1.2. Stimuli and procedure

As the pre-test showed, Fred Perry and Ralph Lauren were more often classified as masculine out of the four brands considered, hence these two brands were chosen for the main study.

We created two scenarios for each of the brands (seen in figures 2, 3, 4 and 5): one where there was no manipulation and participants were shown an image retrieved from the company's website (figures 3 and 5), and another where a fake sustainable campaign was shown to respondents (figures 2 and 4). The association between greenness and femininity is perpetuated by advertising, with eco-campaigns frequently using font styles and color tones that are more feminine (Brough et al., 2016).



Figure 2: Ralph Lauren eco campaign



Figure 3: Ralph Lauren normal campaign



Figure 4: Fred Perry eco campaign



Figure 5: Fred Perry normal campaign

Advertising is extremely intertextual in nature, employing lighting, color, and nonverbal and social role cues (such as facial expression, body stance, and active/passive subjects) (Kervin, 1990). Men are often represented with an assertive pose and direct gaze at the viewer, as seen in Ralph Lauren's campaign (see figure 3), especially when they are advertised in a scenario that could be potentially demeaning (Kervin, 1990). Camera angles are even used from a lower angle to place the reader in the admirer position (Kervin, 1990), which is clearly seen in the Fred Perry example (see figure 5). Therefore, we can conclude the images and models used in the campaigns showcase the expected masculinity.

The eco-campaigns featured claims that were spread across the brands' websites, both being process-oriented in showing how their internal technology

is helping achieve a more sustainable product, the second most common type of environmental advertising claim (Leonidou et al., 2011). Besides this, terms such as recyclable, environmentally friendly, and variations like recycled and responsible are popular in green advertisements (D'Souza & Taghian, 2005). Overall, copy in this context is characterized by declarative statements and a rational approach (Leonidou et al., 2011) and that was observed in the manipulation by using objective declarations.

Each of the manipulations was obtained by sourcing images and text from the official websites of the two brands (see figures 6 and 7), ensuring brand image and communication remained intact.





Figure 6: Elements from Ralph Lauren's website used in the creation of the stimuli, Ralph Lauren (2022)

Recycled Polyester Threads

The sewing threads used for buttons and seams is made from 100% recycled polyester, made from PET bottles.

The Fred Perry Shirt: Designed Responsibly

Figure 7: Elements from Fred Perry's website used in the creation of the stimuli, Fred Perry (2022)

4.1.3. Measures

Both consumer's gender and perceived brand gender are independent variables. In order to ensure a valid and safe relationship between the two, they have both been measured using the MBP/FBP scale developed by Grohmann (2009). Though intended to evaluate brands, this scale has been shown to get results similar to the BSRI scale, which computes human gender as a mix of femininity and masculinity (Bem, 1974) and, so, it is safe to use it to assess the consumer's gender (Grohmann, 2009). This scale defines certain brand personality traits as being more feminine or more masculine as per table 2.

Measured through a 7 point Likert-type scale, where 1 - completely disagree and 7 - completely agree, the average indicates how close the subject is to masculinity and to femininity.

Feminine Brand Personality	
Expresses tender feelings	
Fragile	
Graceful	
Sensitive	
Sweet	
Tender	

Table 2 – MBP/FBP scale, adapted from Grohmann, 2009

Although not necessarily part of the conceptual model, this study has also approached brand familiarity in order to validate respondent's answers by measuring the knowledge they have of each brand. This allows the researcher to understand if the answers could be influenced by a lack of previous knowledge about the brand. To measure brand familiarity, we used a 7 point Likert-type scale (1 - completely disagree and 7 - completely agree) which evaluates agreement with the three statements in table 3 (Simonin & Ruth, 1998).

Brand Familiarity		
I am very familiar with the brand.		
I recognize the brand very well.		
I have heard a lot about the brand.		

Table 3 – Brand Familiarity scale, adapted from Simonin and Ruth, 1998

The first dependent variable studied is brand attitude. To evaluate this variable, we used a 7 point Likert-type scale (1 - completely disagree and 7 - completely agree) including the items most often used in the literature to measure brand attitude (e.g. Grossmann & Till, 1998; Simonin and Ruth, 1998; Spears & Singh, 2004) (see Table 4).

	Brand Attitude	
	This brand is good.	
This brand is high quality.		

I like this brand very much.							
This is a pleasant brand.							
This is an interesting brand.							

Table 4 – Brand Attitude scale, adapted from Simonin and Ruth, 1998

The remainder dependent variable is purchase intention or willingness to buy. This variable is routinely used in consumer research studies (Kalwani & Silk, 1982). Prior research on willingness to buy was purified to achieve a reliable scale to evaluate willingness to buy (Dodds et al., 1991), from which three relevant sentences were chosen as per table 5. Respondents were presented with a 7 point Likert scale, in which they have to attribute a number (1 - completely disagree and 7 - completely agree) in regards to each of the three sentences.

Purchase Intention								
It is very likely that I will buy from this brand.								
It is highly probable that I would buy from this brand.								
I am willing to buy from this brand.								

Table 5 – Purchase Intention scale, adapted from Dodds et al., 1991

4.1.4. Questionnaire

Data was gathered through an online survey. This questionnaire was distributed in English and Portuguese, the two most common idioms spoken by the expected sample. After choosing which language would suit them better, participants were randomly assigned to one of four different groups, each with one of the campaigns mentioned in sub-chapter 4.1.2., figures 2, 3, 4 and 5.

After looking at the campaign, respondents were asked to evaluate brand familiarity through the provided scale (see table 3) and, then, assess brand gender by stating their agreement with Grohmann's statements (as per table 2). Finally, the participants were asked about their brand attitude and purchase intentions according to the provided scales (in table 4 and 5, respectively).

In a different section of the questionnaire, common to all four scenarios, participants were asked to answer some questions regarding themselves, starting with their assessment of their own gender through Grohmann's scale (see table 3). Then, a couple of demographic questions were posed to facilitate the characterization of the sample by age, biological sex, education level, and nationality.

Chapter 5

Results

5.1. Preliminary Analysis

5.1.1. Sample Sociodemographic Characterization

This investigation's main questionnaire was responded by a total of 173 participants (100 respondents are female – 57.8%, as per figure 8), with ages ranging from under 18 to over 74 (see distribution in figure 9). The age ranges of 18-24 (48%) and 25-34 (28.9%) outweigh the remainder age scopes, which is expected since 84% of adults within the 18-29 range use social media (Auxier & Anderson, 2021) and snowball sampling means young people would tend to share the study with close aged peers.

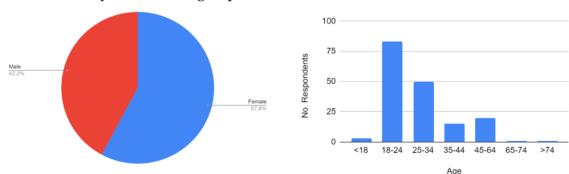


Figure 8: Sex of respondents

Figure 9: Age of respondents

Regarding education level (see figure 10), most respondents have completed a Bachelor's (47.4%), followed by those with High School education (24.9%), who have a similar weight to those with either a Post-Graduate or a Master's Degree (22%).

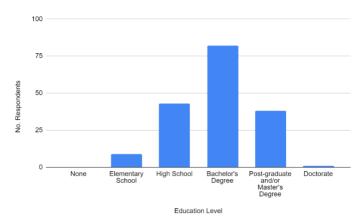


Figure 10: Education Level of respondents

Finally, there is a clear majority of Portuguese nationals (94.8%), followed by Brazilians (2.3%) and other nationalities representing 2.9% of respondents in total (American, Spanish, Italian, Norwegian and Kazakh) as per figure 11.

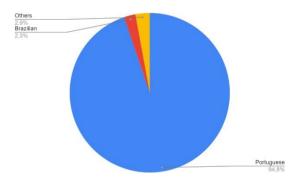


Figure 11: Nationality of respondents

Furthermore, because respondents were randomly divided into 4 different survey groups, a detailed demographic analysis of these by age and sex can be found in table 6.

		Age							Sex	
	n	<18	18-24	25-34	35-44	45-64	65-74	>74	Female	Male
Ralph										
Lauren	45	0%	42,2%	37,8%	11,1%	8,9%	0%	0%	55,6%	44,4%
Normal										
Ralph										
Lauren	40	5%	42,5%	25%	10%	15%	0%	2,5%	47,5%	52,5%
Eco										
Fred Perry Normal	39	0%	51,3%	30,7%	5,1%	12,8%	0%	0%	56,41%	43,59%

Fred Perry	49	2%	53.1%	24.5%	8.2%	10.2%	2%	0%	69,39%	30.61%
Eco	47	270	33,170	24,570	0,2 /0	10,270	270	0 70	07,0770	30,0170

Table 6 - Respondents' Sex and Age by survey group

5.1.2. Outliers

To ensure data quality, an outlier univariate analysis was executed, examining the distribution of responses to a single variable at a time to find possible extreme values. Each variable was firstly observed in a box plot display and none showcased significant outliers. This was later confirmed through a standardization of each variable's results into Z-scores. We considered the range [-3,3], since the literature has deemed the absolute value of 3 as the standard to identify outliers (Tabachnick & Fidell, 2013), and none of the standardized Z-scores were outside this interval. Therefore, we concluded that there were no univariate outliers.

5.1.2. Data reliability

Even though the scales in this work were adopted from relevant literature with no significant changes, there is still the need to validate the internal consistency of these. The Coefficient (or Cronbach's) Alpha is a statistic often used to assess the reliability of scales and can be found for the scales in this study in table 7.

	No. of items	Cronbach's α	Classification
Brand Gender	12	,853	Good
Consumer Gender	12	,875	Good
Brand Attitude	5	,943	Excellent
Purchase Intention	3	,943	Excellent
Brand Familiarity	3	,917	Excellent

Table 7 - Cronbach's alpha for the scales used

The higher the value obtained for the Cronbach's Alpha the greater is the internal consistency of the scale (Hill & Hill, 2012). Hill & Hill (2012) have also classified the statistic according to its quality as Table 8 shows.

Cronbach's α	<0,6	[0.6-0.7[[0.7-0.8[[0.8-0.9]	>0.9
Classification	Unacceptable	Bad	Acceptable	Good	Excellent

Table 8 - Cronbach's alpha classified, adapted from Hill & Hill, 2012.

All dimensions calculated demonstrate a level of internal consistency above 0.8, therefore, the scales may be used with confidence.

Following this process, the data was computed to achieve total scores for the presented variables by averaging the results obtained from the items composing each scale described in chapter 4. Special attention was taken when analyzing Grohmann's (2009) gender scale (both for the brand and the consumer): the value that interests us corresponds to the difference in the average of masculine and feminine traits for each brand and each individual. When there is a positive value, the gender is perceived as masculine whereas when this value is negative, the perceived gender is feminine (Grohmann, 2009). Additionally, our conceptual model contains gender incongruence as a variable and to measure this, the Euclidian distance between brand's and consumer's masculine and feminine gender traits was used, similarly to Lieven et. al (2015). The higher this value is, the more dissimilar these traits are and, so, the higher is gender incongruence between both parties.

5.1.3. Validity Check and Descriptive Statistics

As a method of checking certain conditions for the validity of the study, respondents' previous knowledge of the brands was evaluated through a brand familiarity scale in order to understand if there were large differences between Ralph Lauren (μ_{RL} =5.18) and Fred Perry (μ_{FP} =4.807). A t-test to compare means assured us that these differences would not be impactful (t=1.378, p=0.170) in the

study. Furthermore, to validate the study, respondents had to perceive the chosen brands as being more masculine, which stands true when brand gender corresponds to a positive number (μ_{RL} =0.451 and μ_{FP} =0.184) and was achieved in this study (t_{RL} =3.190, p_{RL} <0.001 and t_{FP} =1.289, p_{FP} <0.05).

Looking at table 9 it is possible to get a general idea of the scores given to each variable studied and to see that both brands had similar mean values for the majority of the variables.

		n	Min.	Max.	Mean	Std. Error
	Brand Femininity	85	1	5,667	3,247	1,144
	Brand Gender	85	-3,167	3,834	,451	1,303
	Consumer Gender	85	-3,167	3,067	-,101	1,316
Ralph Lauren	Gender Incongruence	85	,195	4,697	1,83	1,007
Lauren	Brand Attitude	85	1,6	7	4,979	1,367
	Purchase intention	85	1	7	4,847	1,705
	Familiarity	85	1	7	5,18	1,725
	Brand Femininity	88	1	6	3,068	1,133
	Brand Gender	88	-3,167	4	,184	1,337
	Consumer Gender	88	-3,833	3,166	-,379	1,323
Fred Perry	Gender Incongruence	88	,373	4,879	2,138	1,115
	Brand Attitude	88	2	7	4,759	1,404
	Purchase intention	88	1	7	4,871	1,649
	Familiarity	88	1	7	4,807	1,835

Table 9 – Descriptive Statistics, adapted from SPSS output

5.2. Hypothesis testing

To evaluate the first and second hypotheses, we conducted t-tests with independent samples. Respondents were divided into groups according to which survey they had answered (either 1 for the normal campaign or 2 for the eco

campaign). Statistical significance was achieved when p<0.05 and when possible, the tests were considered unilateral.

Before proceeding to comparing the means between groups within each brand, the homogeneity of variance assumption was tested using Levene's Test and every variable scored p>0.05 as shown in table 10, except for gender incongruence in the male group, meaning an adjusted t-statistic had to be considered for this variable.

	Levene Statistic	p
Brand femininity	,018	,892
Ralph Lauren – brand femininity	,268	,606
Fred Perry – brand femininity	,018	,893
Gender Incongruence	,303	,583
Gender Incongruence – female	,016	,901
Gender Incongruence – male	6,937	,010**
Gender Incongruence – Ralph Lauren	1,998	,162
Gender Incongruence – Fred Perry	,036	,850

Table 10 – Levene's test for homogeneity of variances, adapted from SPSS output

Results from the t-tests are presented further in tables 11 and 12, showing there is evidence to support H1, that is, the eco campaign encourages a more feminine perception of the brands (t=-1.992 and p<0.05). Both brands show indication that brand femininity is, on average, higher for the respondents exposed to the eco campaign ($\mu_{RL: ECO}$ =3.122< $\mu_{RL: NORMAL}$ =3.388 and $\mu_{FP: ECO}$ =2.816< $\mu_{FP: NORMAL}$ =3.269), even though the difference is only statistically significant for Fred Perry (p<0.05).

Brand Femininity	n	Mean	SD	t	df	р	Decision
Normal	84	2,980	1,149	-1,992	171	,024*	Reject H0
Eco	89	3,322	1,109				

Table 11 – T-test for brand feminity, adapted from SPSS output

		n	Mean	SD	t	df	p	Decision
Ralph Lauren	Normal	45	3,122	1,154	-1,068	83	,144	Not Reject
	Eco	40	3,388	1,129				
Fred Perry	Normal	39	2,816	1,136	-1,889	86	,031*	Reject H0
	Eco	49	3,269	1,100				

Table 12 - T-test for brand feminity separated by brand, adapted from SPSS output

Table 13 shows the t-tests for gender incongruence, showing there is statistical significance between the averages of the groups exposed to the environmental sustainable campaign and the ones who were exposed to the regular campaign (t=1.863 and p<0.05). However, the t-test value indicates the opposite direction of H2, meaning sustainable practices would diminish gender incongruence between brand and consumer. Both brands follow the same direction (μ_{RLE} ECO=1.583< μ_{RLE} NORMAL=2.141 and μ_{FPE} ECO=2.247< μ_{FPE} NORMAL=2.050), though only Ralph Lauren achieves statistical significance (p<0.05) as shown in table 14. Additionally, table 15 shows the division of the sample per consumer sex, and it is possible to see that gender incongruence is only statistically significant for males (t=3.015, p<0.05).

Gender	n	Mean	SD	t	df	р	Decision
Incongruence							
Normal	84	2,142	1,072	1,863	171	0,032*	Reject H0
Eco	89	1,840	1,056				

Table 13 - T-test for gender incongruence, adapted from SPSS output

		n	Mean	SD	t	df	p	Decision
Ralph Lauren	Normal	45	2,049	1,067	2,181	83	,016*	Reject H0
	Eco	40	1,583	,884				
Fred Perry	Normal	49	2,247	1,082	,823	86	,206	Not Reject
	Eco	39	2,050	1,143				

Table 14 - T-test for gender incongruence separated by brand, adapted from SPSS output

		n	Mean	SD	t	df	p	Decision
Female	Normal	47	2,306	1,155	,629	98	,265	Not Reject
	Eco	53	2,160	1,161				
Male	Normal	37	1,932	,931	3,015	71	,002*	Reject H0
	Eco	36	1,369	,644				

Table 15 - T-test for gender incongruence separated by consumer sex, adapted from SPSS output

To better understand possible results leading to a direction opposite to what was hypothesized, table 16 and table 17 were added to showcase t-tests for the difference in means for each component of gender incongruence, with brand femininity being the only statistically significant (μ_{brand femininity: NORMAL=3.14<μ_{brand femininity ECO=3.537}, t=-1.714, p<0.59). Brand masculinity also shows some evidence of increasing with the sustainable stimuli (μ_{brand masculinity: NORMAL=3.396<μ_{brand masculinity: ECO=3.82}, t=-1.5, p=0.069), though not significantly. Consumer femininity and masculinity are not significantly different, which is expected as the stimuli should not affect self-gender perception.}}

		n	Mean	SD	t	df	p	Decision
Brand	Normal	37	3,396	1,28	-1,5	71	,069	Not Reject
Masculinity	Eco	36	3,82	1,122				
Brand	Normal	37	3,14	1,005	-1,714	71	,045*	Reject H0
Femininity	Eco	36	3,537	,975				
Consumer	Normal	37	3,607	1,279	,436	71	,332	Not Reject
Femininity	Eco	36	3,482	1,184				
Consumer	Normal	37	3,829	1,469	-,059	71	,477	Not Reject
Masculinity	Eco	36	3,847	1,169				

Table 16 - T-test for components of gender incongruence, adapted from SPSS output

	Levene Statistic	р
Brand masculinity	1,020	,316
Brand femininity	,017	,897
Consumer femininity	,024	,878
Consumer masculinity	3,004	,087

Table 17 – Levene's test for homogeneity of variances for components of gender incongruence, adapted from SPSS output

To test hypothesis H3 and H4, we studied the correlations between gender incongruence and brand attitude (r=-0.178, p=0.019) and between gender incongruence and purchase intention (r=-0.220, p=0.004), both showing statistically significant support for H3 and H4, as seen on table 18.

			Purchase
		Brand Attitude	intention
Gender Incongruence	Pearson correlation	-,178*	-,220**
	p	,019	,004
Brand Attitude	Pearson correlation		,680**
	p		<,001

Table 18 – Correlations between gender incongruence, brand attitude and purchase intention, adapted from SPSS output

Additionally, table 19 and table 20 show t-tests done to compare the means of brand attitude and purchase intention between the normal and the eco group. While there is an increase in average of both variables between the group exposed to the environmental sustainable campaign ($\mu_{BA: NORMAL}=4.74<\mu_{BA: ECO}=4.987$) and the other group ($\mu_{PI: NORMAL}=4.639<\mu_{PI: ECO}=5.067$), this increase is only statistically significant for Purchase Intention (t=-1.694, p<0.05).

		n	Mean	SD	t	df	p	Decision
Brand	Normal	84	4,74	1,356	-1,168	171	,122	Not Reject
Attitude	Eco	89	4,987	1,411				
Purchase	Normal	37	4,639	1,356	-1,694	171	,046*	Reject H0
Intention	Eco	36	5,067	1,411				

Table 19 - T-test for brand attitude and purchase intention, adapted from SPSS output

	Levene Statistic	p
Brand Attitude	,123	,726
Purchase Intention	1,509	,221

Table 20 – Levene's test for homogeneity of variances for brand attitude and purchase intention, adapted from SPSS output

Chapter 6

Discussion

This investigation has examined how sustainability may impact brand gender perceptions, which can lead to different outcomes in terms of brand attitude and purchase intention. The following sub-chapters intend to discuss the main theoretical and managerial contributions of this research.

6.1. Theoretical contributions

One of the central contributions of this study results from the systematization of the main ideas of prior studies on sustainability and brand gender and the building of bridges between these two relevant and recent streams of research. Results complement prior studies, by showing that consumers do perceive a brand as being more feminine when this brand is associated with sustainable practices. When analyzing these results for the two brands studied, we only achieve statistical significance for Fred Perry, but it is interesting to note that Ralph Lauren seems to show evidence of following a similar path. These findings are in line with what is suggested in the literature, proposing that there is an underlying association between eco-friendly brand practices and femininity (Brough et al., 2016). Furthermore, results indicate that this bias is extended to how consumers perceive brand femininity.

The theoretical background chapter led us to believe that sustainability could impact gender congruity for males negatively, by increasing brand femininity perceptions, and, consequently, increasing male consumer-brand gender incongruency (Avery, 2012; Brough et al., 2016). Indeed, sustainability has an

overall impact on gender congruence, as seen in the results chapter, and brand femininity has a major impact in this outcome, since it is part of the calculation of brand incongruence itself. Nevertheless, the study showed that sustainable practices would, on average, diminish gender dissimilarity between the brand and the consumer. Furthermore, these results are statistically significant for males, an unexpected conclusion that required us to look further into the components of gender incongruence. There is some evidence that both brand femininity and brand masculinity could increase for brands associated with sustainability, reaching levels closer to those found in the averages for consumer femininity and masculinity, which would explain why the distance between consumer and brand gender is reduced.

Literature had previously established that personality congruence between the brand and the consumer is as significant predictor of brand preference (e.g.: Dolich, 1969; Aaker, 1997; Sirgy, 1982), and that gender is an essential dimension of the consumer self-concept and, hence, vital to enhancing affective, attitudinal and behavioral responses towards the brand (e.g.: Grohmann, 2009; Lieven et al., 2014). Results have shown strong support for the negative association between gender incongruence and brand attitude, as well as gender incongruence and purchase intention, which is conformant with the current literature. As previously highlighted, if sustainability reduces consumer-brand gender dissimilarity, then we may assume that brand sustainability practices will have an indirect positive effect on brand attitude and purchase intention. Moreover, results seem to also confirm the direct influence of sustainability in purchase intention.

6.2. Managerial contributions

From the business perspective, this study brings forth conclusions that can be useful for clothing and apparel brands looking to establish a sustainable image while maintaining their masculine customer base.

While female consumers are less affected by gender incongruity, males tend to reject more feminine brands as they tend to be particularly affected by cultural stigmas and threats to their gender identity. Since this investigation brings forth the conclusion that a sustainable association leads to an increase in the femininity perceptions of a typically masculine brand, managers must take special care when addressing how their brands are tackling sustainable practices and especially the type of stimuli they use, otherwise, they may alienate their core audience.

Great levels of brand femininity or masculinity have been presented as good predictors of a higher brand equity, thus it is not in the businesses' best interests to opt for an undifferentiated gender approach (Lieven et al., 2014). Our investigation shows that sustainability has a positive impact in the gendered brand personality by making it less undifferentiated since higher levels of femininity are achieved and there is evidence that masculinity may follow the same trend. High levels of femininity and/or masculinity seem to facilitate categorization of the brand (Lieven et al., 2014) and to reduce the distance between the brand and the consumers, since the latter tend to be more aware of their gender identity and achieve higher levels of femininity and/or masculinity. Therefore, sustainability pushes a brand to have a stronger brand gender positioning and, thereby, to be closer to its target consumers. Besides being compatible with prior findings, this study also sheds light on how sustainability may be consistently used by brands to achieve a higher customer-base brand equity via its effects on gender perceptions.

These implications should be thoughtfully incorporated in the brand's strategy, since results add to the existing literature by showing gender and gender congruence have an impact on both brand attitude and purchase intention, two measures of expected success for a brand.

Chapter 7

Limitations and Future Research

This research project comes with limitations. A prominent barrier is the use of a convenience sample instead of a more accurate probability sampling. Due to this work's constraints in terms of time and budget, we had to choose this procedure, despite being aware of the disadvantages connected to it: a non-probabilistic sample cannot be considered a significant part of the population, it is highly likely to provide biased results and, thus, results cannot be generalized. Adding to this, there is a limitation related with the type of profile respondents have, as there is an over-representation of highly educated people and of the 18-24 age group. The majority of respondents were also of Portuguese nationality or currently living in Portugal, which does not allow for the exploration of different cultural contexts and what they mean for the definition of gender and sex.

Furthermore, the industry chosen for this research could imply biased results, since the fashion apparel category has been identified as predominantly feminine and its products are commonly associated with femininity (Lieven et al., 2015).

There are many possible directions for future research. First and foremost, we came to the conclusion that sustainability decreases the dissimilarity between consumer and brand gender. This finding contradicts the expectations formulated based on the literature. It would be of the utmost interest to better understand how different eco-friendly cues may affect the MBP and FBP dimensions of the brand gender construct and the congruence between the brand gender and the gender of its regular customers .

Secondly, there has been little development over Grohmann's MBP/FBP scale since it was published in 2009. Because sex-role identity and gender are

constantly changing concepts as we evolve culturally and socially, future research should focus on re-testing this scale and, eventually, finding more accurate items to increase its reliability (in this study, when compared to the other scales used, its Cronbach's alpha classification was only good and not excellent).

Finally, there are complex variables which have not been measure and that could have an impact on results obtained, such as how sustainability affects actual and ideal selves, and how individual need for gender maintenance affects consumers' perceptions. It would also be interesting to study how age cohorts behave differently given their various degrees prosocialness.

Bibliography

- Aaker, J. L. (1997). Dimensions of Brand Personality. *Journal of Marketing Research*, 34(3), 347–356. https://doi.org/10.1177/002224379703400304
- About Ralph Lauren The World of Ralph Lauren Timeline. (2021). Ralph Lauren. https://www.ralphlauren.com/rl-50-timeline-feat
- Auxier, B., & Anderson, M. (2021, April 7). *Social Media Use in 2021*. Pew Research Center: Internet, Science & Tech; Pew Research Center: Internet, Science & Tech. https://www.pewresearch.org/internet/2021/04/07/social-media-use-in-2021
- Avery, J. (2012). Defending the markers of masculinity: Consumer resistance to brand gender-bending. *International Journal of Research in Marketing*, 29(4), 322–336. https://doi.org/10.1016/j.ijresmar.2012.04.005
- Babbie, Earl R. (2021). The Practice of Social Research. 15th ed. Belmont, CA: Wadsworth Cengage
- Batson, C. D. (1987). Prosocial Motivation: Is it ever Truly Altruistic? *Advances in Experimental Social Psychology*, 65–122. https://doi.org/10.1016/s0065-2601(08)60412-8
- Bem, S. L. (1974). The measurement of psychological androgyny. *Journal of Consulting and Clinical Psychology*, 42(2), 155–162. https://doi.org/10.1037/h0036215
- Berger, I. E., & Corbin, R. M. (1992). Perceived Consumer Effectiveness and Faith in Others as Moderators of Environmentally Responsible Behaviors. *Journal of Public Policy & Marketing*, 11(2), 79–89. https://doi.org/10.1177/074391569201100208

- Brough, A. R., Wilkie, J. E. B., Ma, J., Isaac, M. S., & Gal, D. (2016). Is Eco-Friendly Unmanly? The Green-Feminine Stereotype and Its Effect on Sustainable Consumption. *Journal of Consumer Research*, 43(4), 567–582. https://doi.org/10.1093/jcr/ucw044
- Carrington, M. J., Neville, B. A., & Whitwell, G. J. (2010). Why Ethical Consumers Don't Walk Their Talk: Towards a Framework for Understanding the Gap Between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *Journal of Business Ethics*, 97(1), 139–158. https://doi.org/10.1007/s10551-010-0501-6
- Charpail, M. (2020, October 12). *SustainYourStyle*. SustainYourStyle. https://www.sustainyourstyle.org/en/blog/2020/10/12/bringing-men-into-the-sustainable-fashion-agenda
- Chekima, B., Chekima, S., Syed Khalid Wafa, S. A. W., Igau, O. A., & Sondoh Jr, S. L. (2016). Sustainable consumption: the effects of knowledge, cultural values, environmental advertising, and demographics. *International Journal of Sustainable Development & World Ecology*, 23(2), 210-220. https://doi.org/10.1080/13504509.2015.1114043
- Community Our Company | Fred Perry UK. (2020). Fredperry.com; Fred Perry. https://www.fredperry.com/community-our-company
- D'souza, C., & Taghian, M. (2005). Green advertising effects on attitude and choice of advertising themes. *Asia Pacific Journal of Marketing and Logistics*. 17(3). 51-66. https://doi.org/10.1108/13555850510672386
- Dodds, W. B., Monroe, K. B., & Grewal, D. (1991). Effects of Price, Brand, and Store Information on Buyers' Product Evaluations. *Journal of Marketing Research*, 28(3), 307–319. https://doi.org/10.1177/002224379102800305

- Dolich, I. J. (1969). Congruence Relationships between Self Images and Product Brands. Journal of Marketing Research, 6(1), 80–84. https://doi.org/10.1177/002224376900600109
- ElHaffar, G., Durif, F., & Dubé, L. (2020). Towards closing the attitude-intention-behavior gap in green consumption: A narrative review of the literature and an overview of future research directions. *Journal of Cleaner Production*, 275, 122556. https://doi.org/10.1016/j.jclepro.2020.122556
- Fournier, S. (1998). Consumers and Their Brands: Developing Relationship Theory in Consumer Research. *Journal of Consumer Research*, 24(4), 343–353. https://doi.org/10.1086/209515
- Fowler Jr, F. J. (2013). *Survey research methods*. Sage publications.
- Freimuth, M. J., & Hornstein, G. A. (1982). A critical examination of the concept of gender. *Sex Roles*, 8(5), 515–532. https://doi.org/10.1007/bf00287716
- GANT Heritage. (2022). Gant.co.uk. https://www.gant.co.uk/heritage
- Gershowitz, H. (1995). Improving validation: Process vs. product. *Marketing Research*, 7(1), 48. https://www.proquest.com/scholarly-journals/improving-validation-process-vs-product/docview/202682148/se-2?accountid=192066
- Granskog, A., Lee, L., Magnus, K.-H., & Sawers, C. (2020, July 17). *Survey: Consumer sentiment on sustainability in fashion*. McKinsey & Company;

 McKinsey & Company. https://www.mckinsey.com/industries/retail/our-insights/survey-consumer-sentiment-on-sustainability-in-fashion
- Grohmann, B. (2009). Gender Dimensions of Brand Personality. *Journal of Marketing Research*, 46(1), 105–119. https://doi.org/10.1509/jmkr.46.1.105
- Grossman, R. & Till, B. (1998). The Persistence of Classically Conditioned Brand Attitudes. *Journal of Advertising*, 27(1), 23-31, https://doi.org/10.1080/00913367.1998.10673540

- Hill, M. M., & Hill, A. (2012). Investigação por questionário (2ª Edição). *Sílabo*. https://doi.org/978-972-618-273-3
- Hunt, E. (2020, February 6). *The eco gender gap: why is saving the planet seen as women's work?* The Guardian; The Guardian. https://www.theguardian.com/environment/2020/feb/06/eco-gender-gap-why-saving-planet-seen-womens-work
- Jiang, X., & Akbar, A. (2018). Does Increased Representation of Female Executives Improve Corporate Environmental Investment? Evidence from China. *Sustainability*, 10(12), 4750. https://doi.org/10.3390/su10124750
- Jiménez Sánchez, Á., Vayas Ruiz, E. C., Guachimbosa Villalba, V. H., & Frontera Sánchez, M. R. (2021). Analysis of the Approach to Online Advertising of Leading Sportswear Brands. *Research Anthology on Business Strategies, Health Factors, and Ethical Implications in Sports and Esports,* 193–214. https://doi.org/10.4018/978-1-7998-7707-3.ch012
- Johnson, C., Tariq, A. & Baker, T. (2018) From Gucci To Green Bags: Conspicuous Consumption As A Signal For Pro-Social Behavior. *Journal of Marketing Theory and Practice*, 26(4), 339-356, https://doi.org/10.1080/10696679. 2018.1487769
- Kalwani, M. U., & Silk, A. J. (1982). On the Reliability and Predictive Validity of Purchase Intention Measures. *Marketing Science*, 1(3), 243–286. https://doi.org/10.1287/mksc.1.3.243
- Kervin, D. (1990). Advertising Masculinity: The Representation of Males in Esquire Advertisements. *Journal of Communication Inquiry*, 14(1), 51–70. https://doi.org/10.1177/019685999001400106
- Lee, J. A., & Holden, S. J. S. (1999). Understanding the determinants of environmentally conscious behavior. *Psychology and Marketing*, 16(5), 373–392.

- https://doi.org/3.0.co;2-s">10.1002/(sici)1520-6793(199908)16:5<373::aid-mar1>3.0.co;2-s
- Leonidou, L. C., Leonidou, C. N., Palihawadana, D., & Hultman, M. (2011). Evaluating the green advertising practices of international firms: a trend analysis. *International Marketing Review*. 28(1). 6-33. https://doi.org/10.1108/02651331111107080
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R. & Tilburg, M. (2015). The effect of brand design on brand gender perceptions and brand preference *European Journal of Marketing*. 49(1/2). 146–169. https://doi.org/10.1108\/EJM
- Lieven, T., Grohmann, B., Herrmann, A., Landwehr, J. R., & Tilburg, M. (2014). The Effect of Brand Gender on Brand Equity. *Psychology & Marketing*, 31(5), 371–385. https://doi.org/10.1002/mar.20701
- Liu, C. (2018). Are women greener? Corporate gender diversity and environmental violations. *Journal of Corporate Finance*, 52, 118–142. https://doi.org/10.1016/j.jcorpfin.2018.08.004
- Locander, W. B., & Spivey, W. A. (1978). A Functional Approach to Attitude Measurement. *Journal of Marketing Research*, 15(4), 576–587. https://doi.org/10.1177/002224377801500407
- Lundblad, L., & Davies, I. A. (2015). The values and motivations behind sustainable fashion consumption. *Journal of Consumer Behaviour*, *15*(2), 149–162. https://doi.org/10.1002/cb.1559
- Mckinsey & Company. (2020). *The State of Fashion* 2021. https://www.mckinsey.com/~/media/mckinsey/industries/retail/our%20insig hts/state%20of%20fashion/2021/the-state-of-fashion-2021-vf.pdf

- Meyers-Levy, J., & Loken, B. (2014). Revisiting Gender Differences: What We Know and What Lies Ahead. *Journal of Consumer Psychology*, 25. https://doi.org/10.1016/j.jcps.2014.06.003
- Park, H. J., & Lin, L. M. (2020). Exploring attitude–behavior gap in sustainable consumption: comparison of recycled and upcycled fashion products. *Journal of Business Research*, 117, 623–628. https://doi.org/10.1016/j.jbusres.2018.08.025
- Siegle, L. (2008). *To Die For: Is Fashion Wearing Out the World?* (1st edition). Harper Collins Publishers. ISBN-13: 978-0007264094
- Simonin, B. L., & Ruth, J. A. (1998). Is a Company Known by the Company it Keeps? Assessing the Spillover Effects of Brand Alliances on Consumer Brand Attitudes. *Journal of Marketing Research*, 35(1), 30–42. https://doi.org/10.1177/002224379803500105
- Sirgy, M. J. (1982). Self-Concept in Consumer Behavior: A Critical Review. *Journal of Consumer Research*, 9(3), 287. https://doi.org/10.1086/208924
- Smith, S. M., Haugtvedt, C. P., & Petty, R. E. (1994). Attitudes and recycling: Does the measurement of affect enhance behavioral prediction? *Psychology and Marketing*, 11(4), 359–374. https://doi.org/10.1002/mar.4220110405
- Spears, N. & Singh, S. (2004) Measuring Attitude toward the Brand and Purchase Intentions. *Journal of Current Issues & Research in Advertising*. 26(2). 53-66. https://doi.org/10.1080/10641734.2004.10505164
- Tabachnick, B. & Fidell, L. (2013). Using multivariate statistics (6th edition). Pearson. ISBN-13: 978-0205849574
- Torre, M. (2018). Stopgappers? The occupational trajectories of men in female-dominated occupations. *Work and Occupations*, 45(3), 283-312. https://doi.org/10.1177/0730888418780433

- UNECE. (2018). Fashion and the SDGs: what role for the UN? The fashion industry in numbers.
 - https://unece.org/fileadmin/DAM/RCM_Website/RFSD_2018_Side_event_sus tainable_fashion.pdf
- West, C., & Zimmerman, D. H. (1987). Doing Gender. *Gender & Society*, 1(2), 125–151. https://doi.org/10.1177/0891243287001002002
- Wiederhold, M., & Martinez, L. F. (2018). Ethical consumer behaviour in Germany: The attitude-behaviour gap in the green apparel industry. *International Journal of Consumer Studies*, 42(4), 419–429. https://doi.org/10.1111/ijcs.12435
- You D., Maeda, Y. & Bebeau, M. J. (2011) Gender Differences in Moral Sensitivity:

 A Meta-Analysis, Ethics & Behavior, 21(4), 263-282,

 https://doi.org/10.1080/10508422.2011.585591
- Zelezny, L. C., Chua, P. P., & Aldrich, C. (2000). Elaborating on gender differences in environmentalism. *Journal of Social issues*, *56*(3), 443-458. https://doi.org/10.1111/0022-4537.00177

Appendix 1 – Pre-test

Pré-teste: Género das Marcas

Muito obrigada pela disponibilidade em ajudar nesta investigação.

Este é um inquérito inserido no desenvolvimento do Trabalho Final de Mestrado no Mestrado de Marketing da Universidade Católica Portuguesa – Centro Regional do Porto.

As respostas são anónimas e serão tratadas de forma confidencial. O tempo de resposta deverá rondar os 2 minutos, sendo todas as questões de caráter obrigatório e sem resposta certa ou errada, apenas procuro conhecer a sua opinião.

1. Sexo:
Feminino
Masculino
Outro

2. Se as seguintes marcas fossem pessoas, seriam (selecionar apenas uma coluna por cada linha):

Marca	Um homem	Uma mulher	Tanto homem como mulher	Nem homem
Levis				
Ralph Lauren				
Fred Perry				
Gant				

3. Por favor avalie o seu grau de familiariedade com as seguintes marcas (sendo 1 nada familiar e 5 muito familiar)

Marcas	1 (nada	2	3	4	5 (muito
	familiar)				familiar)
Gant					
Fred Perry					
Levis					
Ralph Lauren					

Appendix 2 – Questionnaire

ENG: This survey is a necessary part for the development of a Master's Final Assignment in the Master in Marketing from Católica Porto Business School, which intends to analyze consumer response towards a group of brands.

There are no right or wrong answers. We are mostly interested in your opinion. All responses are anonymous and treated in a confidential way, used only to help this investigation. Your answers will be essential for the development of our research. The survey will take under 4 minutes to complete.

Thank you in advance for your availability and cooperation in this study!

In case you want any additional information about this study, please contact the responsible investigator, Bárbara Vitorino, through bv.ac98@gmail.com

(Respondents were presented with one of 4 versions of stimuli used:)









Please, evaluate your familiarity with the brand using the provided scale, with 1 being "extremely disagree" and 7 being "extremely agree"

	1	2	3	4	5	6	7
I am very familiar with the brand.							
I recognize the brand very well							
I have heard a lot about the brand							

How would you describe this brand with the following words? Please, use the provided scale where 1 is "extremely disagree" and 7 is "extremely agree".

	1	2	3	4	5	6	7
Adventurous							
Aggressive							
Brave							
Daring							
Dominant							
Sturdy							
Expresses tender feelings							
Fragile							
Graceful							
Sensitive							
Sweet							
Tender							

3. Please indicate how much you agree with the following statements using the provided scale, where 1 is "extremely disagree" and 7 is "extremely agree".

	1	2	3	4	5	6	7
This brand is good.							
This brand is high quality.							
I like this brand very much.							
This brand is pleasant.							
This brand is interesting.							

4. Specify how much you agree with the following statements. Please, use a 7-point scale where 1 is "extremely disagree" and 7 is "extremely agree".

	1	2	3	4	5	6	7
Possibly, I would buy a product from							
this brand.							
It is probable that I would buy a							
product from this brand.							
I would be willing to buy a product							
from this brand.							

5. How would you describe yourself with the following words? Please, use the provided scale where 1 is "extremely disagree" and 7 is "extremely agree".

	1	2	3	4	5	6	7
Adventurous							
Aggressive							
Brave							
Daring							
Dominant							
Sturdy							
Express tender feelings							
Fragile							
Graceful							
Sensitive							
Sweet							
Tender							

6. Age:
7. Sex:
Male
Female
Other
8. Education Level (please specify the last grade obtained):
Elementary School
High School
Bachelor's Degree
Post-graduate and/or Master's Degree
Other
9. Nationality: