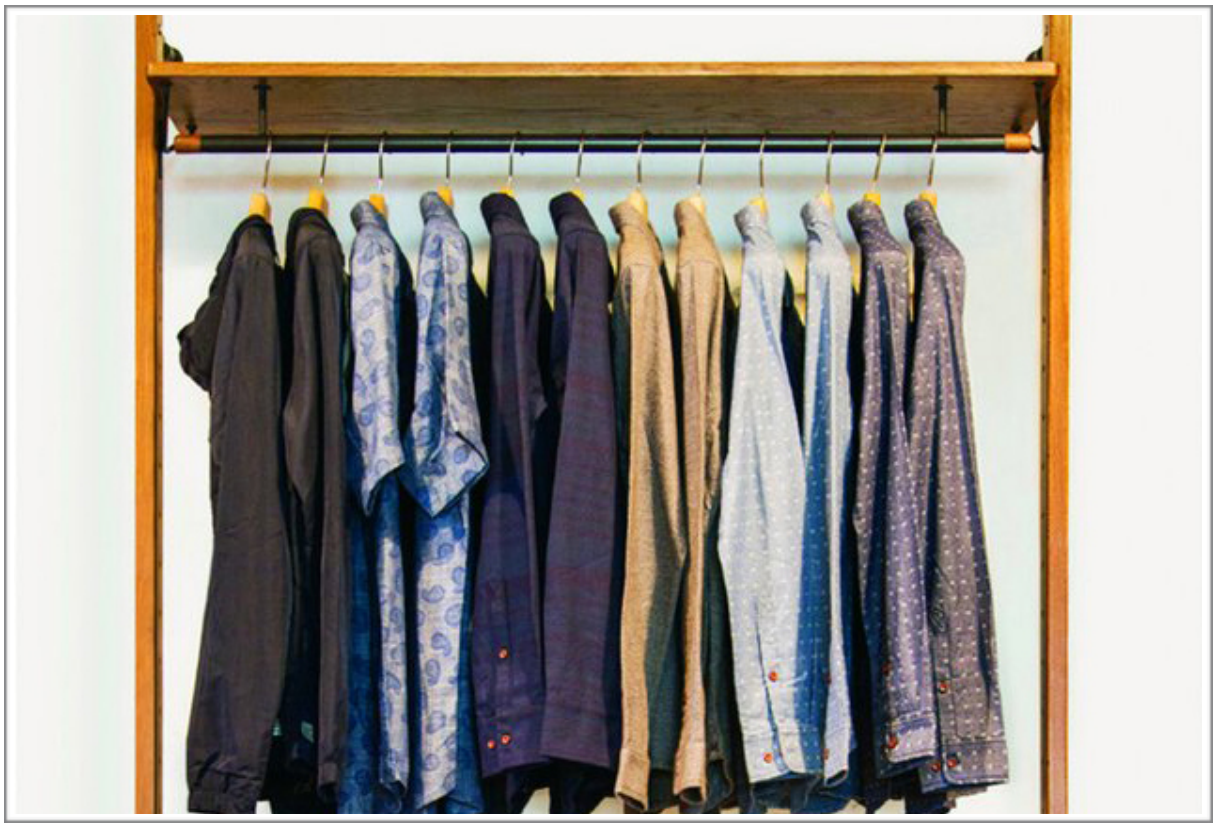
ERASMUS UNIVERSITEIT ROTTERDAM
ERASMUS SCHOOL OF ECONOMICS

MSc Economics and Business: Marketing
Master Thesis



Ethical is the new black,

measuring the effect of ethicality on fashion shoppers

Candidate: Enric Viscarro Grau
Student ID number: 449226
Supervisor: Dr. S.Lim
Second assessor: Dr. S.Wendel
Date: August 15, 2017

Table of content

1. Introduction

“The ILO estimates that 170 million are engaged in child labour, with many making textiles and garments to satisfy the demand of consumers in Europe, the US, and beyond”
— The Guardian (2016)

As *The Guardian* depicts in an online publication of 2016, the headline of which is provided at the beginning of this chapter, many working children around the world are involved in the production of garments for the fashion industry. According to the UN, child labor is defined as work for which children is either too young, or the conditions of which are considered unacceptable for children, and therefore, is prohibited. Under the umbrella of this definition of child labor, many fashion firms find themselves engaging in strongly unethical practices in their supply chain operations. Unfortunately, child labor represents only a portion of these unethical operations, as many companies in the industry also engage in other kinds of reprehensible actions: the use of the so called *sweatshops*[1], animal abuse and testing, corruption and governmental bribing are among the most notorious examples.

Despite these well-known practices in the industry, consumers seem to fail to acknowledge which concrete fashion firms employ which of these practices, if any (Boulstridge & Carrigan, 2000; Auger, Burke, Devinney *et al.*, 2003). Furthermore, the thrive of new business models such as *Fast Fashion* raises the question of whether these unethical practices have any impact on consumers’ perception of the brand or their purchase behavior; especially when some firms make little effort to disprove claims of unethical practices directed to them. As published in *The Independent* in November 2007, when Gap Kids was found to be employing children, as young as ten, for the manufacturing of clothing in a factory in Delhi, the company, which takes pride on being ethically aware, did nothing to defend itself from the accusations.

This contrasts with the main findings in ethical consumerism research, which almost unanimously defend that ethicality is among the factors that the average consumer takes into account in a purchase decision. Ethicality in fashion consumerism is thought to be a special case though: while some researchers have found it an increasingly important factor in purchase decisions (Emberley, 1998), some other researchers defend that consumers’ personal needs take priority over all ethical considerations (Joergens, 2006).

The purpose of this thesis is to assess the impact of corporate unethical behavior on fashion brands. In order to do this, this paper proposes a methodology that allows measuring the impact of unethical information being provided about a brand, on the perceived brand image of customers.

---

[1] Pejorative term used to designate a workplace that has poor, socially unacceptable working conditions. The work may be dangerous, health threatening, climatically challenged or underpaid. Workers in sweatshops usually work long hours with low pay, regardless of the legislation regulating overtime pay or minimum wage.

Separately, a similar design is used in order to measure the impact of the same unethical information on consumer purchase behavior. Finally, the results of both groups of data are compared to each other in order to determine which construct is the most worsened by the acknowledgement of company's unethical practices.

1.1 Academic and managerial relevance

So far, research on ethical consumerism measuring the impact of unethicality in purchase behavior has found that ethicality plays a role in purchase decisions (Brunk, 2010; Belk, Devinney & Eckhardt, 2005; Eckhardt, Belk & Devinney, 2010; Carrigan & Attalla, 2001; Creyer & Ross, 1996; Auger, Burke, Devinney *et al.*, 2003). However, none of these studies have been specifically directed to the fashion industry. Nonetheless, there are some studies that have included an apparel product in their research designs (Auger, Burke & Louviere, 2003). Therefore, the present thesis will provide a measure of how information regarding unethical corporate practices, affects purchase decisions.

In regards to the measurement of unethical information on brand image, there are no previous studies that have attempted to assess its impact either. Thus, the present paper will provide some insight on how fashion brands are perceived by the consumer after this one has been made aware of their unethical practices.

By comparing the effects of unethical information in purchase behavior and perceived brand image, this paper will attempt to determine which of these two constructs is more affected by the information given, from which managerial implications can be derived. Brand image is especially relevant in industry, where functionality is less important than the brand's signal of style and exclusivity (Kort et al. 2005). Physically attaching a brand name to a product is inexpensive, so the profit opportunities resulting of leveraging a brand name to set higher prices are substantial. Therefore, by exploring the effect that ethicality has on the brand image of fashion brands, a relevant topic with managerial implications is approached.

By analyzing how unethical knowledge on behalf of a firm affects perceived brand image, and then comparing how the same unethical knowledge of a brand affects purchase behavior, some valuable conclusions can be obtained, and can also be translated into practices in the industry: should brand image be more worsened by unethical information than purchase behavior, it might be concluded that ethicality does not matter when shopping fashion, and that consumers prioritize other associations with the brand than those ethical. This would be in line with the research of Carrigan & Attalla (2001), which found that the majority of apparel shoppers are only willing to buy ethically as long as they can retain fashion status or trendiness. This possible result would also coincide with Iwanow, McEachern and Jeffrey (2005), Baker (2002) and Joergens (2006), who have found that ethics and unethical activity are of secondary concern when shopping for apparel products. Conversely, should the effect on purchase behavior be higher than in brand image, it could be concluded that

ethicality has a substantial weight in the associations of brand image that are accessed in a purchase situation.

Depending on the result of this comparison, the scenario for fashion brands employing reprehensible actions might be different. If the effect of the information would prove to have more impact on brand image, fashion brands would need to be aware that the real business impact of their unethical activities would be taking place in the long term, since brand image is a construct that develops over-time (Chaudhuri and Holbrook, 2001). On the other hand, if the effect would prove to be greater in purchase decision, the problem for the transgressor fashion brand would be twofold: it would have to address the problem of losing sales in the short-term while amending their brand image so its sales in the long-term are not affected as well.

1.2 Structure of the paper

The structure of the present paper is organized as follows: Chapter 2 presents the previous literature on the topic in order to provide the reader with some context; Chapter 3 discusses the research methodology that has been followed and Chapter 4 presents the results. These are followed by Chapter 5, which contains the conclusions of the study and includes: Discussion, Implications and Limitations and Future Research.

2. Theoretical background

In order to provide some context for the present paper, this chapter addresses some of the keywords of this study with the objective to both clarify them and to provide the reader with the main findings of previous related research. At the end of the chapter, the hypotheses and the conceptual framework for the current paper are presented.

2.1 Literature

2.1.1 Defining (un)ethical behavior

Ethicality, generally speaking, is an undisputed term that refers to a set of moral principles that guide human behavior (Sherwin, 1983). On the other hand, what constitutes an ethical or unethical behavior is not so clear, open to interpretation and subject to the set of moral principles that are used as the basis for judgement. For example, Cavanaugh *et al.* (1981) proposes three different approaches that serve as basis to judge what constitutes ethical behavior:

- The *utilitarian-based approach*; in which behavior is judged to be ethical or unethical based on its effect on the overall welfare of everyone involved. This approach holds that the most ethical course of action is the one that maximizes benefits and minimizes harms, for the whole of the people involved by a particular behavior.
- The r*ights-based approach* judges whether a behavior is ethical based on how it affects the rights that a person possesses. This approach would consider unethical any behavior that violates the rights of an individual.
- Last, the *justice-based approach* determines whether a behavior is considered ethical based on the fairness with which it assigns benefits and burdens. Although all three approaches are significantly subjective, this view is the most open to interpretation.

In addition to the problem of subjectivity that all three approaches have individually, it is important to note that a specific behavior can be judged ethical by one of these approaches, while possibly being considered unethical by one of the other two (Creyer & Ross, 1997). For example, violating the rights of an individual in order to benefit a larger number of people may be considered as an ethical behavior under a utilitarian view, but deemed unethical by a rights-based approach.

However, when it is the ethicality of business activities that is evaluated, there is a simpler approach that is based on the expectations of consumers. According to Creyer & Ross (1997), consumers evaluate outcomes as gains or losses from a reference point. Therefore, given that consumers expect firms to behave ethically, ethical behavior becomes a reference point against which the actual firm behavior can be judged. This ethical behavior that serves as a reference point usually consists in companies behaving within a range of generally accepted standards. Any practice that is considered to be out of this range

would be perceived as unethical by consumers. The present paper uses this consumer expectation-based approach, described by Creyer & Ross (1997), to define ethical behavior.

2.1.2 Brand Image

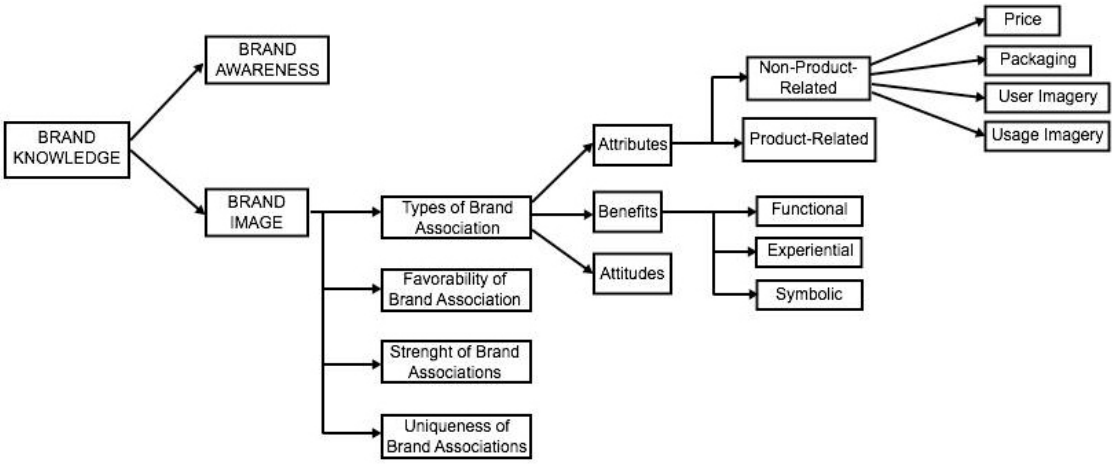
Although research on ethicality in the fashion industry has not been especially prolific, some research has tried to assess the effect of ethicality on consumer's purchase decisions, as a way to determine how brands and firms are affected by their corporate unethical behavior (Auger, Burke & Louviere, 2003; Joergens, 2006; Elliot and Freeman, 2001); However, few or none attention has been paid to the impact of ethicality in brand image, as a way to assess the impact that the unethical associations with the brand have on the firm.

Unfortunately, the concept of Brand Image entails a significant level of ambiguity, since the terms "brand" and "image" have been used in several different thematic areas in previous research. However, in the present study, like many researchers have done before, Brand Image is defined as the perceptions that a consumer has about a brand; which are reflected by the brand associations that the consumer holds in his memory. The type, strength, favorability and uniqueness of brand associations determine the image that a consumer has of a certain brand. Type, strength and favorability also have an important role in determining the differential response that makes up brand equity (Keller, 1993).

Conceptualizing Brand Image

A graphic representation of this definition can be found in Figure 1, as a part of the conceptual framework used by Keller for describing Brand Knowledge. Brand Image is one of the two components of Brand Knowledge, together with Brand Awareness. The latter refers to the probability with which a certain brand name can be recalled in the mind of the consumer and the easiness in which it does so. The former is a more complex multi-construct: as pointed out in last paragraph, Brand Image is conformed by the diverse types of associations with the brand that consumers hold in their minds, and the strength, favorability and uniqueness of these.

Figure 1: Dimensions of Brand Knowledge (Keller, 1993)



Keller distinguishes among three types of brand associations: attributes, benefits and attitudes.

- *Attributes* are those features that characterize a product and, although they can be categorized in many ways, the present paper will classify them as product related or non-product related; in line with Keller and the Branding course in this master's degree. (1) Product related attributes relate to the physical features of the product whereas (2) non-product related attributes refer to non-physical features of the product that affect the activities of purchase and consumption.
- *Benefits* refer to the value that a product offers to the consumer. It is important to note that this value is different for every consumer and, therefore, two different consumers can value the exact same product differently. Benefits are classified in three categories according to their nature: (1) functional benefits, which are usually related to product-related attributes and basic motivations (e.g. a pair of jeans get the consumer clothed); (2) experiential benefits, which relate to the experience of using the product (e.g. a pair of jeans that give the consumer the sensation of comfort) and last, (3) symbolic benefits, which usually relate to non-product-related attributes and to the needs related to the interaction of the individual with society (e.g. a pair of jeans that give the consumer the image of a fashionable person). Aaker (2009) elaborates more on the symbolic benefits and distinguishes three types of them: emotional benefits, self-expressive benefits and social benefits. The descriptions of these can be found in Table 1 in chapter 3.
- *Attitudes* refer to the general evaluations that the consumer does regarding a brand (Keller, 1993).

Brand Image -as well as brand awareness, also present in Figure 1- are crucial parts to Brand Equity[2], according to the model developed by Aaker (1991).

[2] Brand Equity is a concept developed in the early years of the 1990 decade that refers to the value that a brand generates for a company. Brand equity is considered an asset that companies can leverage to their benefit. Most authors, including David Aaker, sustain that Brand Equity is a multi-construct conformed by, among others: Brand associations (Brand Image), Brand awareness and Brand Loyalty.

According to this model, Brand Associations are of big importance to companies since they can create positive attitudes/feelings, differentiate a company from its competitors or help a company communicate more easily and effectively.

Measuring Brand Image

The measurement of Brand Image has also been a topic in which researchers have dedicated their efforts, having developed a wide variety of methodologies that range from quantitative methods, such as Likert scale and Q-sort (Stephenson, 1935); to purely qualitative methods such as Zaltman Metaphor Elicitation Technique (Coulter & Zaltman, 1994) or the Brand Personality Scale (Aaker, 1997). A descriptive classification of these techniques, based on the review of Cian (2011), can be found in Table 1.

Table 1: Taxonomy of the techniques used for measuring Brand Image

Technique	Categories	Macro-categories	Approach
1. Attitude Scales: Likert and Semantic differential scales (TSD, MTSD, GPS, NCS)	Rating	Close method	Quantitative
2. Q-Sort	Ranking	Closed method	Ambivalent
3. Natural Grouping	Pick-any	Mixed	Qualitative
4. Kelly Repertory Grid	Pick-any	Mixed	Ambivalent
5. Laddering	Pick-any	Open method	Qualitative
6. MET Laddering	Pick-any	Open method	Qualitative
7. Benefit chain	Pick-any	Open method	Qualitative
8. Projective Techniques			
8.1 Association techniques	Pick-any	Open method	Qualitative
8.2 Completion techniques	Other	Open method	Qualitative
8.3 Construction techniques	Other	Open method	Qualitative
8.4 Expressive techniques	Other	Open method	Qualitative
9. ZMET	Pick-any and other	Open method	Qualitative
10. Narrative Techniques	Other	Open method	Qualitative
11. Image-congruity	Rating (most of studies)	Closed method (most of studies)	Quantitative (most of studies)
12. Brand Personality	Rating or pick-any (personality scales)	Closed method (personality scales)	Quantitative (personality scales)
	Other (qualitative approach)	Open method (qualitative approach)	Qualitative (qualitative approach)

2.1.3 Ethicality on purchase behavior

On the other hand, although researchers have also used different techniques, there has been more consensus on how to measure the impact of unethical information on consumer's purchase decisions. In qualitative approaches, in-depth interviews have been the norm (Brunk, 2010; Belk, Devinney & Eckhardt, 2005; or Eckhardt, Belk & Devinney, 2010) although some have preferred to use focus groups (Carrigan & Attalla, 2001). In quantitative approaches, most researchers opted for the use of simple self-reported surveys. However, some used structured choice experiments in which they were able to capture the trade-off that consumers do between products' ethical and traditional features and calculate the amount of dollars that the consumers were willing to sacrifice to make these trade-offs (Creyer & Ross, 1996; Auger, Burke, Devinney *et al.*, 2003).

Although previous research in this area has vastly confirmed that ethicality is a factor that is considered in consumers' purchase decisions (Mason, 2000; Forte & Lamont, 1998; Simon, 1995), it seems that is not the most dominant factor in the decision (Boulstridge & Carrigan, 2000). That could be explained, partially because consumers are relatively uninformed about the corporate behavior of firms (Boulstridge & Carrigan, 2000; Auger, Burke, Devinney *et al.*, 2003). The latter study also pointed out that, besides being aware of publicly known offenders like Nestlé, in general, consumers have little knowledge about the practices of companies, whether they are good or bad. In addition, scepticism in regards to the ethicality of firms' actions seems to be the common norm: consumers think that all companies are unethical to some degree (Carrigan & Attalla, 2001). On the other hand, most researchers have found that there is a significant group of consumers that does not value the ethical features that a product may have and that actively ethical consumers are a minority (Auger, Burke, Devinney *et al.*, 2003; Carrigan & Attalla, 2001; Boulstridge & Carrigan, 2000).

There is conflicting research on the willingness of consumers to punish unethical behavior, versus their willingness to reward ethical behavior. Different studies have shown that ethical and unethical behavior have an asymmetrical impact on consumers' attitudes, with bad behavior having a stronger influence on the attitude formation than good behavior (Skowronski & Carlston, 1987; Reeder & Brewer, 1979). Therefore, it could be expected that the willingness to punish a firm for their reprehensible actions would be higher than the willingness to reward. Precisely in this line of thought, later studies found that consumers were more critical towards firms that committed ethical transgressions than they were for ethically behaving firms (Folkes & Kamins, 1999; Spranca *et al.*, 1991). However, other studies carried out during the same decade resulted in contradicting findings: a study by Dragon International (1991) and the Cone and Roper study (Simon, 1995) both found that consumers were more likely to reward ethical practices than punishing unethical ones.

2.1.4 Attitude-behavior gap

Despite conflicting findings in some areas of ethical consumerism, researchers tend to agree in some others; for instance, the gap between the consumers' attitudes and their purchasing behavior. Simon (1995), Roberts (1996) and Rogers (1998) have found significant difference in consumers' expressing an attitude and the actual purchasing behavior that would support that attitude. Rather, it has been found that consumers are more prone to take action in situations that affect themselves directly (Dragon International, 1991; Simon, 1995; Carrigan & Attalla, 2001). The latter study called this phenomenon "Selective Ethicality", and showed that consumers only care about certain types of unethical behavior, depending on how close these are to their personal situation and convictions. For example, the study found that consumers' attitudes were more affected by unethical behavior regarding animal abuse and child labor, than unethical practices regarding human exploitation. These results

were supported by the study conducted by Auger, Burke, Devinney *et al.* (2003). In addition, they also found evidence that this behavior only affects certain product categories. In line with these findings, research has shown that, not all information about unethical practices from companies, results in a sufficiently high effect on consumer attitudes as to take action at its regard. Creyer & Ross (1997) and Carrigan & Attalla (2001) both concluded that even consumers being knowledgeable of firms reprehensible practices, they would still buy from companies like GAP, Nike or McDonalds.

2.1.5 Ethicality and the fashion industry

As mentioned previously in this chapter, research of ethical consumerism in fashion industry has not been widely explored yet, with most of the efforts directed towards assessing the importance of ethical attributes in consumers' purchase decisions. Although information about ethical behavior on behalf of companies is thought to influence sales and the consumer's image of brands (Mascarenhas, 1995; Mohr *et al.*, 2001), and some studies have pointed out its increasing importance in fashion industry (Emberley, 1998; Moisander & Personen, 2002), recent research has found that the impact of ethical behavior information (both good and bad) is more nuanced in this industry.

In their study using focus groups, Carrigan & Attalla (2001) found evidence that brand image, fashion trends and price factors are prioritized to ethical criteria, and that consumers are only willing to buy ethical fashion as long as they can still get hold of the associations that they are looking for when they are buying clothing from a certain brand (fashion status). In addition, the study conducted by Joergens (2006) also found supporting evidence to this phenomenon, as the analysis of the focus groups of the study determined that consumers` personal needs take precedence over any ethical criteria. This same study concluded that there is little evidence in that ethical issues have any effect on consumers' fashion purchase behavior.

Various other studies, using different approaches, settings and sample demographics are also supportive of these findings; for example, a study exclusively revolving around the topic of fast fashion, Joy *et al.* (2012). Another example is the study conducted by Eckman *et al.* (1990), in which the researchers defined a model of in-store apparel purchase based on how women conducted their purchase decision processes. In this study, the researchers identified several criteria that women used for evaluating apparel items by using free elicitation techniques. The results show that none of these criteria are even close to what could be defined as ethical considerations. A table containing these evaluative criteria (Table 2) can be found in chapter 3.

Given these conflicting findings, the objective of the present paper is to test out, in a quantitative study, if ethicality does play a role in apparel purchase decisions and perceived brand image of fashion brands.

2.2 Hypotheses and Conceptual Framework

2.2.1 Hypotheses

The objective of the different hypotheses presented in this chapter is to serve as vehicles to explore the research question laid out in chapter 1: to assess the effect of corporate unethical behavior in perceived brand image for fashion brands, and to compare it with the effect in purchase behavior for apparel products. The main hypotheses are hereby presented:

H1. Information portraying unethical practices of a firm has a negative impact on consumers' perceived brand image of the firm.

H2. The impact of unethical practices on consumers' perceived brand image is bigger in comparison to the one produced by positive ethical behavior.

H3. Information portraying unethical practices of a firm has a negative impact on consumers' purchase behavior for products from the firm.

H4. The impact of unethical practices on consumers' purchase decision is bigger in comparison to the one produced by positive ethical behavior.

H5. I expect the effect of ethicality on Brand Image to be greater than the effect of ethicality on purchase behavior.

Regarding H1, brand image is especially relevant in the fashion industry, where functionality is less important than the brand's signal of style and exclusivity (Kort et al. 2005). Although quantitative research has been conducted in order to assess the impact of unethical information on consumer purchase behavior, little has been done to quantify the effect of unethical information on consumer's perceived brand image. Nevertheless, Carrigan & Attalla (2001) and Joergens (2006) have conducted some exploratory research, through the use of focus groups.

H1 pursues the quantification of the effect of unethicality in consumer's perceived brand image, which is also needed for the testing of hypothesis H5.

Regarding the purchase decision (H3), previous research using conjoint analysis has been conducted in order to assess the impact of ethical information on consumer purchase behavior. For example, Sriram & Forman (1993) conducted some research using this method but only focused on "green issues". Auger, Burke & Louviere (2003) conducted a similar research, including different ethical dimensions and comparing consumer reactions between the soap market and the sneakers market. However, none of these studies have been focused exclusively on the fashion industry. It is precisely in this industry that purchase attitudes are thought to be less affected by the ethical (or unethical) behavior of the firms. As mentioned in this chapter, qualitative research conducted by Carrigan & Attalla (2001), among others, has found evidence of that.

H3 attempts to verify the findings of these previous qualitative studies, by measuring the effect of unethical practices in purchase behavior using quantitative methods.

According to previous research, information about unethical actions has an asymmetrical influence on attitude: vices detract from attitudes more than virtues enhance them (Reeder & Brewer, 1979 and Skrowronski & Carlston 1987). Carrigan & Attalla (2001) have tested this in consumers' attitudes towards corporations by using focus groups. Apparel shoppers, considering fashion corporations, should not be an exception to this; unless there is some effect that it is not being currently considered.

H2 and H4 attempt to verify if the findings of previous research described above are also applicable for consumers shopping for fashion items.

Regarding H5, while brand image is a construct created only by the different kind of associations that consumers hold for a brand (Keller, 1993) in which brand ethicality can have a considerable impact, purchase behavior is a construct which is dependent on many other factors, besides brand associations. In the case of purchase behavior, ethical beliefs about a brand have an effect that, following a logical line of thinking, is expected to be outweighed by other factors: budget, budget allocation, wardrobe needs ,fashion trends, etc. Should H5 be accepted, it could be concluded that, although having an effect on brand image, and thus, having an impact on brand equity in the long term (depending on the size of the effect), managers in the fashion industry should worry less about the immediate effect on purchase behavior and be more concerned about the long term equity of their brand.

Additionally to the main hypotheses, the following interaction effects are to be tested since, according to previous research, the results of the main hypotheses vary depending on them:

H1a and **H3a.** There is a difference in consumers' purchase behavior and consumers perceived brand image based on their age.

Auger, Burke, Devinney *et al.* (2003) found varying results regarding consumers' purchase behavior, depending on consumers' age. This hypothesis aims to ascertain if this moderating effect also occurs in consumers shopping for apparel items.

H1b and **H3b.** There is a difference in consumers' purchase behavior and consumers perceived brand image based on their gender.

Although Auger, Burke, Devinney *et al.* (2003) found varying results depending also on gender, Roberts (1996) and Carrigan & Attalla (2001) obtained contradicting results, indicating that gender plays no role. This hypothesis attempts to find which is the effect of gender on both purchase decisions and perceived brand image in the fashion market.

H1c and **H3c.** There is a difference in consumers' purchase behavior and consumers perceived brand image based on their nationality.

Nationality was also identified as a moderating effect in the study of Auger, Burke, Devinney *et al.*, (2003). This hypothesis aims to ascertain whether this is also the case for the fashion market.

H1d and **H3d.** There is a difference in consumers' purchase behavior and consumers perceived brand image based on their ethical dimension.

The study conducted by Carrigan & Attalla (2001) found that the ethical dimension (e.g. environment, animal abuse, children abuse, sweat-shops, etc.) elicited different intensities on the attitudes of respondents, which was confirmed by the study conducted by Auger, Burke, Devinney *et al.* (2003). This last hypothesis attempts to ascertain whether these general findings apply also to the fashion market.

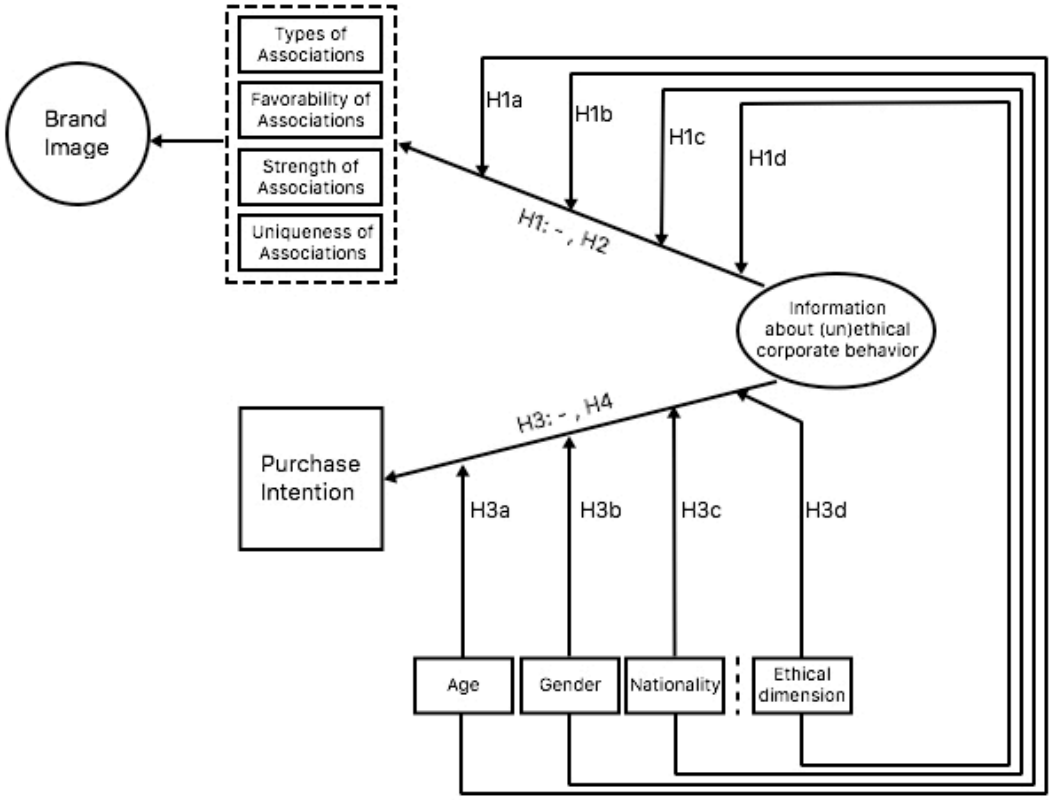
2.2.2 Conceptual Framework

The conceptual framework in Figure 2, shows that there are four main hypotheses being considered: H1, H2 and H3 and H4. H1 is a direct negative effect of Unethical Information on purchase behavior. Although previous qualitative research suggests that the effect of unethical information in purchase behavior for the fashion market is more nuanced, it is expected to see some negative effect. On the other hand, H3 is a direct negative effect of Unethical Information on Brand Image. It is expected that providing consumers with unethical information about a fashion firm will create new unfavorable associations with the brand, and possibly switching some pre-existing favorable associations to unfavorable ones.

The hypotheses, H1 and H3, are both supposed to be mediated by the effect of H1a, H1b, H1c, H1d and H3a, H3b, H3c, H3d respectively. Therefore, it is expected that the demographic characteristics of consumers and the ethical dimension of the information provided, influence the effect of unethical information, on both Brand Image and purchase behavior.

For reasons concerning the clarity of the framework, H5 has not been included on it. However, H5 is central to the current study since it draws the comparison between the effect on Brand Image and purchase decisions, which will yield the most relevant conclusions and implications.

Figure 2: Conceptual framework



3. Methodology

3.1 Survey

3.1.1 Experimental design

The research approach involves designing and conducting a two-part survey that consists of a rating-based conjoint design and a choice experiment:

Firstly, the rating-based conjoint design consists of 8 experimental conditions and it is the enabling instrument to collect data on the effect of (un)ethical information on brand image. The brands that have been used are fictional fashion brands, in order to minimize the effect of previous associations with real brands, and to increase the degree of control of the experiment (Boush & Loken, 1991; Keller & Aaker, 1992). This part of the survey that measures brand image has been designed by combining the research of three authors: the freely elicited attributes for products in the industry, identified by Eckman et al. (1990), the framework and constructs conforming brand image proposed by Keller (1993), and the symbolic brand benefits described by Aaker (2009). Respondents have to rate on a likert scale, how much they believe that the brands that they are presented with represent the different brand attributes.

Due to the lack of previous research measuring fashion brand image with fictional brands, and as mentioned in last paragraph, this part of the survey has been designed by combining the work of three authors: Keller (1993), Eckman *et al.* (1990) and Aaker (2009). Previous studies measuring the effects of fictional brands have used attributes generated from freely elicitation techniques, such as Percy & Rossiter (1983). Considering that the use of freely elicited attributes is common practice when measuring the brand image of a fictional brand, the present study uses the categories defined by Eckman *et al.* (1990) for classifying the freely elicited attributes of their research (see Table 2), and determines the product attributes based on them. In this way, the attributes used in the present study are based on freely elicited attributes for clothing items.

Given the background acquired in the Branding course of this master's degree, each of these evaluative criteria have been classified under its relevant Brand Image construct, as defined by Keller (1993). As explained in chapter 2, Keller's work has been used as a framework for defining Brand Image and its multiple constructs in this study. Additionally, the present research uses the types of symbolic brand benefits defined by Aaker (2009) (see Table 2) as evaluative criteria for measuring consumers' perception of this part of Brand Image. A classification of the evaluative criteria used in this study, allocated to the brand image construct that each one describes, can be seen in Table 3.

Table 2. Categories of Evaluative Criteria identified by Eckman et al. (1991) and Aaker (2009).

Evaluative Criteria Category	Definition
Eckman *et al.* (1990)	
Aesthetic criteria	
Color/Pattern	Any references to color, print or visual pattern of knit or weave
Styling	Responses about design of the garment including individual preferences for a particular cut
Fabric	References to the material and the fiber content of the fabric
Uniqueness	Indication that the garment is unusual or rare in any way
Appearance	How the garment lookson the subject: flattering vs. unattractive
Usefulness criteria	
Versatility	Adaptability of the garments to various end uses and mix-and-match potential
Matching	Degree to which garments go together or are suitable with some other owned garments
Appropriateness	Suitability of the garment for specific social and work settings
Utility	Degree to which the garment fulfills particular wardrobe needs of the subject
Performance and quality crieria	
Fit	Judgments on how the garment conforms the shape of the body
Comfort	How the garment and material feels to the subject
Care	Concerns about how the subject would mantain the garment in wearable condition
Workmanship	Level of excellence of the construction or material in the garment
Extrinsic criteria	
Price	References to price
Brand	reference to the name of the manufacturer
Competition	Availability of the same item at another store
Aaker (2009)	
Emotional benefits	What does the brand make feel to the consumer during the purchase process or user experience e.g."When I buy or use this brand, I feel__."
Self-expressive benefits	Which self-expressive benefit does does the brand provide to the user e.g."When I buy or use this brand I feel I am__."
Social benefits	Which social benefit does the brand provide to the user e.g."When I buy or use this brand, the type of people I relate to are__."

Table 3. Allocation of Evaluative criteria to their respective survey statement and Brand Image construct

Author	Evaluative criteria category	Survey statement	Brand Image construct (Keller, 1993)
Eckman *et al.* (1990)	Price	I think the price is good	Attributes:Non-Product-Related:Price
Eckman *et al.* (1990)	Appearance	I like the image that these jeans would transmit	Attributes:Non-Product-Related:User and Usage Imagery
Eckman *et al.* (1990)	Styling	I like the design and cut of the jeans	Attributes:Product-Related
Eckman *et al.* (1990)	Workmanship	These jeans are of good quality	Attributes:Product-Related
Eckman *et al.* (1990)	Versatility	I can use these type of clothes in plenty of occasions	Benefits:Functional
Eckman *et al.* (1990)	Matching	The jeans match with my own clothes	Benefits:Functional
Eckman *et al.* (1990)	Utility	These jeans fulfill particular wardrobe trends	Benefits:Functional
Aaker (2009)	Emotional benefits	These jeans/brand feel trendy	Benefits:Symbolic
Aaker (2009)	Self-expressive benefits	With these clothes I feel attractive	Benefits:Symbolic
Aaker (2009)	Social Benefits	Withe these jeans I will get the approval of others	Benefits:Symbolic
-	-	I like the brand	Attitudes
-	-	I have a favorable opinion of this brand	Favorability of associations

Additionally, the way in which brand attitudes are captured in the survey corresponds to the single-response measures method of measuring brand attitudes, described by Fishbein and Ajzen (1975). This ensures that the concept at regard (the brand) is unmistakable for anyone and that all subjects understand that the likert scales in this section attempt to provide an evaluation of the brand, as opposed to a descriptive dimension.

Secondly, the choice experiment included in the survey is the instrument that enables to collect data on the effect of unethical information on purchase decision. This choice experiment follows the method of paired comparisons (Fechner, 1860) and consists of 8 experimental conditions. The paired comparison method presents each respondent with various items grouped in pairs and asks them to select the preferred one (see Appendix A). Thus, in addition to being able to capture the importance of each product attribute separately, the preferences of the respondents among different alternatives also become clear.

The different brand cards and choice sets of the survey were defined by means of a fractional (orthogonal) design, using the attributes and attribute levels presented in Table 4 in section 3.1.2. This orthogonal design gave an output of 16 combinations that are used for both measuring consumer perceived brand image and consumer purchase behavior. In order to maintain respondents' attention, focus in the task demanded and reduce their fatigue, the following measures in regards to the survey design were taken:

- The 16 combinations of attributes to measure brand image were split into two groups of 8. Survey type A and survey type B were created, each one containing one of the 8-combination subset.
- The 16 combinations of attributes to measure purchase behavior were paired using the paired method technique.

These measures prevent the variance in the answers from increasing due to the loss of attention (Smith, 1982).

The reason why this study will employ a fractional factorial design in order to determine the importance of the ethical attributes is because the measuring of simple, unconstrained stated preferences tends to overestimate the importance of product features for which there are obvious, socially correct, responses. The majority of previous quantitative research has used this simpler methodology (e.g. Elliot & Freeman, 2001; Creyer & Ross, 1997; Viriyavidhayavongs & Yothmontree, 2002). However, by using a fractional factorial design, respondents are forced to make trade-offs between attributes in their survey choices, which leads to more reliable results regarding the importance of the ethical factors in both dependent variables.

The survey includes a final question regarding the respondent's last purchase of a product of the same category than the one presented. The respondent is queried about the last purchased brand in this category and whether he or she knows about the (un)ethicality of the brand practices along its chain. The inclusion of this question in the survey will allow for gathering data on the level of information that consumers have regarding corporate ethical practices, since

previous research suggests that consumers are quite uninformed at this regard (Boulstridge & Carrigan, 2000; Auger, Burke, Devinney *et al.*, 2003). This question has been included at the end of the survey in order not to provide obvious clues about the purpose of the survey. Knowledge of the respondents about the purpose of the research could lead to possible biases and to non-reliable results.

3.1.2 Product, attributes and levels

The product chosen for the survey were jeans, due to the general consumer's familiarity with the item and its relevance to specific ethical issues, namely labor rights and environmentalism.

The product attributes considered are the same for both conjoint designs: the brand image design and the purchase behavior one. These are: price, style, durability and manufacturing issues. Table 4 contains the attributes and their respective levels. These attributes have been obtained taking into consideration the information that the respondents should possess in order to be able to answer the questions regarding the perceived brand image and their purchase intention.

Table 4. Attributes and levels

Attribute	Levels	
Price	20 € 30 € 40 € 50 €	
Style	Woman	Man
	Blue, stone washed boyfriend	Light blue, skinny
	Blue, mom fit	Dark blue, regular fit
	Blue, acid-washed, ripped skinny	Blue, stone washed, slim fit
Durability	Several years More than one year About one year	
Manufacturing issues	Child labor Sweatshops Environmental pollution Responsible, sustainable manufacturing	

- Price: The inclusion of price as one of the attributes is crucial for the reliability of the conjoint analyses since it is a very important factor for purchase decisions, as well as an important cue for inferring brand non-product-related attributes. For instance, price serves as a cue to consumers to infer product quality (which translates into the quality perception of the brand), among other information (Leavett 1954; Lichtenstein and Burton 1989; Monroe and Krishnan 1985; Rao 1984; Rao and Monroe 1988; Stiving 2000). The levels for the price attribute were determined from current selling prices of the product in the market,

in order to ensure that this attribute is a realistic representation, consistent with real product prices.

- Style: Style is an attribute that also helps consumers infer the quality of the product and brand (Pujara & Chaurasia, 2011). Furthermore, the style attribute contains indispensable information for consumers to be able to perceive user and usage imagery of the brand, which are non-product-related attributes, in regards to which consumers can form their associations about a brand. It is also the enabling factor that allows the consumer to create associations related to product-related brand attitudes, functional benefits and symbolic benefits. The different levels for this attribute have been defined according to the styles that fashion brands currently offer, in order to ensure consistency of the fictional products with real products.

- Durability: Durability is an attribute that allows consumers to directly infer the quality of the product. It also allows consumers to create associations regarding functional benefits with the fictional brand. The different levels for this attribute have been determined in accordance with the durations of the real product from different brands.

- Manufacturing issues: Manufacturing issues is the attribute that describes the ethical and unethical practices that companies perform during the manufacturing process of their products. The levels have been chosen to be consistent with the most usual unethical practices that companies perform in the garment and apparel industry. An ethical behavior level has also been included in order to capture the importance of a totally ethical manufacturing process for the consumer.

The inclusion of different ethical dimensions is also relevant because the majority of previous research has focused on one single ethical dimension only. For instance, Elliot & Freeman (2001) put their focus on working conditions. However, as identified by previous research (Simon, 1995; Carrigan & Attalla, 2011; Auger, Burke, Devinney *et al.*, 2003) different ethical dimensions have different effects on consumers' attitudes and actions. Therefore, measuring the effects of the different ethical dimensions can bring new insights to ethical apparel consumerism. The effect of these different ethical dimensions, as well as the effect of age, gender and nationality (H1a, H1b, H1c, H1d and H3a, H3b, H3c and H3d), are measured as moderation effects. On one hand, the different ethical dimensions will be included as a brand or product attribute in the cards presented to the respondents. On the other hand, age, gender and nationality of the respondents are going to be captured by asking a series of demographic questions at the beginning of each survey.

A copy of the whole survey employed for the data gathering process can be found in Appendix A.

3.2 Sampling

Conjoint analysis does not require a particular sample size for its results to be reliable. Rather, the size of the sample depends, in no little part, to factors that depend on the study in particular (e.g. What is being measured, which conjoint methodology is being used, how large is the budget for the study, etc.). Although most of the principles that influence the size of a sample are based on statistics, researchers have successfully used rules-of-thumb over the years, based on their experience. According to Orme (2010), one rule-of-thumb for determining an acceptable sample size for a choice-based conjoint, is the one presented below:

$$n \geq 500\left(\frac{c}{ta}\right)$$

Where *n* denotes the number of respondents, *t* is the number of choice tasks, *a* is the number of alternatives in each task and *c* is the number of analysis cells - when considering main effects, c is equal to the largest number of levels of an attribute.

Thus, regarding the present paper, the elements of the formula should be replaced as follows:

$$n \geq 500\left(\frac{4}{8\times2}\right)$$

Therefore an acceptable sample size (*n*) for this particular choice-based conjoint design is 125 respondents.

Unlike choice-based designs, there are no heuristics to easily determine an adequate sample size for a rating-based conjoint design. Therefore, to make the two samples comparable, the same sample size is used for the rating-based conjoint design of this study.

The survey was self-administered to respondents from two nationalities: Dutch and Spanish. The researcher controlled for an equitable distribution of gender and nationality in order for the results of the two surveys to be comparable. The respondents' ages ranged from 16 to 73 years old.

Respondents have been contacted both by email and Facebook group. Those potential respondents that were already known by the researcher -and who matched the nationality requirements- were directly contacted by email, and invited to participate in the survey. Other respondents have been gathered through the use of specialized Facebook groups, dedicated to find suitable respondents for academical research surveys. Due to the researcher non-Dutch background, a number of Dutch respondents have been obtained using this method.

3.3. Analysis

The analysis of the data is conducted, mainly, through two conjoint analysis: one to measure the importance of the different attributes on Brand Image (1)

and a second one to measure the importance of the attributes on purchase behavior (2).

1. The first conjoint analysis uses the mean of all respondent answers for every card as the dependent variable, while the levels of the different attributes serve as the independent variables. The linear regression model is used to determine the effect of ethicality in perceived Brand Image, as well as the effect of all the other attributes on the same construct. Therefore it allows for testing H1 and H2.

Table 5. Variables included in the conjoint analysis. The same variables are also applicable for conjoint analysis (2)

Variables in the Conjoint Analysis

Variable	Type	Attribute to which belongs	Encoded as
Perceived Brand Image	Dependent	-	Brand Image
30 €	Independent	Price	Price30€
40 €	Independent	Price	Price40€
50 €	Independent	Price	Price50€
Blue, mom fit/ Dark blue, regular fit	Independent	Style	Stylemom/regular
Blue, acide-wshed, ripped skinny/ Blue, stone washed, slim fit	Independent	Style	Styleskinny/slim
More than one year	Independent	Durability	Durability+1year
About one year	Independent	Durability	Durability1year
Child labor	Independent	Ethicality	Child labor
Sweatshops (factories with poor conditions)	Independent	Ethicality	Sweatshops
Environmental pollution	Independent	Ethicality	Pollution
Responsible, sustainable manufacturing	Independent	Ethicality	Ethical process

2. Similarly, the second conjoint analysis uses the logit model to measure the impact of unethical information and the rest of the attributes in purchase behavior. The dependent variable for this analysis is the answer of every respondent to every choice set. Naturally, the levels of the different attributes serve as independent variables. Thus, this analysis allows testing H3 and H4.

Besides the tests described above, additional processing of the data is needed to test all the hypotheses formulated:

A comparison between the results of both conjoint analyses allows determining for which construct, brand image or purchase behavior, ethicality has a bigger effect (H5). According to Moore (2004), the results obtained from a choice-based conjoint analysis and a rating-based conjoint analysis can be compared with each other. Therefore, the comparison between the ethical factors of both conjoint analyses should be possible and reliable. However, the discrete choice model (logit) used for the analysis of the choice-based conjoint design, has a latent scale of coefficients (Train, 2009). This implies that a direct comparison between the coefficients of the rating-based and the choice-based conjoint designs is not possible. Therefore, this study uses relative measures such as

utility and relative importance in order to compare the effect of ethical behavior between both conjoint designs.

Lastly, as mentioned before, previous research suggests that the effect of the ethical factor on the dependent variable differs depending on the demographics of the respondent (Auger, Burke, Devinney *et al.*, 2003). In order to verify this, additional interaction effects with the dependent variable need to be computed.

4. Results

This chapter presents the results from the various analyses, that serve to test the hypotheses formulated in chapter 2 of this study. First, the reader is presented with descriptive information about the data. Second, the different analyses that have been conducted are presented. The status of each hypothesis can be found following the analysis that tests it.

4.1 Descriptives

The demographic characteristics of the sample have been summarized in Figure 3. The table shows the the amount of respondents that belong to each gender, nationality and age group; for every survey group (A or B) and in total. The total size of the sample is 261 respondents, from which 130 have participated in survey A and 131 have participated in survey B.

Figure 3. Demographic characteristics of the sample

	N	Nationality		Gender		Age	
		Dutch	Spanish	Female	Male	Mean	SD
Group A	130	68	62	79	51	25,16	5,71
Group B	131	61	70	80	51	31,61	13,19
Total	261	129	132	159	102	28,43	10,72

	N	Nationality		Gender	
		Dutch	Spanish	Female	Male
Group A	49,81%	52,71%	46,97%	49,69%	50,00%
Group B	50,19%	47,29%	53,03%	50,31%	50,00%
Total	100,00%	100,00%	100,00%	100,00%	100,00%

Age group	Group A	% Group A	Group B	% Group B	Total	% Total
15 - 20	3	2,31%	11	8,40%	14	5,36%
21 - 25	85	65,38%	63	48,09%	148	56,70%
26 - 30	33	25,38%	14	10,69%	47	18,01%
31 - 35	5	3,85%	7	5,34%	12	4,60%
36 - 40	0	0,00%	5	3,82%	5	1,92%
41 - 45	1	0,77%	5	3,82%	6	2,30%
46 - 50	1	0,77%	10	7,63%	11	4,21%
51 - 55	1	0,77%	5	3,82%	6	2,30%
56 - 60	1	0,77%	4	3,05%	5	1,92%
61 - 65	0	0,00%	6	4,58%	6	2,30%
66 - 70	0	0,00%	1	0,76%	1	0,38%

Figure 4 shows the results of the Mann-Whitney test performed with the two different survey groups of the sample: A and B. The total sample has been created by combining the samples of survey group A and survey group B, thus it needs to be checked whether these two groups, that conform the total sample, are significantly different from each other. Figure 4 shows that the amount of males and females is not statistically different between the two samples (Gender's p-value > 0.05); so is the case with Dutch and Spanish respondents

(Nationality's p-value > 0.05). However, it can be seen that the age groups prove to be statistically different between the two samples, with a p-value=0.018 (therefore, less than 0.05). A closer look to the ranks table reveals that the rank mean of group B is somehow higher than the one of group A, so it can be inferred that the average age of the respondents of group B is significantly higher than the average age of respondents of group A.

Figure 4. Mann-Whitney Test

Mann-Whitney Test

Ranks

	Group	N	Mean Rank	Sum of Ranks
Gender	1	130	130,80	17004,50
	2	131	131,19	17186,50
	Total	261		
Nationality	1	130	134,76	17519,00
	2	131	127,27	16672,00
	Total	261		
Age	1	130	120,97	15726,50
	2	131	140,95	18464,50
	Total	261		

Test Statistics[a]

	Gender	Nationality	Age
Mann-Whitney U	8489,500	8026,000	7211,500
Wilcoxon W	17004,500	16672,000	15726,500
Z	-0,490	-0,926	-2,373
Asymp. Sig. (2-tailed)	0,961	0,354	0,018

a. Grouping Variable: Group

4.2 Reliability and consistency tests

In order to assess the reliability and internal consistency of the data that measures Brand Image, a Cronbach's alpha test is run. The results of the test show that the underlying items have an excellent consistency with each other, α=0.928. This statistic shows enough internal consistency as to perform further analysis with the complete set of variables.

Table 6. Cronbach's alpha test results

Reliability Statistics

Cronbach's Alpha	N of Items
0,928	12

4.3 Conjoint analysis: Brand Image

As mentioned in the previous chapter, two conjoint analyses are the main drivers for obtaining the results of this study. This first conjoint analysis aims to measure the effect of the different attributes and its levels (presented in Table 4, in chapter 3), on the latent variable of perceived Brand Image. The results of this test are shown in Figure 5.

Figure 5. Results of the rating-based conjoint analysis

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0,365[a]	0,133	0,129	1,133958864

a. Predictors: (Constant), Ethical process, Durability1year, Price30€, Styleskinny/slim, Pollution, Durability+1year, Price50€, Stylemom/regular, Sweatshops, Child labor, Price40€

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	409,958	11	37,269	28,984	0,000[b]
	Residual	2669,451	2076	1,286		
	Total	3079,409	2087			

a. Dependent Variable: Brand Image

b. Predictors: (Constant), Ethical process, Durability1year, Price30€, Styleskinny/slim, Pollution, Durability+1year, Price50€, Stylemom/regular, Sweatshops, Child labor, Price40€

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	4,589	0,081		56,449	0,000
	Price30€	0,156	0,081	0,056	1,926	0,054
	Price40€	0,047	0,085	0,018	0,550	0,582
	Price50€	0,102	0,081	0,036	1,255	0,210
	Stylemom/regular	-0,254	0,061	-0,091	-4,187	0,000
	Styleskinny/slim	-0,030	0,064	-0,011	-0,458	0,647
	Durability+1year	-0,194	0,064	-0,069	-3,011	0,003
	Durability1year	-0,231	0,061	-0,082	-3,799	0,000
	Child labor	-0,425	0,077	-0,140	-5,496	0,000
	Sweatshops	-0,419	0,078	-0,137	-5,391	0,000
	Pollution	-0,055	0,078	-0,018	-0,708	0,479
	Ethical process	0,706	0,079	0,230	8,907	0,000

a. Dependent Variable: Brand Image

As shown by Figure 5, the 12,9% (Adjusted R Square = 0.129) of the variation of the dependent variable can be explained by the variation of the independent variables included in the model.

The ANOVA test in the same figure shows a p-value less than 0.05, therefore the null hypothesis is rejected and the model is proved meaningful.
The coefficients table, also presented in Figure 5, show which of the independent variables have a significant effect on the dependent variable. It can be seen that none of the levels of the price attribute is significantly different from zero, since all p-values for this levels are greater than the level of significance

0.05. Therefore, it can be concluded that price does not play a role in determining the perceived brand image for consumers. Opposite is the case for the durability attribute: all of the levels for this attribute prove to be significantly different from zero ($p<0.05$). Thus, this attribute does have an effect on how consumers conform their image of a brand. The sign of this effect, as shown by both coefficients, is negative compared to the base level (a duration of several years): *Durabilty+1year* presents a coefficient of β=-0,194, which is smaller than the β=-0231 of *Durability1year*. These direction of the effect of these coefficients seems obvious, since both levels represent a clear disadvantage to the consumer when they compared to the base level.

Regarding the style levels, respondents seem to be indifferent between the base level (boyfriend jeans for women and skinny jeans for men) and level Styleskinny/slim. However, Stylemom/regular has a negative effect (β=-0,254), being less preferred than the base level.

Regarding the ethical attribute, the key piece in this study, the table shows that *Child labor*, poor factory conditions (*Sweatshops*) and a completely ethical manufacturing are all significant levels. The only attribute level that is not significant is environmental pollution ($p=0.479$). These results are supportive of those of the studies conducted by Mascarenhas (1995) and Mohr *et al*. (2001), who defend that information about the ethicality of corporate behavior has an effect on consumer's perceived Brand Image. *Child labo*r and *Sweatshops* both present coefficients (β=-0,425 and β=-0,419, respectively) that have a negative effect when compared to the base level: No information regarding ethicality. As it may seem obvious, level *Ethical process* has a positive effect (β=0,706), although it might be surprising that it is bigger than the negative effects produced by *Child labo*r and *Sweatshops*.

Based on the attributes and attribute levels that prove significant, the regression model can be estimated as follows:

Perceived Brand Image = b_0 + b_2 style + b_3 durability + b_4 ethicality + ε = 4.589 + (-2.54) style1 + [-0.194 durability1 or -0.231 durability2] + [-0.425 child labor or -0.419 sweatshops or 0.706 ethical] + ε

Table 7. Relative importance values i

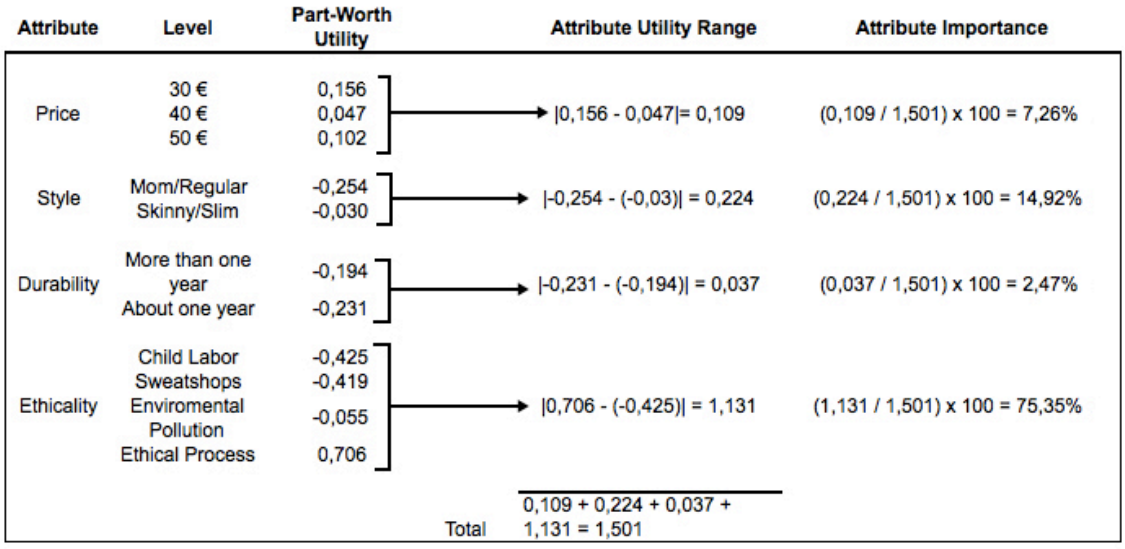
Importance values	
Price	7,26%
Style	14,92%
Durability	2,47%
Ethicality	75,35%

Additionally to the coefficients of the levels, the relative importance for each of the attributes have been calculated and are shown in Table 7. This table shows, in percentage, the importance of each of the whole attributes within the linear regression.

The computation of the relative importance values is done using the coefficients of the levels in the regression. Only the highest and the lowest coefficients (part-worths) of the

levels are taken into consideration. The lowest is subtracted from the highest coefficient, giving the attribute utility range. The sum of the utility ranges of all attributes equals the total utility range. Then, the individual utility range of each attribute (in absolute value) is divided by the total utility range and the result is multiplied by 100, giving the relative importance values for all of the attributes in the conjoint analysis. A more visual explanation of this computation is shown in Figure 6.

Figure 6. Computation of relative importance values



Based on the results of the *Coefficients* table in Figure 5, hypothesis **H1** can be partially accepted and hypothesis **H2** can be rejected:

H1. Information portraying unethical practices of a firm has a negative impact on consumers' perceived brand image of the firm.
The negative coefficients of *Child labor* and *Sweatshops* demonstrate that unethical practices on behalf of firms have a negative repercussion on perceived brand image. However, environmental pollution is not significant.

This result can be seen as supporting to the phenomenon of "Selective Ethicality" described by Carrigan & Attalla (2001), according to which consumers are more affected by events to which they can easily relate. Chapter 5 elaborates more on this argument.

H2. The impact of unethical practices on consumers' perceived brand image is bigger in comparison to the one produced by positive ethical behavior.
This hypothesis may be rejected since the coefficient for the ethical practices level is bigger than any of the coefficients for the levels identifying unethical practices.

This finding contradicts the results of the studies conducted by Skowronski & Carlston (1987) and Reeder & Brewer (1979), who found that unethical practices had a bigger effect on consumers than ethical ones.

4.4 Conjoint analysis: Purchase behavior

The second conjoint analysis aims to measure the effect of the different attributes and its levels on the dependent variable purchase behavior. The results of this test are shown in Figure 7.

Figure 7. Results of the choice-based conjoint analysis

Omnibus Tests of Model Coefficients

		Chi-square	df	Sig.
Step 1	Step	293,839	11	0,000
	Block	293,839	11	0,000
	Model	293,839	11	0,000

Model Summary

Step	-2 Log likelihood	Cox & Snell R Square	Nagelkerke R Square
1	5495,326[a]	0,068	0,091

a. Estimation terminated at iteration number 3 because parameter estimates changed by less than ,001.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1[a]	Price30€	-0,281	0,102	7,565	1	0,006	0,755
	Price40€	-0,300	0,106	8,014	1	0,005	0,741
	Price50€	0,111	0,105	1,112	1	0,292	1,117
	Stylemom/regular	-0,413	0,081	25,764	1	0,000	0,661
	Styleskinny/slim	-0,373	0,084	19,898	1	0,000	0,688
	Durability+1year	-0,080	0,082	0,950	1	0,330	0,923
	Durability1year	-0,697	0,083	69,926	1	0,000	0,498
	Child labor	-0,386	0,099	15,051	1	0,000	0,680
	Sweatshops	-0,534	0,101	28,247	1	0,000	0,586
	Pollution	0,401	0,114	12,448	1	0,000	1,494
	Ethical process	0,501	0,097	26,837	1	0,000	1,650
	Constant	0,529	0,102	26,666	1	0,000	1,697

a. Variable(s) entered on step 1: Price30€, Price40€, Price50€, Stylemom/regular, Styleskinny/slim, Durability+1year, Durability1year, Child labor, Sweatshops, Pollution, Ethical Process.

For regression models with a nominal dependent variable, it is not possible to compute a unique R^2 statistic that contains all the information contained by a R^2 statistic in a linear regression. Therefore, some approximations to this statistic are computed instead. Figure 7, under the table *Model Summary*, shows these approximations: Log-likelihood, Cox & Snell R^2 and Nagelkerke R^2. Although suggestive, these approximations cannot provide much information in the context of the present study, since they are most useful when comparing competing models for the same data, where the model with the single highest approximation proves to be the best fit. Although these coefficients may seem

low (including also the R^2 statistic of the linear regression), previous literature defends that the R^2 statistics of Conjoint Analysis are usually low (Lawrence & Klimberg, 2015). This is explained further in chapter 5.3.

Since the p-value of this model is less than 0.000, the null hypothesis can be rejected and the model proves meaningful (0.05>0.000).

Similarly to the results of the linear regression, level *Price50€* is not significantly different from 0 (p=0,292) and, therefore, has no effect on consumer purchase behavior. However, levels *Price30€* and *Price40€* prove to be significant and, as it may be expected, both represent a negative effect (β=-0,281 and β=-0,300, respectively) on the dependent variable, compared to the a-priori-prefered base level (*Price20€)*.

In regards to the style, consumers seem to prefer the base style level (boyfriend jeans for women and skinny jeans for men) to *Styleskinny/slim* (β=-0,373), but even more to *Stylemom/regular* (β=-0,413).

In addition, it also seems that the level *Durability1year*, with a β coefficient of -0,697 has a negative effect on respondents purchase decision when compared to the base level. *Durability+1year* though, has no effect at all since it proves not to be significantly different from the base level (p=0,330). It could be argued that

Unlike in the linear regression model, all ethicality levels are significant with the logit model to estimate customer purchase behavior. Unsurprisingly, *Child labor* and *Sweatshops* have negative effects (β=-0,386 and β=-0,534, respectively) on the respondents' purchase decisions, but *Pollution* has a positive impact on respondents when compared to the base level (no ethical information provided). This finding is certainly unexpected and it is more elaborated on in chapter 5.

Based on the significant attributes and attribute levels of this test, the model can be estimated as follows:

Utility of purchasing the product = b_0 + b_1 price + b_2 style + b_3 durability + b_4 ethicality + ε = 0.753 + [-0.296 price 30€ or -0.275 price 40€] + [-0.355 style 1 or -0.377 style 2] + (-0.632 durability less than one year] + [-0.635 child labor or -0.782 sweatshops or 0.4 environmental pollution] + ε

The relative importances of each of the attributes have been calculated and are shown in Table 8. They show the importance of the attribute as a whole on the dependent variable purchase behavior.

Table 8. Relative importance values ii

Importance Values	
Price	18,16%
Style	1,77%
Durability	34,33%
Ethicality	45,74%

Based on the results shown in Figure 7, we can accept both hypotheses **H3** and **H4**:

H3. Information portraying unethical practices of a firm has a negative impact on consumers' purchase behavior for products from the firm.
This hypothesis can only be partially accepted since, surprisingly, ethicality level *Pollution* has a positive effect on purchase behavior. All other levels for this attribute present negative effects on the dependent variable.

H4. The impact of unethical practices on consumers' purchase decision is bigger in comparison to the one produced by positive ethical behavior.
This hypothesis can be accepted since the level *Sweatshops* has a bigger (negative) effect on the dependent variable compared to the level ethical manufacturing.

This result (conversely to **H2)** supports the findings of Skowronski & Carlston (1987) and Reeder & Brewer (1979). It may be concluded that consumers react more strongly to unethicality through their purchase behavior than by reconsidering a brand's image.

The testing of **H5** requires a comparison between the coefficients of the attributes and the importance values, obtained in the two conjoint analysis. As mentioned in the previous chapter, in line with the research of Moore (2004) the results obtained from a choice-based conjoint analysis and a rating-based conjoint analysis can be reliably compared with each other. The above mentioned comparison is shown in Figure 8.

Figure 8. Comparison of relative importance values for the attributes and regression coefficients between attributes and levels, respectively. **p<0,05

Importance values		
	Brand Image	Purchase Intention
Price	7,26%	18,16%
Style	14,92%	1,77%
Durability	2,47%	34,33%
Ethicality	75,35%	45,74%

Regression coefficients		
	Brand Image	Purchase Intention
Price30€	0,156	-0,281**
Price40€	0,047	-0,300**
Price50€	0,102	0,111
Stylemom/regular	-0,254**	-0,413**
Styleskinny/slim	-0,030	-0,373**
Durability+1year	-0,194**	-0,080
Durability1year	-0,231**	-0,697**
Child labor	-0,425**	-0,386**
Sweatshops	-0,419**	-0,534**
Pollution	-0,550	0,401**
Ethical process	0,706**	0,501**

The table *Importance values* in Figure 8 shows the quantity of the effect that each of the attributes wield on Brand Image and purchase behavior. On the other hand, the table *Regression coefficients* compares the effect of each of the attribute levels on both dependent variables.

H5. I expect the effect of ethicality on Brand Image to be greater than the effect of ethicality on purchase behavior.
In *Importance values* table, it can be seen that *Ethicality* has a bigger impact on Brand Image than on purchase behavior. Therefore, **H5** is accepted.

All importance values and regression coefficients of both tables in Figure 8 should be looked at as absolute values, since what is being measured is the size of the effect, not its direction. Following this rationale, *Importance values* table surprisingly shows that style has a bigger effect on Brand Image than it has on purchase behavior. On the other hand, it seems logical that durability of the clothing item and price have a bigger effect on purchase decisions than on Brand Image, since they seem more relevant attributes for a purchasing decision.

The *Regression coefficients* table allows to deepen on the comparison shown in the first table by showing the particular effect of each attribute level, for both dependent variables. Therefore, it can be seen that not all ethical levels have

the biggest effect on Brand Image, alas one of them, *Sweatshops* seem to have a bigger impact on purchase behavior.

4.5 Interaction effects

4.5.1 Brand Image

Table 9. Interaction effects of gender in the Brand Image regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,589	0,081		56,449	0,000
	Price30€	0,156	0,081	0,056	1,926	0,054
	Price40€	0,047	0,085	0,018	0,550	0,582
	Price50€	0,102	0,081	0,036	1,255	0,210
	Stylemom/regular	-0,254	0,061	-0,091	-4,187	0,000
	Styleskinny/slim	-0,030	0,064	-0,011	-0,458	0,647
	Durability+1year	-0,194	0,064	-0,069	-3,011	0,003
	Durability1year	-0,231	0,061	-0,082	-3,799	0,000
	Child labor	-0,425	0,077	-0,140	-5,496	0,000
	Sweatshops	-0,419	0,078	-0,137	-5,391	0,000
	Pollution	-0,055	0,078	-0,018	-0,708	0,479
	Ethical process	0,706	0,079	0,230	8,907	0,000
2	(Constant)	4,588	0,081		56,683	0,000
	Price30€	0,169	0,117	0,060	1,443	0,149
	Price40€	0,067	0,124	0,026	0,543	0,587
	Price50€	-0,075	0,118	-0,027	-0,640	0,522
	Stylemom/regular	-0,283	0,095	-0,101	-2,983	0,003
	Styleskinny/slim	-0,166	0,103	-0,059	-1,613	0,107
	Durability+1year	-0,149	0,103	-0,053	-1,449	0,148
	Durability1year	-0,097	0,095	-0,035	-1,026	0,305
	Child labor	-0,211	0,112	-0,069	-1,882	0,060
	Sweatshops	-0,233	0,114	-0,076	-2,052	0,040
	Pollution	0,094	0,115	0,031	0,819	0,413
	Ethical process	0,778	0,122	0,254	6,362	0,000
	Prrice30€_Female	-0,023	0,139	-0,007	-0,168	0,866
	Price40€_Female	-0,037	0,148	-0,012	-0,248	0,804
	Price50€_Female	0,289	0,140	0,085	2,065	0,039
	Stylemom/regular_Femal	0,053	0,120	0,016	0,443	0,658
	Styleskinny/slim_Female	0,229	0,131	0,068	1,743	0,081
	Durabillity+1year_Female	-0,073	0,131	-0,022	-0,553	0,581
	Durabillity1year_Female	-0,219	0,120	-0,065	-1,825	0,068
	Child labor_Female	-0,360	0,136	-0,096	-2,645	0,008
	Sweatshops_Female	-0,310	0,137	-0,083	-2,259	0,024
	Pollution_Female	-0,244	0,139	-0,065	-1,758	0,079
	Ethical process_Female	-0,113	0,152	-0,030	-0,741	0,459

a Dependent Variable: Brand Image

Table 9 shows the moderation effect of gender on the independent variables (attributes) of the dependent Brand Image. The results of the regression show that the interaction variable is significant for a number of the attribute levels. More concretely, gender plays a role in one level of the attribute Price and in three levels of the attribute Ethicality. Therefore, **H1b** is accepted. It can be then concluded that males and females create associations of different intensity regarding the use of child labor, sweatshops and environmental pollution on behalf of fashion firms, when developing their perceived Brand Image for those firms. Additionally, it can be seen that level *Price50€* produces a positive effect on females (-0,075 + 0,289= 0,214), whereas it produces a negative effect for

males (-0,075). Although the main effect of *Price50€* is not significant, it could also be concluded that females are less price sensitive than males while creating their associations with a brand.

Table 10. Interaction effects of nationality in the Brand Image regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,589	0,081		56,449	0,000
	Price30€	0,156	0,081	0,056	1,926	0,054
	Price40€	0,047	0,085	0,018	0,550	0,582
	Price50€	0,102	0,081	0,036	1,255	0,210
	Stylemom/regular	-0,254	0,061	-0,091	-4,187	0,000
	Styleskinny/slim	-0,030	0,064	-0,011	-0,458	0,647
	Durability+1year	-0,194	0,064	-0,069	-3,011	0,003
	Durability1year	-0,231	0,061	-0,082	-3,799	0,000
	Child labor	-0,425	0,077	-0,140	-5,496	0,000
	Sweatshops	-0,419	0,078	-0,137	-5,391	0,000
	Pollution	-0,055	0,078	-0,018	-0,708	0,479
	Ethical process	0,706	0,079	0,230	8,907	0,000
2	(Constant)	4,592	0,081		56,369	0,000
	Price30€	0,232	0,106	0,083	2,197	0,028
	Price40€	0,122	0,112	0,047	1,090	0,276
	Price50€	0,151	0,106	0,054	1,428	0,153
	Stylemom/regular	-0,277	0,084	-0,099	-3,319	0,001
	Styleskinny/slim	-0,137	0,090	-0,049	-1,517	0,129
	Durability+1year	-0,218	0,090	-0,078	-2,423	0,015
	Durability1year	-0,245	0,084	-0,087	-2,912	0,004
	Child labor	-0,480	0,103	-0,158	-4,639	0,000
	Sweatshops	-0,471	0,103	-0,154	-4,574	0,000
	Pollution	-0,066	0,103	-0,021	-0,641	0,522
	Ethical process	0,682	0,109	0,223	6,282	0,000
	Price30€_Dutch	-0,153	0,137	-0,041	-1,114	0,265
	Price40€_Dutch	-0,150	0,145	-0,044	-1,033	0,302
	Price50€_Dutch	-0,103	0,137	-0,028	-0,750	0,453
	Stylemom/regular_Dutch	0,046	0,118	0,012	0,392	0,695
	Styleskinny/slim_Dutch	0,219	0,129	0,059	1,699	0,090
	Durability+1year_Dutch	0,052	0,129	0,014	0,406	0,684
	Durability1year_Dutch	0,026	0,118	0,007	0,220	0,826
	Child labor_Dutch	0,101	0,135	0,025	0,748	0,455
	Sweatshops_Dutch	0,101	0,135	0,024	0,749	0,454
	Pollution_Dutch	0,014	0,136	0,003	0,105	0,917
	Ethical process_Dutch	0,039	0,149	0,009	0,265	0,791

a Dependent Variable: Brand Image

Table 10 shows the interaction effect created by nationality, on the independent variables of the dependent Brand Image. The table shows that there is almost no moderation effect by nationality. All attribute levels when only Dutch nationality is considered are not significantly different from the ones including both nationalities, except for one: *Stylemom/regular*. Although still negative, stylemom/regular has less of a bad effect on Dutch people when they are forming their styling associations with Brand Image. Based on this results, we can conclude that the fashion tastes are slightly different for Dutch and Spanish people.

Given that no significant effect is generated by nationality, **H1c** can be rejected.

Table 11. Interaction effects of age in the Brand Image regression

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	4,589	0,081		56,449	0,000
	Price30€	0,156	0,081	0,056	1,926	0,054
	Price40€	0,047	0,085	0,018	0,550	0,582
	Price50€	0,102	0,081	0,036	1,255	0,210
	Stylemom/regular	-0,254	0,061	-0,091	-4,187	0,000
	Styleskinny/slim	-0,030	0,064	-0,011	-0,458	0,647
	Durability+1year	-0,194	0,064	-0,069	-3,011	0,003
	Durability1year	-0,231	0,061	-0,082	-3,799	0,000
	Child labor	-0,425	0,077	-0,140	-5,496	0,000
	Sweatshops	-0,419	0,078	-0,137	-5,391	0,000
	Pollution	-0,055	0,078	-0,018	-0,708	0,479
	Ethical process	0,706	0,079	0,230	8,907	0,000
2	(Constant)	4,582	0,082		55,789	0,000
	Price30€	-0,119	0,231	-0,042	-0,516	0,606
	Price40€	-0,297	0,248	-0,113	-1,197	0,232
	Price50€	-0,076	0,219	-0,027	-0,349	0,727
	Stylemom/regular	0,057	0,183	0,020	0,311	0,756
	Styleskinny/slim	0,212	0,212	0,076	0,997	0,319
	Durability+1year	-0,070	0,196	-0,025	-0,356	0,722
	Durability1year	-0,398	0,192	-0,142	-2,078	0,038
	Child labor	-0,934	0,295	-0,308	-3,170	0,002
	Sweatshops	-0,483	0,251	-0,158	-1,928	0,054
	Pollution	-0,111	0,217	-0,036	-0,512	0,609
	Ethical process	0,952	0,249	0,311	3,828	0,000
	Price30€_Age	0,009	0,008	0,104	1,175	0,240
	Price40€_Age	0,013	0,009	0,158	1,491	0,136
	Price50€_Age	0,006	0,007	0,068	0,833	0,405
	Stylemom/regular_Age	-0,011	0,006	-0,129	-1,753	0,080
	Styleskinny/slim_Age	-0,009	0,007	-0,105	-1,200	0,230
	Durability+1year_Age	-0,004	0,007	-0,040	-0,543	0,587
	Durability1year_Age	0,007	0,007	0,073	0,992	0,322
	Child labor_Age	0,021	0,011	0,175	1,851	0,064
	Sweatshops_Age	0,003	0,009	0,031	0,336	0,737
	Pollution_Age	0,002	0,007	0,018	0,233	0,816
	Ethical process_Age	-0,009	0,009	-0,097	-1,038	0,299

a Dependent Variable: Brand Image

Table 11 shows the result of the interaction between age and the independent variables of the regression. It can be considered surprising that, as the table shows, age of the consumers plays almost no role in developing their perceived Brand Image. Whereas it could be thought that attributes like ethicality or price would entail differences between age groups, mainly due to different income levels or ideologies, the table shows that the only effect is on style. Thus, the only factor that significantly changes how different age groups create brand associations, are styling options.

Given the results of Table 10, **H1a** can be rejected.

4.5.2 Purchase behavior

Figure 9. Interaction effects of gender, nationality and age in the purchase behavior regression

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Price30€	-0,337	0,149	5,119	1	0,024	0,714
	Price40€	-0,322	0,155	4,323	1	0,038	0,724
	Price50€	0,047	0,153	0,095	1	0,758	1,048
	Stylemom/regular	-0,231	0,126	3,346	1	0,067	0,793
	Styleskinny/slim	-0,384	0,133	8,343	1	0,004	0,681
	Durability+1year	-0,100	0,130	0,584	1	0,445	0,905
	Durability1year	-0,689	0,129	28,365	1	0,000	0,502
	Child labor	-0,342	0,146	5,515	1	0,019	0,710
	Sweatshops	-0,438	0,147	8,892	1	0,003	0,645
	Pollution	0,266	0,170	2,438	1	0,118	1,305
	Ethical process	0,449	0,145	9,604	1	0,002	1,567
	Prrice30€_Female	0,092	0,179	0,265	1	0,607	1,097
	Price40€_Female	0,036	0,187	0,037	1	0,848	1,036
	Price50€_Female	0,106	0,187	0,323	1	0,570	1,112
	Stylemom/regular_Female	-0,302	0,161	3,515	1	0,061	0,739
	Styleskinny/slim_Female	0,016	0,171	0,008	1	0,927	1,016
	Durabillity+1year_Female	0,031	0,168	0,035	1	0,853	1,032
	Durabillity1year_Female	-0,013	0,164	0,007	1	0,935	0,987
	Child labor_Female	-0,072	0,176	0,168	1	0,682	0,931
	Sweatshops_Female	-0,158	0,178	0,787	1	0,375	0,854
	Pollution_Female	0,225	0,213	1,108	1	0,292	1,252
	Ethical process_Female	0,087	0,180	0,235	1	0,628	1,091
	Constant	0,529	0,103	26,672	1	0,000	1,698

a Variable(s) entered on step 1: Price30€_Female, Price40€_Female, Price50€_Female, Stylemom/regular_Female, Styleskinny/slim_Female, Durability+1year_Female, Durability1year_Female, Child labor_Female, Sweatshops_Female, Pollution_Female, Ethical process_Female.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Price30€	-0,306	0,135	5,149	1	0,023	0,736
	Price40€	-0,255	0,140	3,344	1	0,067	0,775
	Price50€	0,172	0,141	1,497	1	0,221	1,188
	Stylemom/regular	-0,413	0,113	13,290	1	0,000	0,662
	Styleskinny/slim	-0,594	0,120	24,609	1	0,000	0,552
	Durability+1year	0,010	0,117	0,007	1	0,932	1,010
	Durability1year	-0,729	0,117	38,975	1	0,000	0,483
	Child labor	-0,476	0,132	12,966	1	0,000	0,622
	Sweatshops	-0,536	0,133	16,208	1	0,000	0,585
	Pollution	0,560	0,157	12,750	1	0,000	1,750
	Ethical process	0,530	0,131	16,347	1	0,000	1,699
	Price30€_Dutch	0,049	0,176	0,077	1	0,781	1,050
	Price40€_Dutch	-0,090	0,183	0,245	1	0,621	0,913
	Price50€_Dutch	-0,126	0,184	0,474	1	0,491	0,881
	Stylemom/regular_Dutch	-0,005	0,158	0,001	1	0,976	0,995
	Styleskinny/slim_Dutch	0,432	0,167	6,654	1	0,010	1,540
	Durability+1year_Dutch	-0,181	0,165	1,211	1	0,271	0,834
	Durability1year_Dutch	0,060	0,161	0,140	1	0,708	1,062
	Child labor_Dutch	0,175	0,172	1,041	1	0,308	1,192
	Sweatshops_Dutch	-0,002	0,174	0,000	1	0,991	0,998
	Pollution_Dutch	-0,309	0,210	2,178	1	0,140	0,734
	Ethical process_Dutch	-0,057	0,176	0,103	1	0,748	0,945
	Constant	0,532	0,103	26,862	1	0,000	1,702

a Variable(s) entered on step 1: Price30€_Dutch, Price40€_Dutch, Price50€_Dutch, Stylemom/regular_Dutch, Styleskinny/slim_Dutch, Durability+1year_Dutch, Durability1year_Dutch, Child labor_Dutch, Sweatshops_Dutch, Pollution_Dutch, Ethical process_Dutch.

Variables in the Equation

		B	S.E.	Wald	df	Sig.	Exp(B)
Step 1a	Price30€	-0,409	0,276	2,193	1	0,139	0,664
	Price40€	-0,763	0,284	7,203	1	0,007	0,466
	Price50€	-0,335	0,301	1,241	1	0,265	0,715
	Stylemom/regular	0,211	0,240	0,777	1	0,378	1,235
	Styleskinny/slim	0,166	0,250	0,439	1	0,507	1,180
	Durability+1year	0,378	0,247	2,338	1	0,126	1,460
	Durability1year	-0,520	0,243	4,581	1	0,032	0,595
	Child labor	-0,408	0,254	2,583	1	0,108	0,665
	Sweatshops	-0,237	0,259	0,834	1	0,361	0,789
	Pollution	-0,513	0,326	2,474	1	0,116	0,599
	Ethical process	0,188	0,272	0,476	1	0,490	1,206
	Price30€_Age	0,004	0,009	0,236	1	0,627	1,004
	Price40€_Age	0,017	0,009	3,101	1	0,078	1,017
	Price50€_Age	0,016	0,010	2,510	1	0,113	1,016
	Stylemom/regular_Age	-0,023	0,008	7,650	1	0,006	0,978
	Styleskinny/slim_Age	-0,019	0,008	5,277	1	0,022	0,981
	Durability+1year_Age	-0,017	0,008	3,891	1	0,049	0,984
	Durability1year_Age	-0,006	0,008	0,621	1	0,431	0,994
	Child labor_Age	0,001	0,008	0,015	1	0,904	1,001
	Sweatshops_Age	-0,010	0,009	1,462	1	0,227	0,990
	Pollution_Age	0,033	0,011	8,695	1	0,003	1,034
	Ethical process_Age	0,012	0,009	1,561	1	0,212	1,012
	Constant	0,528	0,103	26,458	1	0,000	1,696

a Variable(s) entered on step 1: Price30€_Age, Price40€_Age, Price50€_Age, Stylemom/regular_Age, Styleskinny/slim_Age, Durability+1year_Age, Durability1year_Age, Child labor_Age, Sweatshops_Age, Pollution_Age, Ethical process_Age.

Figure 9 shows that, unlike in Brand Image, the interaction of gender, nationality or age with the independent variables (attributes) does not yield any significant difference on any of the attribute levels. Thus, it can be concluded that demographics gender, nationality or age have no moderation effect on the independent variables of the dependent purchase behavior and hypotheses **H3a**, **H3b** and **H3c** are rejected.

The results of the regressions including interaction effects for purchase behavior contradict the findings of Auger, Burke, Devinney *et al.* (2003), who found varying results regarding consumers' purchase behavior, depending on consumers' age, gender and nationality.

Hypotheses **H1d** and **H3d** refer to the differential responses of consumers depending on the dimension of the ethical transgression. This study defends that consumers' perceived brand image and purchase behavior is not affected equally by all types of unethical practices. Both hypotheses are accepted since Figures 5 and 7 show different levels of significance and different coefficients for the various levels of the *Ethicality* attribute.

As a summary of the present chapter, Figure 10 contains a table with the status, accepted or rejected, of all the hypotheses presented in chapter 2, and tested with the results of this chapter.

Figure 10. Hypotheses and sub-hypotheses status

Hypothesis	Status
H1	Accepted
H2	Rejected
H3	Accepted
H4	Accepted
H5	Accepted

Sub-hypothesis	Status
H1a	Rejected
H1b	Accepted
H1c	Rejected
H1d	Accepted
H3a	Rejected
H3b	Rejected
H3c	Rejected
H3d	Accepted

5. Conclusion

5.1 Discussion

The main conclusion that can be drawn from the results of this study is that, according to Mascarenhas (1995) and Mohr *et al* (2001), there is an impact of ethicality on purchase behavior and consumer's image of fashion brands. Although some researchers sustain that the effect of ethicality is more nuanced in the fashion industry than in other markets (Carrigan & Attalla, 2001), this study cannot show any proof of it.

As mentioned in last paragraph, in line with the research of Mason (2000), Forte & Lamont (1998) and Simon (1995), the present paper shows that ethicality plays a role in purchase behavior. Furthermore, ethicality proves to be the most determinant factor, since it is the variable of the study that obtains the highest importance value of the regression. These findings conflict with those of the qualitative studies of Joergens (2006) and Boulstridge & Carrigan (2000) who, even though they admit that ethicality plays a role in purchase decision, sustain that it is not the most important factor. This finding also is contrary to that of Carrigan & Attalla (2001), which found that ethicality plays a secondary role in apparel purchase decisions, being always outweighed by price considerations or fashion trends.

However, these contradictory findings may have a simple explanation: respondents in the study were fully informed about the ethical or unethical practices of the brands presented, whereas in normal settings most consumers are completely unknowing of the ethicality of firms' corporate behavior (Boulstridge & Carrigan, 2000; Auger, Burke, Devinney *et al.*, 2003). This affirmation is also supported by the findings of the present paper. The 86,05% of the respondents were unaware of any unethical practices of the fashion firm that they last bought jeans from, while only the 13,95% of the respondents answered that they were aware of them. However, only the 10,47% of the total respondents were able to name at least one unethical practice carried out by a fashion firm. Therefore, it might be concluded that the difference in the results can be explained, at least partially, by the asymmetric levels of information of the respondents in artificial settings versus normal settings. It can also be inferred that, should consumers be more aware of corporate behavior of firms, ethicality could be a determinant on purchase decisions, even in fashion, and that ethical shopping could become a bigger trend than it currently is.

According to Skowronski & Carlston (1987) and Reeder & Brewer (1979), this study has also found that unethical behavior has a bigger impact than ethical behavior for purchase decisions. Therefore, it can be said that the willingness to punish a firm is higher than the willingness to reward one for its good behavior. This could be explained with the expectation-based approach of ethicality that

this paper uses. As mentioned in chapter 2, this approach sustains that ethicality is defined by a range of commonly accepted corporate practices, which the regular consumer would expect companies to stick to. Using this definition, ethical behavior is something that is expected from firms, contrary to unethicality, which is not included in this range of commonly accepted practices. Therefore, the willingness to reward something that is commonly expected from a firm as a standard, is obviously less than the willingness to punish a firm that deviates from the accepted behavior.

Conversely, when it comes to shaping a brand image, this study shows that consumers are more influenced by positive ethical behavior. This contradicts with the findings of Folkes & Kamins (1999) and Spranca *et al.* (1991), which state the opposite. The time difference between these studies and the present paper could show an evolution of consumers or "consumer sophistication" over time. This is defended by Hirschman (1980) and Barnes & McTavish (1983), who state that consumers are becoming more sophisticated every time thanks to being more informed, more educated and more aware of consumer rights and product requirements. Therefore, the different results of this paper and those from Folkes & Kamins (1999) and Spranca *et al.* (1991) could respond to a different degree of consumer sophistication. If that should be the case, a more ethical fashion consumerism would have had an increased importance over the years, as Emberley (1998) and Moisander & Personen (2002) both defended.

The phenomenon of "Selective Ethicality", identified by Simon (1995) and Carrigan & Attalla (2001) in their research, can also be observed in this study. "Selective Ethicality" defends that consumers are more influenced by events that affect themselves directly, or that they can visualize and perceive as closer in time to them (Xueming Luo *et al.*, 2013). This could be a possible explanation for the not significant or positive results of environmental pollution on the first and second regression respectively. As opposed to child labor or extreme working conditions, this ethical dimension has a higher degree of difficulty to feel personally related to since it does not entail the mistreatment of any human being. Additionally, the ultimate consequence of environmental pollution is its contribution to climate change, which is an event that is difficult to concretize and still seems far in time to most people.

Another effect that has previously been researched, the "Attitude-behavior gap" (Boulstridge & Carrigan, 2000) is also present in this study. The comparison between the importance values for both regressions shows that, although ethicality is a big determinant for conforming a brand image (attitude), its is less so in a purchase decision. This entails that, while respondents have socially responsible attitudes, not all of them are willing to take action based on that, since it seems to be other factors that gain importance on a purchase situation. This difference between the two importance values for ethicality should be considered to be even bigger, given that what respondents, in the

purchasing behavior part of the survey, were choosing which product would they buy on an hypothetical scenario, not actually buying one. Therefore, their responses cannot be recorded exactly as “behavior” and thus the effect of the ethical factor in their actual purchase decisions should be more nuanced.

5.2 Implications

The results of this study have some managerial implications worth noting. These are included in this chapter.

The main conclusion of this paper is that ethicality plays a role in fashion industry, both when it comes to creating associations with a brand and in purchasing situations. Therefore, it can be used by firms to their advantage.

Figure 8 in chapter 4 shows a comparison of the importance values of the independent variables included in the two regressions (both linear and binomial). It can be seen from this comparison table that the effect of ethicality is higher when consumers encode a brand image in their minds than when they are facing purchase decisions. Therefore, the most efficient use of ethicality on behalf of managers should be to build and position their brand, without forgetting that it is also an important factor in purchasing situations.

This study also reveals that a vast majority of consumers are not aware of the ethicality of corporate practices. However, if they were, the results show that the impact of this knowledge on brand image is quite powerful. Brands who engage in ethical practices or that strive for a complete ethical process, should not hesitate on using it as a brand building tool. In fact, they should use this ethical practices as a point of difference, in order to create strong, favorable, unique associations that distinguish their brand from others in the same frame of reference. Differentiating aspects or points of difference are fundamental to successful brand positioning, since they can set a brand apart from their competition (brands which are in the same frame of reference), by offering something that is relevant to the customer and that no other brands are offering. This can be the case with ethicality: results show that the ethical factor is important to customers but the majority of them is unaware about firm’s corporate practices. Additionally, given that a number of the big players, especially in *fast fashion*, are involved in some sort of unethical practices, ethicality as a brand positioning tool is an opportunity for some brands to achieve their precious point of difference.

Keller *et al.* (2002) propose a classification of the different typologies of points of difference in their study: (1) Brand performance associations, (2) Brand imagery associations and (3) Consumer insight associations. According to their

classification, ethicality would fall into the category “Consumer insight associations”, since it does not create different user or usage imagery (“Brand imagery associations”) nor introduces any change in the product performance (“Brand performance associations”). A point of difference based on consumer insights is generally used when a brand’s performance or imagery do not differ much from those of the competition, a scenario that is particularly true in the fashion market. In such cases, showing consumers that a brand has more insight into their goals, problems or beliefs, can become a differentiating point. However, this category is considered the less preferable of the three by the authors since “insights into consumers goals are readily emulated.” Ethicality though, seems to be the exception to this rule since it needs to be shown through the firm’s actions, not slogans, and it is a costly endeavor both in terms of capital and time. Since, for most of the fashion brands, becoming an ethical player entails changing their manufacturing process by stop using child labor or improving their employees’ working conditions (remember that environmental pollution proved to be insignificant), which is a long and effortful process, ethicality turns out to be a valid, long-term point of difference.

This is a particularly important managerial implication since most ethical brands do not position themselves as such. A clear example is America Today. This brand does not engage on any of the unethical dimensions that have been included in this study (child labor, *sweatshops* and environmental pollution) and dedicates considerable resources to prevent these from happening through collaborations and partnerships with different entities in underdeveloped countries: Business Social Compliance Initiative, Fair Labor Association, UNICEF, Hivos, etc. However, the brand does not advertise none of these. This study shows that brands like America Today could leverage their ethical behavior in order to build brand image and to better position their brand with a compelling point of difference, which could also serve to justify their possibly higher prices compared to their competitors.

5.3 Limitations and future research

The present paper aims to measure the impact of ethical and unethical corporate behavior on behalf of fashion firms, on brand image and on purchase behavior. Nevertheless, the study has some design limitations that should be noted.

One of them is that the measurement of Brand Image has been carried out using fictional brands. This has important advantages to the research, like minimizing the effect of previous associations with real brands, thus not allowing previous associations interfere in the evaluation of the attributes presented to the respondent. However, using a design with fictional brands has also its downsides.

The most important of this downsides is the need to clearly and unequivocally present information regarding the ethicality of the brand's actions, due to the impossibility of familiarity with the brand. This constitutes a limitation to the study because it makes the respondent fully aware of the ethicality of the behavior of the brand, which is a piece of information than the vast majority of consumers ignore. Therefore, the asymmetrical informational conditions between this study and a natural setting, has yielded results that can be contradicting, in some cases, with previous research. Notwithstanding the foregoing, it also allows for drawing new conclusions about the effect of a more informed or more "sophisticated" consumer base.

Using fictional brands to measure Brand Image carries additional problems, also related to the lack of preexisting associations. Thus, it may have been difficult for respondents to form complete associations regarding constructs like brand imagery -both user and usage imagery.

Another limitation of the present study is the one defined by the "attitude-behavior gap", described in chapter 2. As much as the present research has tried to measure the consumer attitudes (using brand image) and consumer purchase decisions (by forcing respondents to make tradeoffs with a choice-based conjoint design), this study has not captured actions *per se*. Rather, what have been capture are the intentions to take these actions and, although the choice-based conjoint design does not allow respondents to choose the politically correct answers, the fact of not recording actual purchasing actions entails a certain limitation.

Although this study has collected data from two different countries in order to explore possible moderation effects of nationality with the dependent variables, it can be considered that two nationalities are not enough to be able to measure if nationality plays any role as a moderator.

In addition to the limitations that are inherent to the design of the study, some other need to be noted as well:

The age of the groups proved be be statistically different, therefore affecting the validity of the comparison between the results of the two groups.

Finally, the value for the Adjusted R-Square of the rating-based conjoint is low (see Figure 5, Table *Model Summary)*. Some literature suggests that "a conjoint analysis R-squares are inherently low" and that, in a conjoint analysis, "a low R-square would not have the equivalent negative connotation as it would with other statistical methods" (Lawrence & Klimberg, 2015). In spite of this, a low goodness of fit can be a symptom of a poor design and, as such, some recommendations for future research have been included in the next chapter.

The limitations of the present study offer, at the same time, opportunities for future researchers to avoid the same flaws. This last chapter presents some recommendations to improve the design used in this research:

A first recommendation would be to control for the respondents' age distribution, as well as other demographics -gender, nationality, etc- that wish to be included in the study. As it can be seen in Figure 3, in chapter 4, the average age of respondents in group B is significantly higher than the average age of respondents in group A. This situation can jeopardize the validity of the comparison between the two groups and, as an extension, the validity of the results of the study. Thus, by controlling the respondents' age distribution, the researcher prevents this from happening.

The second and most important important recommendation to future research is to conduct a pilot study. This study has found a low goodness of fit of the model and, although this is inherent to conjoint analyses, it can also denote that the model used is not good enough. This can be avoided by conducting a pilot study prior the actual one. In this way, the researcher is able to see how well the model would predict the dependent variable during the pilot, and make improvements on the design before starting the actual study. Usually, running a pilot study requires considerable resources (both economic and in terms of time), but helps avoiding possible future problems derived from a low goodness of fit of the model.

6. Appendix

A. Survey

Survey A

Question 1
Please state your age

Question 2
Please state your gender

Question 3
Please state your nationality

This survey experiment uses descriptions of fictional fashion brands and apparel products that are presented to you, using a certain number of attributes.

In preparation for the task, you are now presented with the attributes that conform these brand and product descriptions, and the different levels within each attribute:

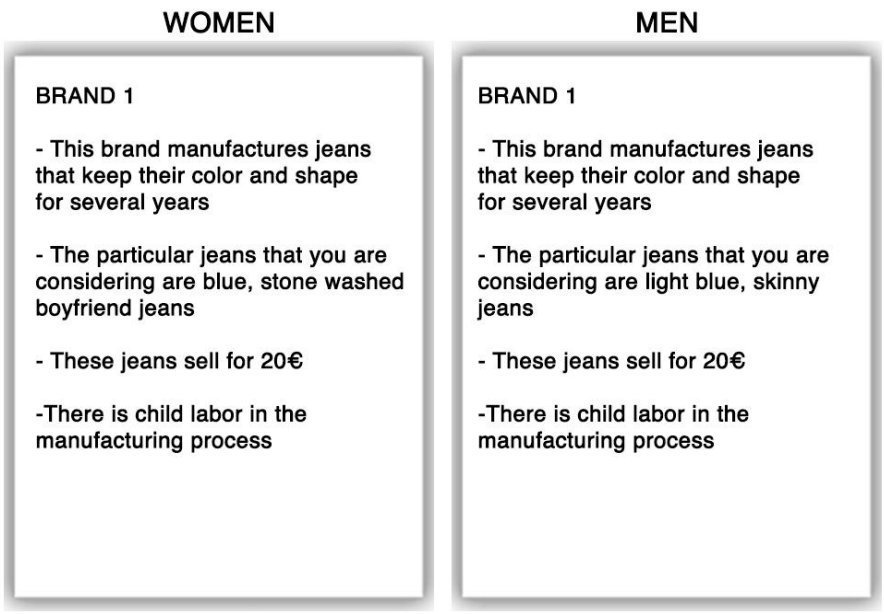
ATTRIBUTES	LEVELS	
Price	1.- 20€	
	2.- 30€	
	3.- 40€	
	4.- 50€	
Style	**WOMAN**	**MAN**
	1.- Blue, stone washed boyfriend 	1.- Light blue, skinny 
	2.- Blue, mom fit 	2.- Dark blue, regular fit 
	3.- Blue, acid-washed, ripped skinny 	3.- Blue, stone washed, slim fit 
Durability	1.- Several years	
	2.- More than one year	
	3.- About 1 year	
Manufacturing issues	1.- Child labor	
	2.- Sweatshops (factories with poor conditions)	
	3.- Enviromental pollution	
	4.- Responsible, sustainable manufacturing	

Next, you are going to be presented with some information about fictional fashion brands. Based on the information given, you are asked to fill in the questions below every brand presented.

Please only consider the information provided under the label that indicates your gender.

Question 4

How much do you agree with the following statements regarding the brand presented just above?



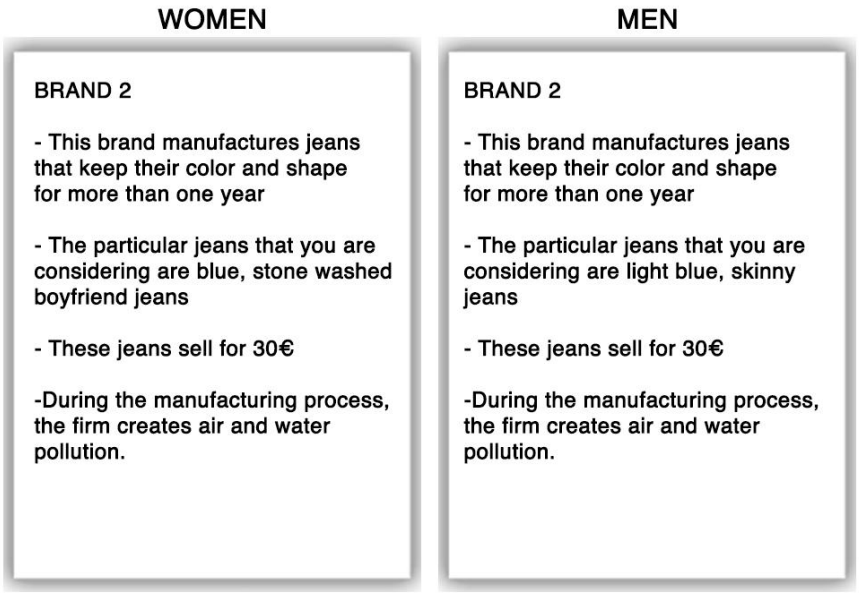
	Strongly agree	Agree	Somewhat Agree	Neither agree nor disagree	Somewhat disagree	Disagree	Strongly disagree
I think the price is good	○	○	○	○	○	○	○
I like the image that these jeans would transmit	○	○	○	○	○	○	○
I like the design and cut of the jeans	○	○	○	○	○	○	○
These jeans are of good quality	○	○	○	○	○	○	○
I can use these type of clothes in plenty of occasions	○	○	○	○	○	○	○
The jeans match with my own clothes	○	○	○	○	○	○	○
These jeans fulfill particular wardrobe trends	○	○	○	○	○	○	○
These jeans/brand feel trendy	○	○	○	○	○	○	○
With these clothes I feel attractive	○	○	○	○	○	○	○
With these jeans I will get the approval of others	○	○	○	○	○	○	○
I like the brand	○	○	○	○	○	○	○
I have a favorable opinion of this brand	○	○	○	○	○	○	○

3

Question 5

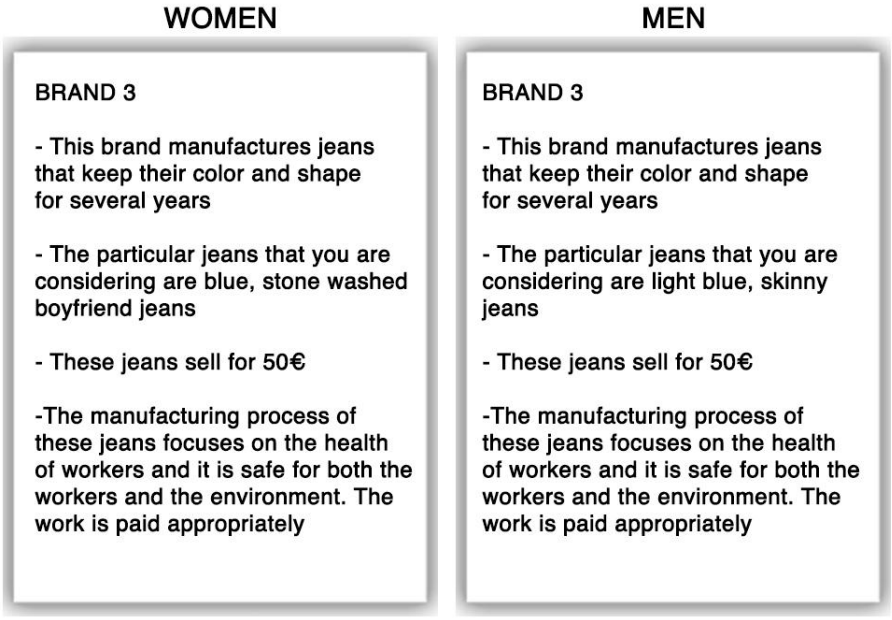
[3] This question set is equal for all of the questions that measure perceived Brand Image. Therefore, in order to save space, it is only going to be presented once, in the

How much do you agree with the following statements regarding the brand presented just above?



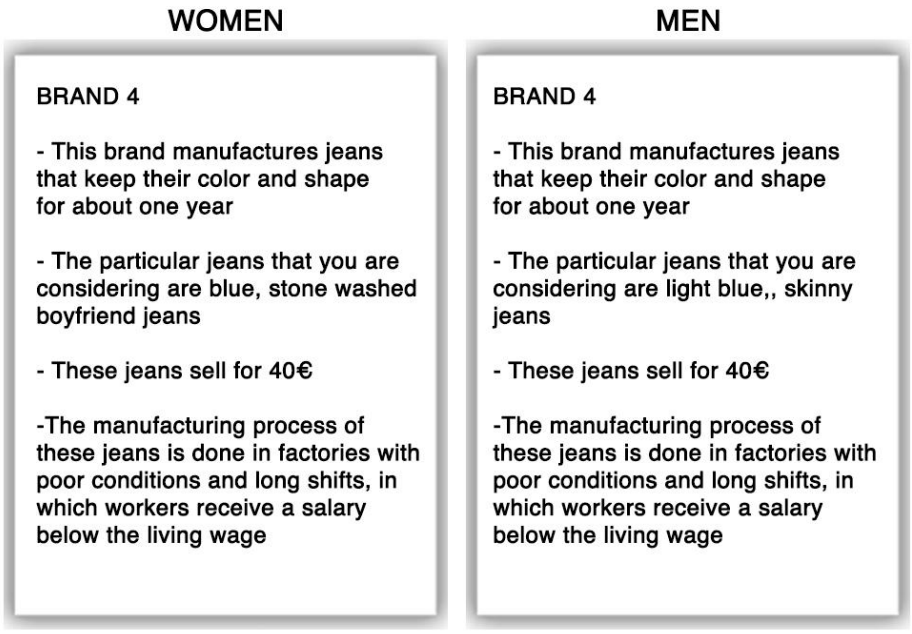
Question 6

How much do you agree with the following statements regarding the brand presented just above?



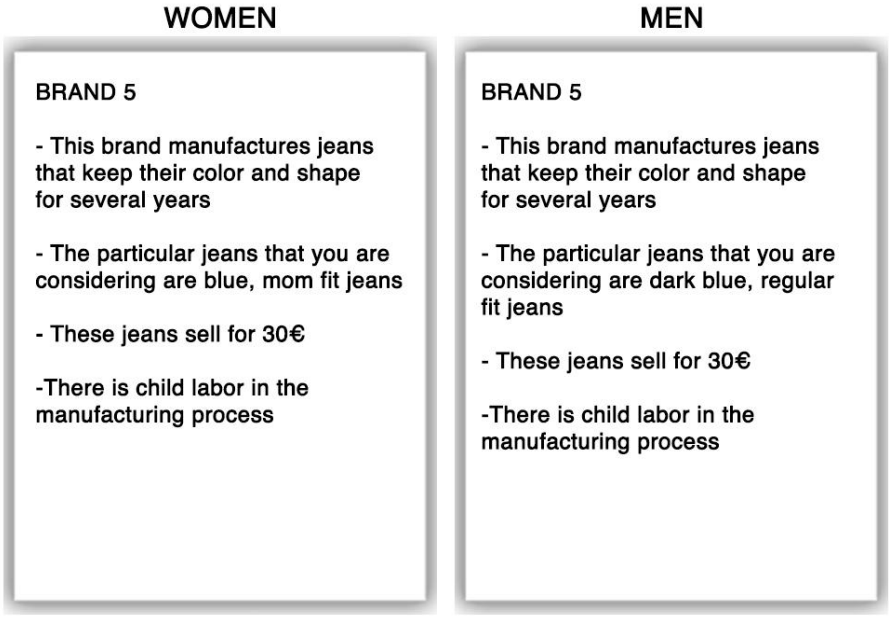
Question 7

How much do you agree with the following statements regarding the brand presented just above?



Question 8

How much do you agree with the following statements regarding the brand presented just above?



Question 9

How much do you agree with the following statements regarding the brand presented just above?

WOMEN

BRAND 6

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are blue, stone washed boyfriend jeans

- These jeans sell for 20€

-The manufacturing of these jeans is done in factories with poor conditions and long shifts, in which workers receive a salary below the living wage

MEN

BRAND 6

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are light blue, skinny jeans

- These jeans sell for 20€

-The manufacturing of these jeans is done in factories with poor conditions and long shifts, in which workers receive a salary below the living wage

Question 10

How much do you agree with the following statements regarding the brand presented just above?

WOMEN

BRAND 7

- This brand manufactures jeans that keep their color and shape for more than one year

- The particular jeans that you are considering are blue, stone washed boyfriend jeans

- These jeans sell for 40€

-There is child labor in the manufacturing process

MEN

BRAND 7

- This brand manufactures jeans that keep their color and shape for more than one year

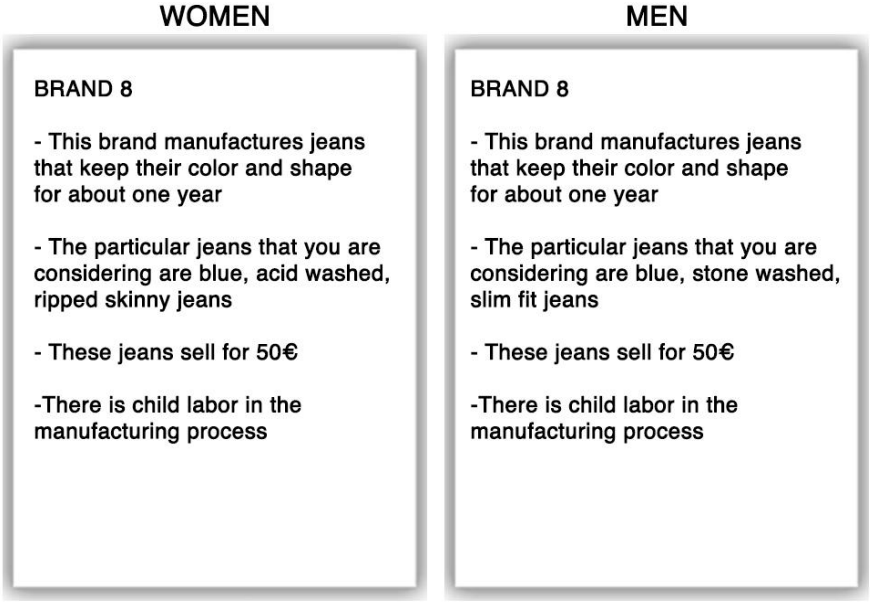
- The particular jeans that you are considering are light blue, skinny jeans

- These jeans sell for 40€

-There is child labor in the manufacturing process

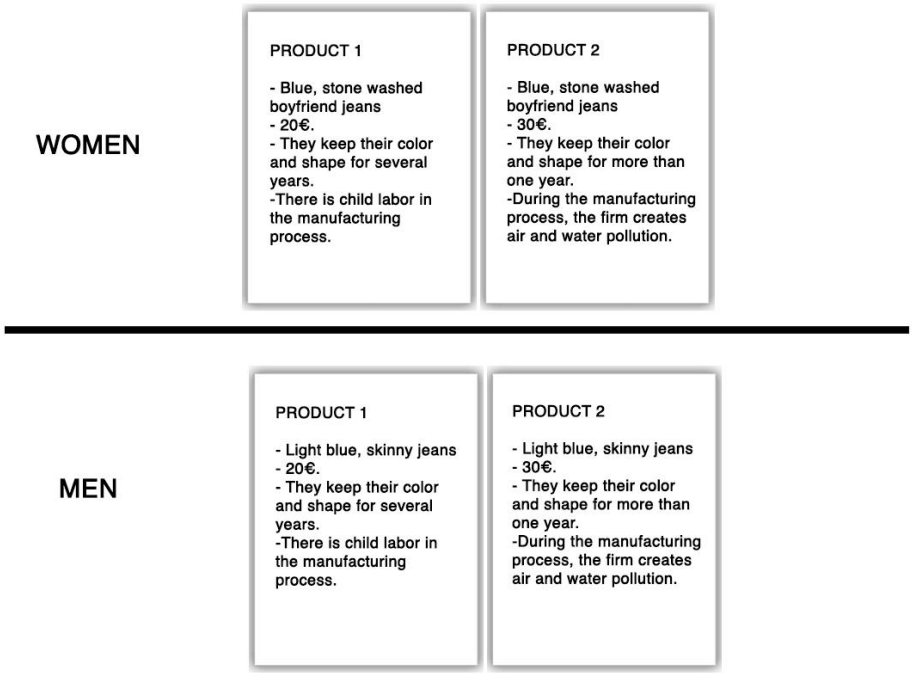
Question 11

How much do you agree with the following statements regarding the brand presented just above?



You're almost at the end. Thanks for your patience.

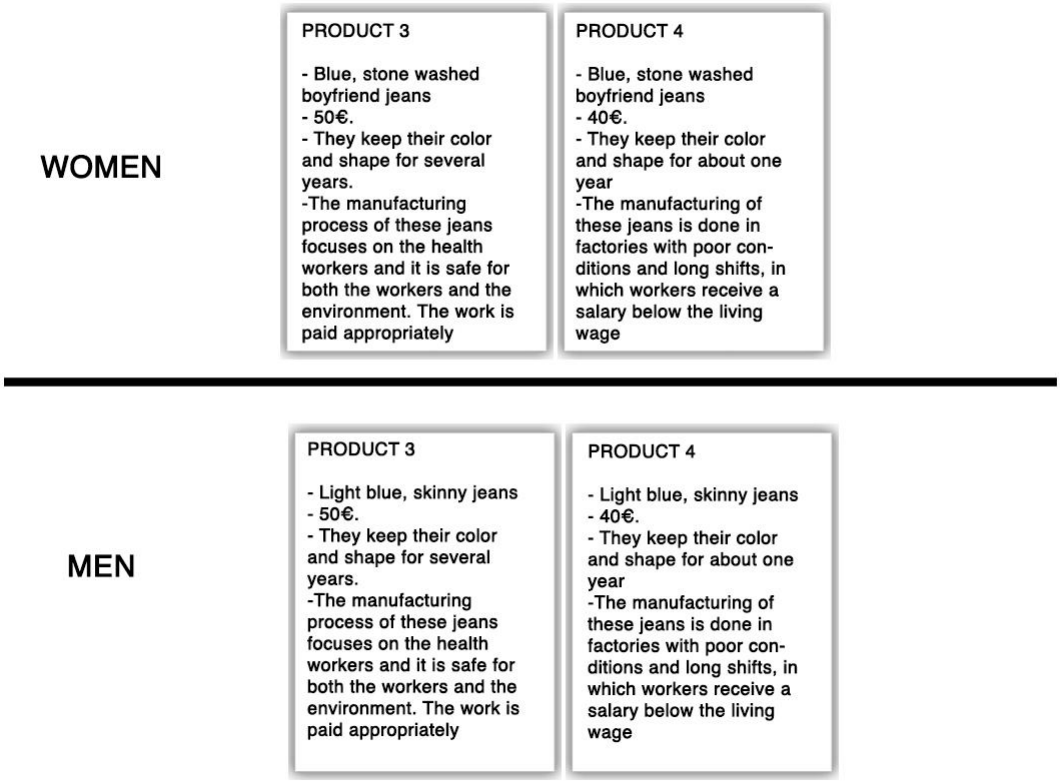
In this part, you will have to select one of the two pairs of jeans that are presented. For your decision, please only take into consideration the type of jeans belonging to your same gender.



Question 12

Which pair of jeans would you choose?

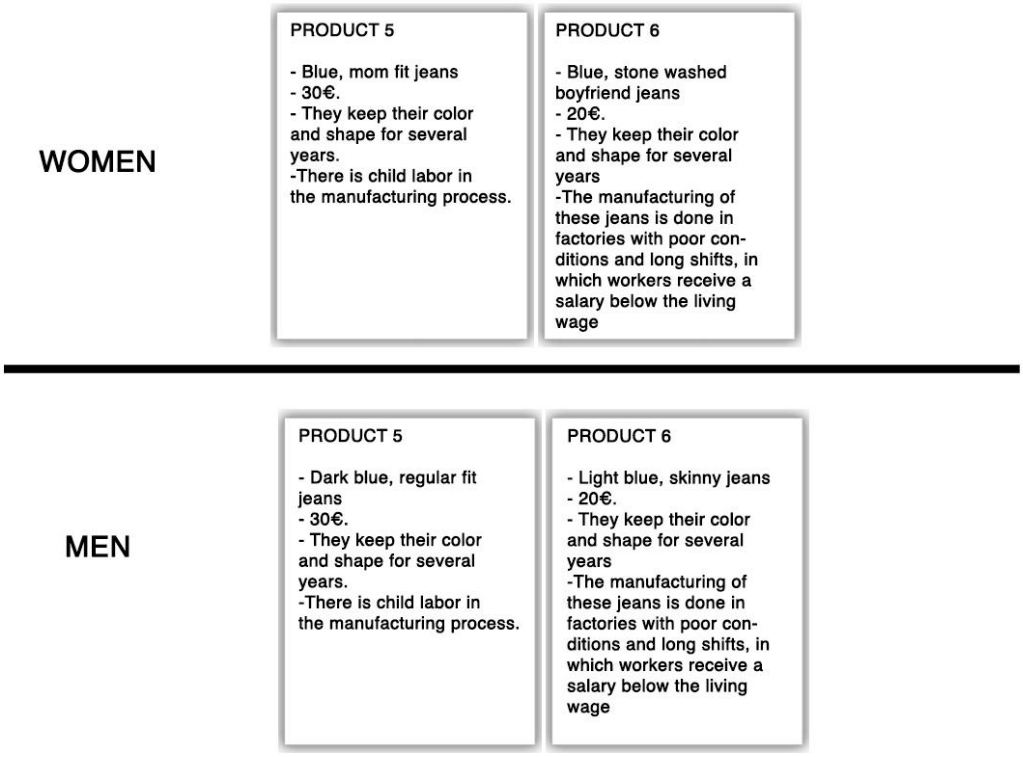
- Product 1
- Product 2



Question 13

Which pair of jeans would you choose?

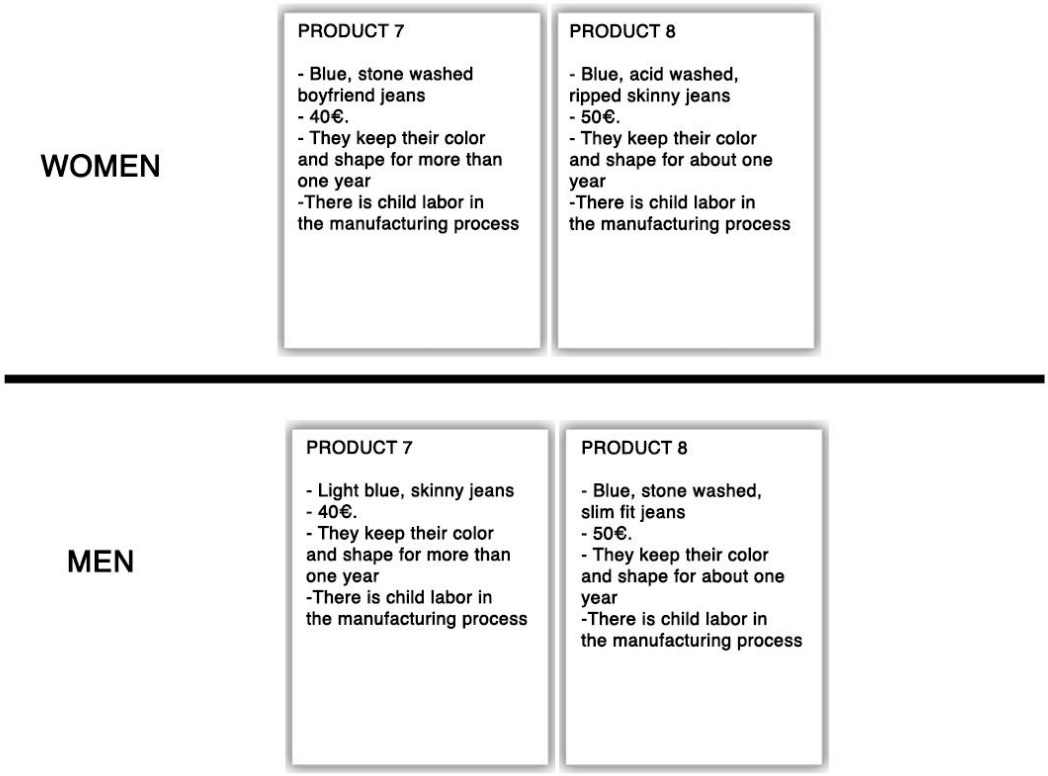
- Product 3
- Product 4



Question 14

Which pair of jeans would you choose?

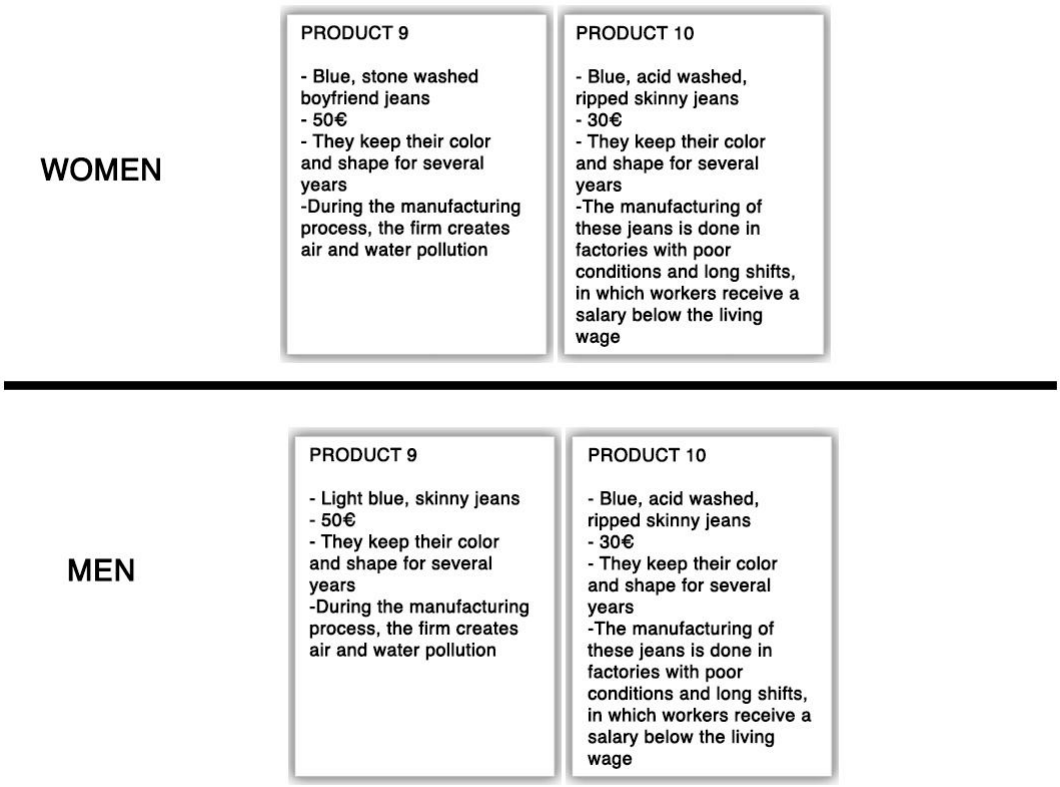
- Product 5
- Product 6



Question 15

Which pair of jeans would you choose?

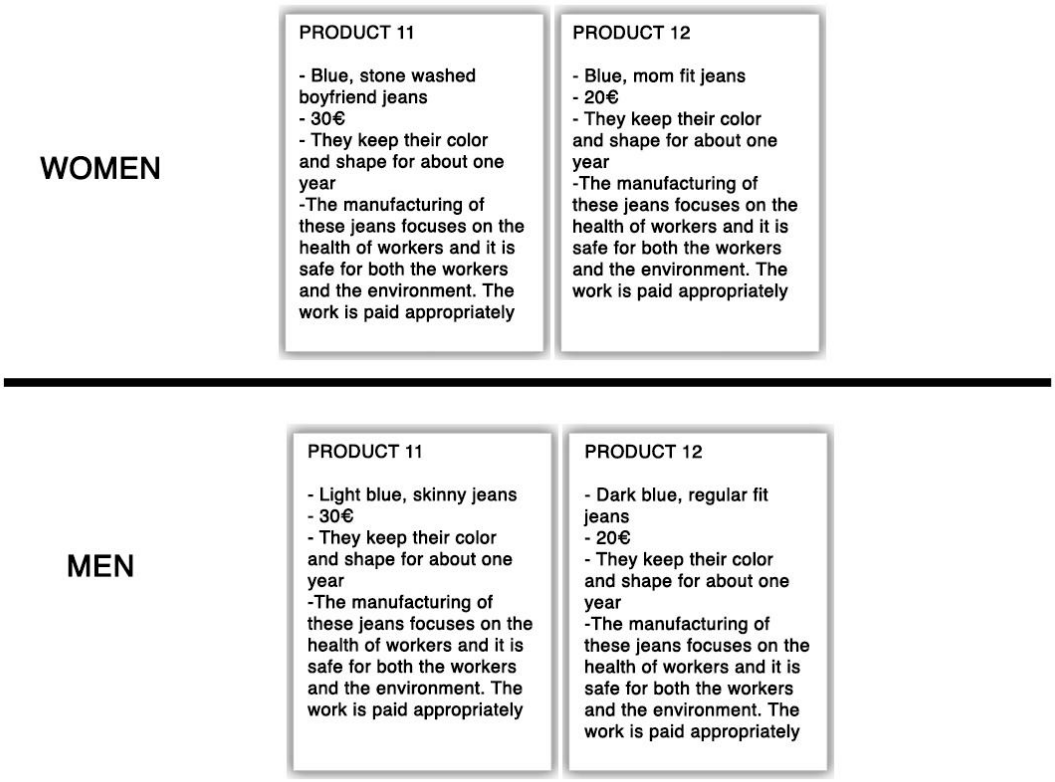
- Product 7
- Product 8



Question 16

Which pair of jeans would you choose?

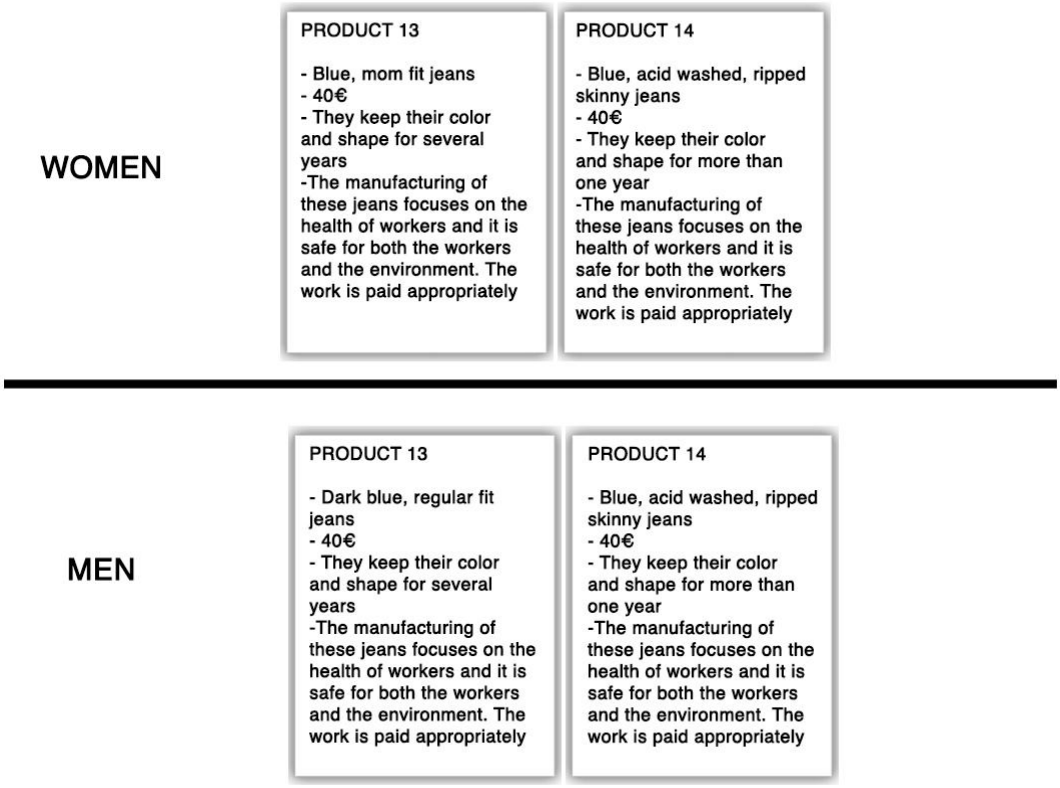
- Product 9
- Product 10



Question 17

Which pair of jeans would you choose?

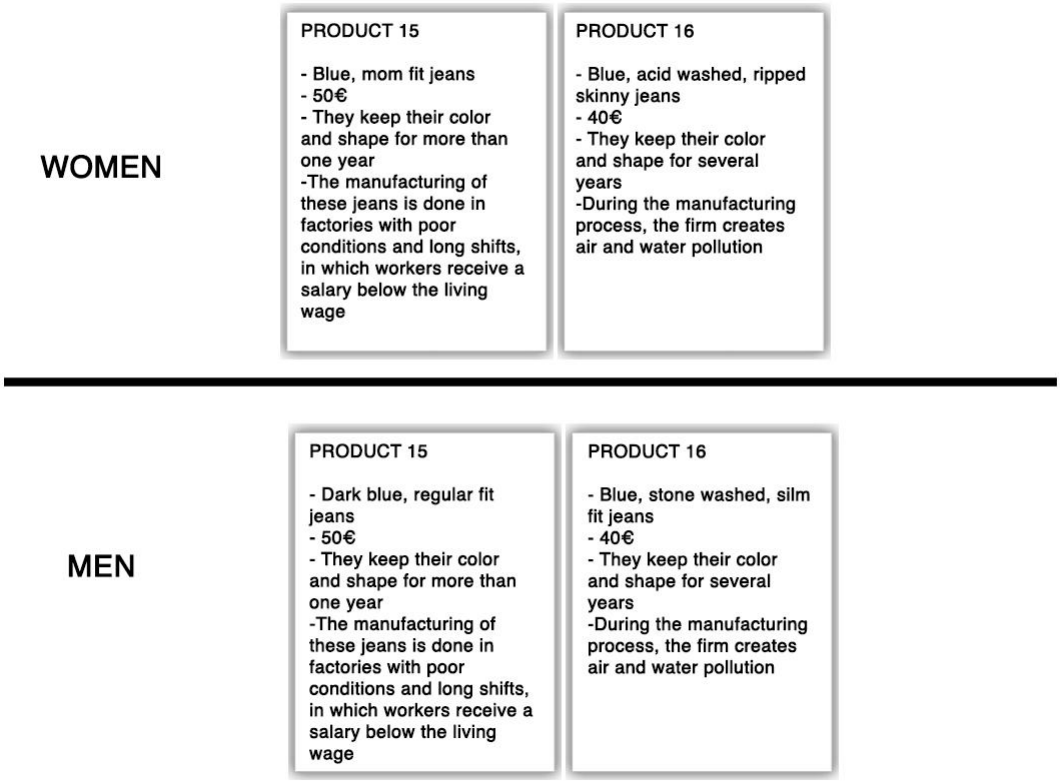
- Product 11
- Product 12



Question 18

Which pair of jeans would you choose?

- Product 13
- Product 14



Question 19

Which pair of jeans would you choose?

- Product 15 (1)
- Product 16 (2)

Question 20

Do you remember which is the brand of the last pair of jeans you bought? In case you remember, please, write the name of the brand in the text box.

- Yes: _____
- No

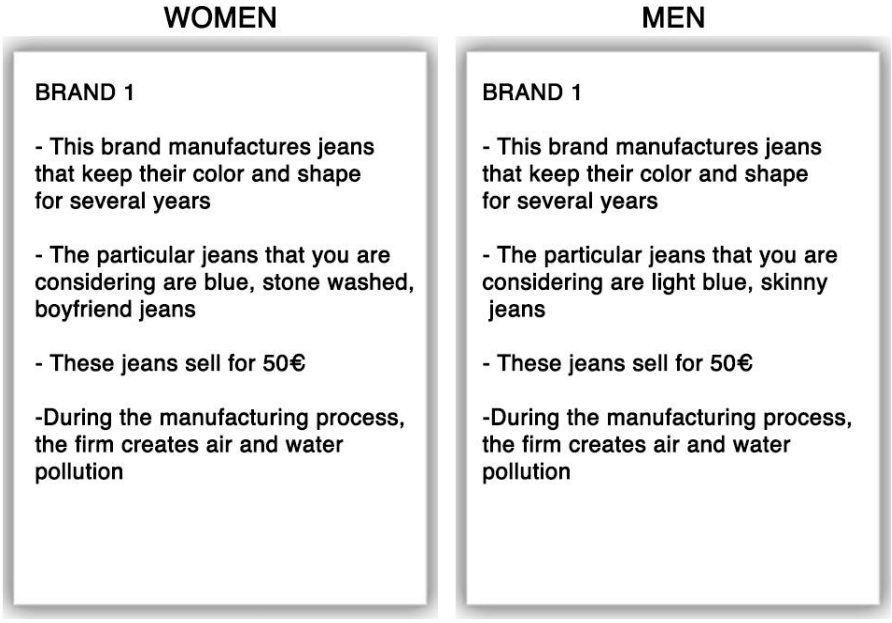
Question 21

In case you remember the brand of the last pair of jeans you bought, are you aware of any ethical or unethical practices from this brand? In case you do, please mention which are those.

- Yes: _____
- No

Survey B

Survey B only differs from Survey A in terms of the Brand Cards presented to respondents. Thus, this part of the appendix will only present the Brand Cards for the second survey.



WOMEN

BRAND 3

- This brand manufactures jeans that keep their color and shape for about one year

- The particular jeans that you are considering are blue, stone washed, boyfriend jeans

- These jeans sell for 30€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

MEN

BRAND 3

- This brand manufactures jeans that keep their color and shape for about one year

- The particular jeans that you are considering are light blue, skinny jeans

- These jeans sell for 30€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

WOMEN

BRAND 4

- This brand manufactures jeans that keep their color and shape for about one year

- The particular jeans that you are considering are blue, mom fit jeans

- These jeans sell for 20€

-During the manufacturing process, the firm creates air and water pollution

MEN

BRAND 4

- This brand manufactures jeans that keep their color and shape for about one year

- The particular jeans that you are considering are dark blue, regular fit jeans

- These jeans sell for 20€

-During the manufacturing process, the firm creates air and water pollution

WOMEN

BRAND 5

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are blue, mom fit jeans

- These jeans sell for 40€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

MEN

BRAND 5

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are dark blue, regular fit jeans

- These jeans sell for 40€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

WOMEN

BRAND 6

- This brand manufactures jeans that keep their color and shape for more than one year

- The particular jeans that you are considering are blue, acid washed, ripped skinny jeans

- These jeans sell for 40€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

MEN

BRAND 6

- This brand manufactures jeans that keep their color and shape for more than one year

- The particular jeans that you are considering are blue, stone washed, slim fit jeans

- These jeans sell for 40€

-The manufacturing of these jeans focuses on the health of workers and it is safe for both the workers and the environment. The work is paid appropriately

WOMEN

BRAND 7

- This brand manufactures jeans that keep their color and shape for more than one year

- The particular jeans that you are considering are blue, mom fit jeans

- These jeans sell for 50€

-The manufacturing of these jeans is done in factories with poor conditions and long shifts, in which workers receive a salary below the living wage

MEN

BRAND 7

- This brand manufactures jeans that keep their color and shape for more than one year

- The particular jeans that you are considering are dark blue, regular fit jeans

- These jeans sell for 50€

-The manufacturing of these jeans is done in factories with poor conditions and long shifts, in which workers receive a salary below the living wage

WOMEN

BRAND 8

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are blue, acid washed, ripped skinny jeans

- These jeans sell for 40€

-During the manufacturing process, the firm creates air and water pollution

MEN

BRAND 8

- This brand manufactures jeans that keep their color and shape for several years

- The particular jeans that you are considering are blue, stone washed, slim fit jeans

- These jeans sell for 40€

-During the manufacturing process, the firm creates air and water pollution

B. Code used in the analysis

All statistical analyses have been performed in the software SPSS. This part of the appendix includes all the code use to perform the statistical analyses of the present paper.

```
*Reliability test

RELIABILITY
  /VARIABLES=BrandImage_Question1 BrandImage_Question2
BrandImage_Question3 BrandImage_Question4 BrandImage_Question5
BrandImage_Question6 BrandImage_Question7 BrandImage_Question8
BrandImage_Question9 BrandImage_Question10 BrandImage_Question11
BrandImage_Question12
  /SCALE('ALL VARIABLES') ALL
  /MODEL=ALPHA.


*Rating-based Conjoint Analysis (Linear Regression)

REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT BrandImage
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability+1yearyear ChildLabor Sweatshops
Pollution EthicalProcess.


*Choice-based Conjoint Analysis (Binary Logistic Regression)

LOGISTIC REGRESSION VARIABLES dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability+1yearyear ChildLabor Sweatshops
Pollution EthicalProcess
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) CUT(.5).
```

*Interaction effects: Brand Image

*Gender

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability+1yearyear ChildLabor Sweatshops
Pollution EthicalProcess
  /METHOD=ENTER Price50€0€_Female Price40€_Female Price50€_Female
Stylemom/regular_Female Styleskinny/slim_Female Durabillity+1year_Female
Durabillity1year_Female ChildLabor_Female Sweatshops_Female
Pollution_Female EthicalProcess_Female.
```

*Nationality

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT Dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability+1yearyear ChildLabor Sweatshops
Pollution EthicalProcess
  /METHOD=ENTER Price50€0€_Dutch Price40€_Dutch Price50€_Dutch
Stylemom/regular_Dutch Styleskinny/slim_Dutch Durabillity+1year_Dutch
Durability+1yearyear_Dutch ChildLabor_Dutch Sweatshops_Dutch
Pollution_Dutch EthicalProcess_Dutch.
```

*Age

```
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
```

```
  /DEPENDENT Dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability+1yearyear ChildLabor Sweatshops
Pollution EthicalProcess
  /METHOD=ENTER Price50€0€_Age Price40€_Age Price50€_Age Stylemom/
regular_Age Styleskinny/slim_Age Durability+1year_Age
Durability+1yearyear_Age ChildLabor_Age Sweatshops_Age Pollution_Age
EthicalProcess_Age.


*Interaction effects: Purchase behavior

*Variable Generation

COMPUTE Price50€0€_Female=Price50€0€ * Gender.
EXECUTE.
COMPUTE Price40€_Female=Price40€ * Gender.
EXECUTE.
COMPUTE Price50€_Female=Price50€ * Gender.
EXECUTE.
COMPUTE Stylemom/regular_Female=Stylemom/regular * Gender.
EXECUTE.
COMPUTE Styleskinny/slim_Female=Styleskinny/slim * Gender.
EXECUTE.
COMPUTE Durability_Female=Durability+1year* Gender.
EXECUTE.
COMPUTE Durability1year_Female=Durability1year* Gender.
EXECUTE.
COMPUTE ChildLabor_Female=ChildLabor*Gender.
EXECUTE.
COMPUTE Sweatshops_Female=Sweatshops*Gender.
EXECUTE.
COMPUTE Pollution_Female=Pollution*Gender.
EXECUTE.
COMPUTE EthicalProcess_Female=EthicalProcess*Gender.
EXECUTE.
COMPUTE Price50€0€_Dutch=Price50€0€ * Nationality.
EXECUTE.
COMPUTE Price40€_Dutch=Price40€ * Nationality.
EXECUTE.
COMPUTE Price50€_Dutch=Price50€ * Nationality.
EXECUTE.
COMPUTE Stylemom/regular_Dutch=Stylemom/regular * Nationality.
EXECUTE.
COMPUTE Styleskinny/slim_Dutch=Styleskinny/slim * Nationality.
```

```
EXECUTE.
COMPUTE Durability+1year_Dutch=Durability+1year * Nationality.
EXECUTE.
COMPUTE Durability1year_Dutch=Durability1year * Nationality.
EXECUTE.
COMPUTE ChildLabor_Dutch=ChildLabor * Nationality.
EXECUTE.
COMPUTE Sweatshops_Dutch=Sweatshops * Nationality.
EXECUTE.
COMPUTE Pollution_Dutch=Pollution * Nationality.
EXECUTE.
COMPUTE EthicalProcess_Dutch=EthicalProcess * Nationality.
EXECUTE.
COMPUTE Price50€0€_Age=Price50€0€ * Age.
EXECUTE.
COMPUTE Price40€_Age=Price40€ * Age.
EXECUTE.
COMPUTE Price50€_Age=Price50€ * Age.
EXECUTE.
COMPUTE Stylemom/regular_Age=Stylemom/regular * Age.
EXECUTE.
COMPUTE Styleskinny/slim_Age=Styleskinny/slim * Age.
EXECUTE.
COMPUTE Durability+1year_Age=Durability+1year * Age.
EXECUTE.
COMPUTE Durability1year_Age=Durability1year * Age.
EXECUTE.
COMPUTE ChildLabor_Age=ChildLabor * Age.
EXECUTE.
COMPUTE Sweatshops_Age=Sweatshops * Age.
EXECUTE.
COMPUTE Pollution_Age=Pollution * Age.
EXECUTE.
COMPUTE EthicalProcess_Age=EthicalProcess * Age.
EXECUTE.

*Gender

LOGISTIC REGRESSION VARIABLES dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim Durability+1year Durability1year ChildLabor Sweatshops
Pollution EthicalProcess
  /METHOD=ENTER Price50€0€_Female Price40€_Female Price50€_Female
Stylemom/regular_Female Styleskinny/slim_Female
```

```
    Durability_Female Durability1year_Female ChildLabor_Female
Sweatshops_Female Pollution_Female EthicalProcess_Female
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) CUT(.5).
```

*Nationality

```
LOGISTIC REGRESSION VARIABLES dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim durability1 Durability1year ChildLabor Sweatshops Pollution
EthicalProcess
  /METHOD=ENTER Price50€0€_Dutch Price40€_Dutch Price50€_Dutch
Stylemom/regular_Dutch Styleskinny/slim_Dutch Durability+1year_Dutch
Durability1year_Dutch ChildLabor_Dutch Sweatshops_Dutch Pollution_Dutch
EthicalProcess_Dutch
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) CUT(.5).
```

*Age

```
LOGISTIC REGRESSION VARIABLES dependentvariable
  /METHOD=ENTER Price50€0€ Price40€ Price50€ Stylemom/regular
Styleskinny/slim durability1 Durability1year ChildLabor Sweatshops Pollution
EthicalProcess
  /METHOD=ENTER Price50€0€_Age Price40€_Age Price50€_Age Stylemom/
regular_Age Styleskinny/slim_Age Durability+1year_Age Durability1year_Age
ChildLabor_Age Sweatshops_Age Pollution_Age EthicalProcess_Age
  /CRITERIA=PIN(.05) POUT(.10) ITERATE(20) CUT(.5).
```