

A MASTER'S THESIS ABOUT

# SUSTAINABLE FASHION

Differences in types of consumers and  
effectively using social influence techniques

by **Janine de Bruijn**

Utrecht University  
Social, Health and Organizational Psychology  
23-06-2020



Utrecht University

**Different types of consumers and the use of social influence techniques to increase their willingness to buy sustainable fashion**

Name: Janine de Bruijn

Student number: 5704251

Master's Thesis

Social, Health and Organizational Psychology

Utrecht University

Date: 23-06-2020

Thesis supervisor: Lieke Heil

Second reader: Inga Rosler

Word count: 10.095

### Abstract

Fast fashion is polluting our earth, however it is still popular to buy it in our current society. Consuming sustainable fashion helps to decrease pollution and gives employees a better working environment. Even though sustainable fashion has many pros, most people do not buy it. This research examines if and how three types of consumers ('self consumers', 'social consumers' and 'sacrifice consumers') differ in their willingness to buy sustainable fashion. Moreover, it is examined if three social influence techniques ('liking', 'social proof', 'consistency') differ in their effect on willingness, and if there is a social influence technique that works better for one type of consumer than for another. A pre-test is done to develop a survey to measure the types of consumer. Thereafter, an experimental study is done, using a survey as the method. The data is gathered amongst individuals between 18 and 30 years old. The data is analyzed by executing ANOVA and ANCOVA. Results show that a 'sacrifice consumer' has a higher willingness than both a 'self consumer' and 'social consumer'. The social influence techniques do not differ in their effectiveness, and it is found that no social influence technique is more effective for a specific kind of consumer than another. Possibly no difference is found between 'self consumer' and 'social consumer', since those types of consumer might not differ in consumer behavior. However, it could also be that the way of measuring the types of consumer is not yet fully reliable, since these types were never measured before. Moreover, the exposure to the social influence techniques might have been too short. Other ways of applying these techniques could possibly change this.

**Key words:** willingness to buy sustainable fashion; type of consumer; social influence technique; self consumer; social consumer; sacrifice consumer; liking; social proof; consistency

## Introduction

Imagine you want to buy a new item for your wardrobe online or offline, and you go to the well-known websites or physical stores of Zara and H&M, and maybe search at Primark, which are stores that mostly sell fast fashion (Zhenxiang & Lijie, 2011). However, to help the environment you could also choose to go to a shop with more sustainable clothing, like Armed Angels or Everlane. Knowledge and the importance of sustainable fashion is growing (Henninger, Alevizou & Oates, 2016; Ahsmann, Bakker, Bos, Janssen & van der Vaart, 2020), since the facts show us that the fashion industry has many negative effects, such as being the second-most polluter of clean water, air and chemical waste (Kant, 2012). Besides, 700 gallons of water are used in the production of cotton for one t-shirt (Ahsmann et al., 2020), and Green (2015) says that one t-shirt has travelled around 27.000 km before it is at its clothing store for individuals in Europe to buy it. Moreover, the production of much clothing takes place in bad and unhealthy work environments, where workers are not treated well and paid very little (Kant, 2012; de Lenne, 2016). However, still many people choose to buy clothing at fast fashion stores (Bhardwaj & Fairhurst, 2010), even 46% of Europeans admit that they like to use fast fashion (Textile Today, 2018). The general goal of this study is to examine how this behavior can be changed and influenced towards more sustainable fashion consumption behavior.

Because of many individuals still buying fast fashion and the negative aspects of the fashion industry, sustainable fashion has become a growing topic in literature and in society (Henninger, Alevizou & Oates, 2016), however most research is focused on sustainability in general instead of specifically sustainable fashion (McNeill & Moore, 2015). Existing literature which does focus on sustainable fashion mostly pays attention to awareness, knowledge and fashion markets (i.a. Henninger et al., 2016; Shen, 2014; Kozar & Connell, 2013; Luchs, Phipps & Hill, 2015). Although these are important aspects, to change the fashion industry and people's behavior, research on specific consumers and changing their behavior into buying sustainable fashion instead of fast fashion is needed, but lacking in existing literature. To do research on changing this behavior, it is thus important to look at the consumers and at ways to influence them. McNeill and Moore (2015) show that there is a difference in attitudes and consumer behavior regarding sustainable fashion between three types of consumers. Therefore, first of all, in this study it is examined if and how different types of consumers have a different degree of willingness to buy sustainable fashion. And, secondly, what social influence techniques ('liking', 'social proof' or 'consistency') can be used best for these different types of consumers? Since the actual behavior of individuals

buying clothing is difficult to measure, their willingness is being looked at, because people are likely to act in accordance with their intentions/willingness (Thaler & Sunstein, 2009). The above leads to the following research question, which will be answered in this study:

*To what extent do three types of consumers differ in their willingness to buy sustainable fashion? And to what extent do 'liking', 'social proof' and 'consistency' differ in their effectiveness to increase willingness for specific types of consumers?*

### **Fast Fashion and Sustainable Fashion**

In the last decades fast fashion has become more and more popular, because of its fast and trendy designs that appeal to the needs of the consumers (Bhardwaj & Fairhurst, 2010). In fast fashion stores a new collection is displayed every two weeks, which gives consumers what they want, mostly for a low price (Bhardwaj & Fairhurst, 2010). Fast fashion is fashion that is often produced in an unsustainable and unethical way to provide consumers with new collections (Bhardwaj & Fairhurst, 2010; de Lenne, 2016). Besides the negative effects of fast fashion, this type of fashion is still popular (Kant, 2012; de Lenne, 2016).

Individuals can decrease the negative effects of fast fashion by buying sustainable fashion instead of fast fashion. The term sustainable fashion, also known as green fashion or eco-fashion, has many slightly different definitions. In this research sustainable fashion is seen as clothing which is produced using ethical fabrics and/or processes, such as eco-materials like organic cotton and recycled fabrics and environmentally-friendly packaging, or a reuse or reduction of clothing items by individuals, and where less pollutive forms of transport are used than with fast fashion (McNeill & Moore, 2015; Shen, Zheng, Chow & Chow, 2014).

Consumers have different kinds of reasons for buying either fast fashion or sustainable clothing and they have different tastes (McNeill and Moore, 2015). Social influence techniques can be used to influence people's consumption, and thus could also help in making people buy more sustainable fashion (Salazar, Oerlemans & van Stroe-Biezen, 2013). However, in order to apply various social influence techniques to attract consumers into buying more sustainable fashion, it is important to first know more about the types of consumers that exist, how those types differ, and how willing each of those types are in buying sustainable fashion.

### **Types of Consumers**

Individuals have the desire to create an identity and express themselves (McNeill & Moore, 2015). Clothing plays an important role in the creation of this identity, because it is constantly present and visible. This identity that individuals want to express differs per person. Some individuals care about being 'fashionable', others dress how they like it themselves, and again others have intentions to buy sustainable fashion, but those intentions do not always lead to behavior (McNeill & Moore, 2015). When looking at consumption behavior of consumers, the Theory of Reasoned Action states that consumers' attitudes and subjective norms lead to a behavioral intention/willingness (Saricam & Okur, 2019). Subjective norms refer to the perceived social pressure to behave in a certain way and will play a bigger role the more an individual cares about others' opinions (Horng et al., 2013). Attitudes refer to the evaluation of the specific behavior. Somebody's attitudes towards sustainable products is amongst others influenced by knowledge, awareness, and norms and values (Tikir & Lehmann, 2011; Wiseman & Bogner, 2003). When individuals have more knowledge about, and are more aware of the downsides of the fashion industry and the positive aspects of sustainable fashion, their willingness to buy sustainable fashion products will increase (Saricam & Okur, 2019). Besides, the more an individual's personal norms and values are positive towards sustainable products, the more likely that the person will be more willing to buy sustainable products. Furthermore, personal characteristics like egocentrism versus altruism play a role in the different behaviors of consumers (Corraliza & Berenguer, 2000). They state that more altruistic consumers are more likely to adopt pro-environmental behavior. The above means that consumers differ in amongst others their attitudes, norms and values, knowledge, and reasons to consume fashion (Saricam & Okur, 2019). Therefore, potentially, different kinds of consumers will differ in their willingness to buy sustainable fashion.

Some research is done on the attitudes, knowledge and behavior of individuals regarding sustainable fashion consumption, however literature on the approach of consumers towards sustainable fashion is quite limited (Saricam & Okur, 2019). McNeill and Moore (2015) explored the attitudes of individuals towards sustainable fashion products and their subsequent behavior amongst inhabitants of a city in New Zealand by interviewing them. They found that fashion consumers can be split up into three categories; 'self consumers' (consumers concerned with hedonistic needs), 'social consumers' (consumers concerned with their social image) and 'sacrifice consumers' (consumers striving to decrease their impact on the world), who thus all have different attitudes towards sustainable fashion. McNeill and

Moore (2015) drew their conclusions on interviews they held, however the types of consumers and their possible differences in willingness to buy sustainable fashion were never tested. To add to existing literature, the current study will do further research on the conclusions of McNeill and Moore (2015), by developing a survey based on their findings.

To describe the three types of consumers, the findings of McNeill and Moore (2015) are made more explicit and detailed by incorporating the literature on consumption behavior from the beginning of this section. A 'self consumer' is a consumer who is concerned with hedonistic needs (McNeill & Moore, 2015). This type of consumer has a low perceived social pressure and thus subjective norms will not play a big role in their behavior. Besides, 'self consumers' are often not aware of sustainable fashion and have little knowledge about it (McNeill & Moore, 2015). Moreover, their norms and values towards sustainable fashion are mostly negative, they are high in egocentrism and care about their self-identity. This could possibly make 'self consumers' have a low willingness to buy sustainable fashion. A 'social consumer' is a consumer who is concerned with his/her social image (McNeill & Moore, 2015). This type of consumer cares about what others think of them, and thus feels social pressure. 'Social consumers' are more aware of sustainable fashion, than 'self consumers', but do not necessarily have positive norms and values towards sustainable fashion. This mostly depends on others' opinions about sustainable fashion. Since they care about others' opinions, it is assumed that they will want to wear what others wear and what is trendy and fashionable. Since 'social consumers' are more open to sustainable fashion in terms of awareness and attitudes, it could mean that 'social consumers' will be more willing to buy sustainable fashion than 'self consumers'. A 'sacrifice consumer' is a consumer who strives to decrease his/her impact on the world (McNeill & Moore, 2015). This type of consumer is highly aware of sustainable fashion, and has knowledge about it. Their norms and values towards sustainable fashion are positive, and they are more altruistic. This could mean that 'sacrifice consumers' will be more willing to buy sustainable fashion than both 'self consumers' as well as 'social consumers'. The above leads to the following hypotheses:

*H1: 'Social consumers' will be more willing to buy sustainable fashion than 'self consumers'.*

*H2: 'Sacrifice consumers' will be more willing to buy sustainable fashion than 'self consumers' and 'social consumers'.*

Those three types of consumers are hypothesized to differ in their willingness to buy sustainable fashion. To increase the willingness of consumers social influence techniques can be used (Salazar, Oerlemans & van Stroe-Biezen, 2013; Iyengar, Han & Gupta, 2009). However, to increase the willingness, different consumers all need a different type of marketing or information to influence them into buying more sustainable fashion products (McNeill and Moore, 2015). Therefore, to optimally use social influence techniques, they potentially have to be used for a certain type of consumer.

### **Social Influence Techniques**

Social influence has an impact on consumption (Salazar et al., 2013; Janssen & Jager, 2001; Iyengar et al., 2009). Individuals are no independent decision-making consumers. They themselves and their behavior is shaped by their surroundings (Salazar et al., 2013). There are different social influence techniques as mentioned by Cialdini (2014), of which three are used in this study. Since many studies proved the positive effects of social influence techniques in consumer behavior, the current study takes the application of social influence techniques a step further by looking at their differences and application to specific types of consumer. Therefore, in the current research three social influence techniques will be used to examine if a social influence technique is more effective for one type of consumer than for another type of consumer. The three social influence techniques used in this study are 'liking', 'social proof' and 'consistency'. These three techniques are chosen, since those can be matched best with the three types of consumer, which will be described below. First these techniques are explained in detail, whereafter they are applied to different types of consumer.

**Liking.** The social influence technique 'liking' shows that individuals are more likely to show certain behavior when it is requested by people they like (Cialdini, 2014; Silic & Back, 2016; Jacob, Guéguen, Martin & Boulbry, 2011). To apply the 'liking' technique in sustainable fashion, the store/brand/employees thus have to be liked by the individual, in order to make individuals (more) willing to buy products from this brand/store. Individuals like another person, or fashion brand, when the person/brand is similar to them, brings them positive information, and when an individual feels flattered by the request (Cialdini, 2014; Sundie, Cialdini, Griskevicius & Kenrick, 2012). Besides, research shows that interpersonal bonds between customers and employees in selling contexts might increase sales and positive perceptions of the store/brand and employees (Jacob et al., 2011). Berger and Heath (2007) showed that individuals are attracted to products which give them the opportunity to show unique aspects of their identity, especially when the requester, for example the



brand/employees, is liked because of showing this same identity. 'Liking' can thus be applied by sustainable fashion stores/brands by emphasizing the importance of showing your identity with clothing. By emphasizing this many customers will see a similarity in what they find important in clothing and what the brand/store finds important in clothing. Moreover, to make individuals like the brand/store/employees by providing them with positive information, they can offer help to (possible) customers to find the perfect clothing that matches their identity, since individuals might feel flattered by this request and might create a positive feeling and attitude towards the brand/store/employees.

Research shows that 'liking' works effectively to influence individuals, however, looking at the literature, 'liking' might possibly work best for 'self consumers'. As examined by McNeill and Moore (2015), 'self consumers' have unfavorable or neutral attitudes towards sustainable fashion products. Moreover, these individuals are found to not care about others' opinions about them and their choices (McNeill & Moore, 2015). Therefore, this type of consumer is influenced by how much they like the clothing and the brand themselves. If 'self consumers' would buy sustainable fashion, they would do so because they like the clothing/brand/store/employees, and since they can find clothing there that they think is 'unusual' or 'cool' and fits their identity. Therefore, it is hypothesized that the willingness to buy sustainable fashion will be higher when the 'self consumer' is exposed to 'liking', than when the 'social consumer' or 'sacrifice consumer' are exposed to 'liking'. This is expected because the 'self consumer' will start liking the brand and its employees. Since the 'self consumer' makes decisions based on what they themselves like, the technique of 'liking' will lead to a higher willingness for 'self consumers' than for 'social consumers' and 'sacrifice consumers' to buy a clothing product from the brand/store. 'Liking' will have less of a positive effect on 'social consumers', since 'social consumers' will not behave in a way that only themselves like, since they care a lot about others' opinions, mostly from their peers or friends. Besides, 'liking' will also have less of an effect on 'sacrifice consumers', since they are more altruistic, and thus care more about the wealth of others and the world, than that they care about themselves. The above leads to the following hypothesis:

*H3: 'Liking' will lead to a higher willingness to buy sustainable fashion for 'self consumers', than for 'social consumers' and 'sacrifice consumers'.*

**Social proof.** 'Social proof' is a technique which has to do with the influence of the behavior of others on an individual's own behavior (Cialdini, 2014). An individual sees certain behavior as 'right' depending on the extent to which others show this behavior.

Salazar and colleagues (2013) did research on consumer behavior and sustainable products and used 'social proof'. In an experimental design participants had to choose between different chocolates; a conventional or a sustainable option. Some participants got information about the choices of others, while the rest of the participants did not get this information. Salazar and colleagues (2013) found that, when choosing between the conventional and sustainable chocolate, participants were influenced by information about other people's choices. This study shows that 'social proof' can be used to influence people to buy sustainable products. Many other studies of consumption behavior proved the effectiveness of 'social proof'. An online social discussion about a product or customer reviews show the choices of others ('social proof'), and influence an individual's consumption behavior (Amblee & Bui, 2011). Besides, research of Salmon et al. (2015) shows that 'social proof' can be used in supermarkets to make individuals buy more healthy products. They showed that individuals were more likely to buy the low-fat cheese option when this option was shown to be the most sold cheese in that supermarket. 'Social proof' could be applied in sustainable fashion by providing possible customers with information about for example the high percentage of their peers that buy sustainable fashion.

Research shows that 'social proof' works effectively to influence individuals, however, looking at the literature, 'social proof' might possibly work best for 'social consumers'. 'Social consumers' are consumers that are more aware of sustainable fashion than 'self consumers'. They mostly show a higher concern for sustainability and the environment than 'self consumers', however not higher than 'sacrifice consumers' (McNeill & Moore, 2015), but these attitudes of 'social consumers' mostly do not lead to actual behavior. A barrier they perceive is that they are influenced by the opinions of their peers and they might perceive a lack of social acceptance regarding buying and wearing sustainable fashion (McNeill & Moore, 2015). However, when 'social consumers' are told that their peers wear sustainable fashion and value it as positive, 'social consumers' would most likely also want to buy sustainable fashion. Therefore, it is hypothesized that the willingness will be higher when the 'social consumer' is exposed to 'social proof', than when the 'self consumer' or 'sacrifice consumer' are exposed to 'social proof'. This is expected, because 'social consumers' are more easily influenced by their peers and others. 'Social proof' will have less of a positive effect on both 'self consumer' and 'sacrifice consumers', since both of them are less/not influenced by choices of others and trends in fashion. The above leads to the following hypothesis:

*H4: 'Social proof' will lead to a higher willingness to buy sustainable fashion for 'social consumers', than for 'self consumers' and 'sacrifice consumers'.*

**Consistency.** The social influence technique 'consistency' shows that once an individual has taken a stand or made a decision, he/she is faced with personal and interpersonal pressures to behave according to the stand/opinion he/she has taken before (Cialdini, 2014). This means that most individuals prefer to behave consistent with what they have said and done before (Cialdini, Wosinska, Barrett, Butner & Gornik-Durose, 1999). The foot-in-the-door technique is an application of 'consistency' where getting individuals to agree to an initial, small request makes them more likely to agree to a larger, related, subsequent request (Vaidyanathan & Aggarwal, 2005; Cialdini et al., 1999). Sherman (1980) examined the influence of one's own predicted behavior on actual behavior. It was found that individuals are more likely to behave according to their self-predicted behavior, so they are consistent. Besides, Vaidyanathan and Aggarwal (2005) found that consistency and commitment is effective in the context of consumer behavior regarding products that support the environment. They concluded that after individuals made a commitment, this influences their purchase intentions in order to act consistent to their commitment. When individuals expressed commitment to rainforests, their willingness to buy products that contribute to rainforest protection increased (Vaidyanathan & Aggarwal, 2005). Moreover, Whitmarsh and O'Neill (2010) state that when an individual says to care about the environment and agrees that things need to change, this individual most likely wants to act consistent with this (Christensen, Rothgerber, Wood & Matz, 2004; Festinger, as cited in Whitmarsh & O'Neill, 2010). Furthermore, Thøgersen (2004) states that there is evidence that cognitive dissonance (the need to avoid inconsistencies in our attitudes, beliefs and behaviors) can increase pro-environmental behavior, mostly amongst individuals who are trying to live sustainable and be green, but sometimes fail to do so. 'Consistency' can be applied in sustainable fashion by for example providing possible customers with information on the pollution of the fashion industry, and then letting them answer a statement on if they think this needs to change. In this way mostly all people will answer the statement with 'yes', whereafter they will more likely act according to this answer, and thus possibly buy sustainable fashion.

Research shows that 'consistency' works effectively to influence individuals, however, looking at the literature, 'consistency' might possibly work best for 'sacrifice consumers'. 'Sacrifice consumers' are shown to have a high concern for the environment (McNeill & Moore, 2015). This type of consumer experiences the least barriers in buying

sustainable fashion. Even though 'sacrifice consumers' have strong positive attitudes towards sustainable behavior, they do not always think about these attitudes, which means that these attitudes do not always lead to actual behavior or willingness to buy sustainable products (Whitmarsh & O'Neill, 2010). However, when 'sacrifice consumers' are reminded about their attitudes before they buy clothing, they want to behave consistent with these attitudes, and thus have a higher willingness to buy sustainable fashion. Therefore, it is hypothesized that the relationship between the type of consumer and willingness will be stronger when the 'sacrifice consumer' is exposed to 'consistency', than when the 'self consumer' or 'social consumer' are exposed to 'consistency'. This is expected, because 'sacrifice consumers' already have the positive attitudes towards sustainable products, and will be reminded about these attitudes and intentions when being confronted with a statement on sustainability. For 'sacrifice consumers' being reminded about their principles is more important than for 'self consumers' and 'social consumers', since 'sacrifice consumers' want to behave in a way that is the best for others and for the environment. Even if 'self consumers' and 'social consumers' will also see that something needs to change in the fashion industry, their attitudes and principles are not as positive and strong as with 'sacrifice consumers', and therefore they will feel a less strong need to act consistent with their opinion about the fashion industry. This means that 'consistency' will have less of an effect on 'self consumers', since they mostly have negative attitudes towards sustainable fashion and are more egocentric. Also, 'consistency' will have less of an effect on 'social consumers', because even if they want to be more sustainable, the pressure of others to not choose sustainable clothing will most likely be higher. The above leads to the following hypothesis:

*H5: 'Consistency' will lead to a higher willingness to buy sustainable fashion for 'sacrifice consumers', than for 'self consumers' and for 'social consumers'.*

In sum, the current study will combine the differences in willingness to buy sustainable fashion amongst three types of consumers. Moreover, it is examined what social influence technique ('liking', 'social proof', 'consistency') will work best for which type of consumer in influencing them into being more willing to buy sustainable fashion. Since a study that combines these factors is not yet done, this research will be an addition to existing literature on types of consumer, social influence and sustainable fashion.

By answering the research question and testing the hypotheses, a store/brand that sells sustainable fashion can indicate a difference between various consumers, and see what kind of consumers are already their customers, and which type they want to attract more. Moreover,

they can get to know the willingness for a type of customer in buying sustainable clothing from their store/brand. Besides, the store/brand can take the results into account to see if they can use a specific social influence technique that works best to attract (a specific type of) consumers. Moreover, if the government wants people to increase sustainable (fashion)consumption, they can potentially use a specific social influence technique for a certain type of consumer. These techniques can be used in and around stores, as well as on social media and television.

## **Methods**

### **Participants**

Before gathering the data an a priori power analysis with a medium effect size of 0.25,  $\alpha$  of .05 and Power of 0.95 was done, which showed that the sample size should be minimal 303. Eventually, this study was done amongst 457 respondents. After filtering out 11 respondents who did not fit in the age category of 18 to 30 years old, 10 respondents who did not complete the survey, 4 participants who answered 'no' or 'no opinion' in the consistency condition (see Appendix C), and 63 respondents who could not be categorized as one type of consumer, a final sample of 369 respondents remained. The age category 18-30 was chosen as a sample, since people of this age buy much clothing in fast fashion stores (Joy, Sherry Jr, Venkatesh, Wang & Chan, 2012). Besides, younger people are less conservative and more open for change than older people (Truett, 1993; Spisak, Grabo, Arvey & Van Vugt, 2014).

A post-hoc power analysis with a medium effect size of 0.25 and  $\alpha$  of .05 showed that the sample size is reliable, since the calculated Power is 0.98. The sample consists of 56 males (15.2%), 311 females (84.3%), and 2 other (0.5%), aged between 18 and 30 years ( $M = 23.00$ ;  $SD = 2.22$ ). These respondents mostly come from the Netherlands (53.4%), however also other countries around the world were represented. The two most common educational levels were the following: 155 respondents finished or are following a master (42%), and 149 a bachelor (40.4%).

### **Procedure and Design**

In this study a quantitative research method was used. To test the hypotheses an experimental study was done by using an online survey to collect the data. Moreover, a pre-test is used beforehand, which will be explained in more detail in the next sub-chapter. The goal of this pre-test was to test if respondents can be categorized into the types of consumer.

The survey consisted of three manipulated treatments. Every respondent was randomly exposed to one of the following social influence techniques: 'liking' (1), 'social proof' (2) or 'consistency' (3). These social influence techniques are the moderator in this study. The number of respondents was almost equally distributed amongst these categories, where 145 respondents were exposed to 'liking', 141 to 'social proof' and 146 to 'consistency'. These social influence techniques were included by showing each respondent a short text (Appendix C) and a self-made advertisement. These pictures and the logo were copied from the official website of the clothing brand Armed Angels. The advertisements look the same for all social influence techniques. The only difference was the short text in the survey and on the advertisements. The advertisements are shown below.

Image 1, 2, 3. Advertisements with social influence techniques included (1. 'Liking', 2. 'Social proof', 3. 'Consistency')



For 'liking', the focus in the text was on the helpfulness of the brand/employees and on showing your own identity/style with this clothing. The customer might start liking the brand/store/employees, since they offer help and emphasize the importance of expressing your identity with clothing. The latter increases liking, since this shows a similarity between the brand and the customer in expressing your identity with clothing. For 'social proof', the focus in the text was on the peers that like the clothing and already bought sustainable clothing. For 'consistency', the text was focused on saving the planet and helping people work in good work environments. For this last technique an extra question was added before the advertisement. Respondents first read some information on the pollution of the fashion industry and the bad working conditions (Appendix C). Thereafter the following question was

asked: *Do you think this should be changed?*, with the answer options 'yes', 'no' and 'no opinion'. Only the respondents that answered this question with 'yes' stayed in the data, as explained before. Right after the respondent saw the text and advertisement, they got a question on their willingness to buy sustainable clothing.

The survey was written in English and took a respondent around 5 minutes to complete. Moreover, an individual could only fill out the survey once. The data for this study was gathered on Qualtrics, in the period from beginning of April 2020 until half of May 2020, via various social media platforms. Creating a sample like this means that convenience sampling was used, since the sampling is limited only to people who have internet access and/or use social media. Besides, snowball sampling was used, because some people who filled out the survey were asked to send the survey to their friends and family.

Before respondents started the survey, an introduction text was shown, which gave respondents general information about the study. Not explaining the goal of the study in detail (e.g. different manipulations) in the introduction text could be an ethical issue. Therefore, the anonymity, privacy and confidentiality was emphasized before respondents started the survey. If participants agreed with filling in the survey, the survey started with some demographic questions. Thereafter, one of three social influence techniques was shown. This technique was combined with a question about the respondent's willingness to buy a sustainable fashion product. Then, statements about the respondent's way of consuming clothing and their attitudes were asked. Lastly, there were some questions on knowledge about sustainability and the degree of the respondent's sustainable lifestyle. The questions were the same for all respondents, regardless of the manipulation they got (Appendix C). Respondents saw their progress in the survey on the top of the screen, and the survey was finished by showing respondents an end text, where they were thanked for their time.

### **Pre-test**

In the current study a pre-test was done by conducting a survey (Appendix B). This pre-test was mainly focused on testing if respondents can be categorized into the types of consumer. This was done, since the statements to measure types of consumers were not yet a part of a previously tested and validated survey. It was tested if 15 statements measured the three factors that they were supposed to measure, which are 'self consumer', 'social consumer' and 'sacrifice consumer'. The pre-test survey consisted of statements about the way of consuming and attitudes of a person, based on research of McNeill and Moore (2015). Next to the statements some demographic questions and questions on sustainability of the

respondent were asked. The pre-test was conducted amongst 117 respondents. After filtering out the respondents who did not fit in the age category of 18 to 30 years, 105 respondents remained in the data. This sample consisted of 33 males (31.4%), 70 females (66.7%), and 2 others (1.9%), aged between 18 and 30 years ( $M = 23.67$ ;  $SD = 2.39$ ). Most respondents indicated that they are following or finished a Bachelor (52.4%) or Master (24.8%). Besides, most respondents had an idea of what sustainable fashion is. Their answers included the positive aspects for the environment and the working conditions for employees. Moreover, respondents indicated themselves as having a moderately sustainable lifestyle on a scale of 1 to 10 ( $M = 5.78$ ,  $SD = 1.57$ ).

To test if the 15 statements measure three categories of type of consumer, a factor analysis was done. Before the factor analysis was conducted, some assumptions had to be met. The assumption of independence and sample size were met. Ideally the sample size could be bigger, however, due to limited time this sample size was seen as big enough for the study. The Shapiro-Wilk tests showed significant results for each statement, which meant that the questions may not be normally distributed. However, this was not problematic, since a factor analysis is robust against violations of this assumption of normality (Allen, Bennett & Heritage, 2014). Moreover, the Normal Q-Q plots and histograms showed that the statements appear to be reasonably normally distributed. The assumption of linearity was met, since scatterplots mostly showed linear lines, however sometimes this was a weak linear relationship. Lastly, the assumption of multicollinearity was met, since the Determinant value in the Correlation Matrix was 0.008, which is higher than 0.00001. The Kaiser-Meyer-Olkin test showed that the sample is adequate to perform a factor analysis,  $KMO = .652$ . Besides, Bartlett's test was significant, which means that there is enough correlation between the items.

A Principal components analysis with Direct Oblimin rotation was executed. The factor analysis identified five factors as underlying the 15 questions, with loadings between -0.440 and 0.895 (Table 1, Appendix A). Since these questions were meant to measure three factors, the Pattern Matrix was further investigated. The Pattern Matrix showed that the last six statements did not fit in the right factor where they should belong. Therefore, it was decided to execute a second factor analysis, where the last six statements were excluded. This factor analysis identified three factors as underlying the remaining 9 questions, with loadings between -0.355 and 0.926 (Table 2, Appendix A). In total, these factors accounted for 66.22% of the variance in the data. The three statements that measure 'sacrifice consumer' were identified as factor one, the three statements that measure 'social consumer' were identified as factor two, and the three statements that measure 'self consumer' were identified



as a third factor. Based on the results of these factor analyses it was decided that only the first 9 statements were included to measure the three types of consumer in the survey.

### Measures

**Willingness to buy sustainable fashion.** An individual's willingness to buy sustainable fashion is the dependent variable in this study. This variable was measured by the question: *On a scale of 1 to 10, how willing would you be to buy a piece of sustainable clothing, as shown in the advertisement above?* With this question the willingness of an individual to buy a piece of sustainable clothing was asked, with the clothing in the advertisement as an example of sustainable clothing. The respondent answered this question by indicating their score between 1 and 10, where 1 means 'Extremely unwilling' and 10 means 'Extremely willing'.

**Type of consumer.** Based on the factor analyses described above, *Type of consumer* was thus measured by 9 statements in the survey (Appendix C). Respondents were asked to indicate to what degree they agree with and/or identify themselves with each statement on a 7-points Likert scale, where 1 means 'Strongly disagree' and 7 means 'Strongly agree'. The first group of three statements was about the reason for the respondent to buy the clothing they prefer to buy. For example: *I buy clothing that I like myself, regardless of what others think or if it is sustainable.* The second group of three statements was about what the respondent cares about when buying clothing. For example: *I care about other people's opinions of my clothes.* Lastly, the third group of three statements was about the respondent's goal when buying clothing. The last statement was as follows: *My goal when buying clothing is that it caused the least pollution and bad working environments possible.* Statements 1, 4 and 7 measured 'self consumer', 2, 5 and 8 measured 'social consumer', and 3, 6 and 9 measured 'sacrifice consumer'. To check if the 9 statements measured what they were supposed to measure, and as a check of the results of the factor analysis on the pre-test data, another factor analysis was done on the data of the main survey. The assumptions for the factor analysis were met. The Kaiser-Meyer-Olkin test showed that the sample is adequate to perform a factor analysis,  $KMO = .721$ . Besides, Bartlett's test was significant. The factor analysis confirmed the results from the pre-test. Three factors accounted for 69.01% of the variance in the data, with loadings between -0.421 and 0.885 (Table 3, Appendix A). Cronbach's Alpha of the first factor was .534, which is not so high. This makes the first factor less reliable, however, results show that the Cronbach's Alpha would be lower if one of three items is deleted out of the factor. Therefore, the decision was made to keep all three items in the survey as measuring

one factor. Cronbach's Alpha for the second factor was .691 and for the third factor .860. These showed that factor two and three are reliable.

From the answers to those 9 statements three variables for each type of consumer were firstly made. The scores that the respondent filled in on the three statements that measure the degree of a person being a 'self consumer' were summed up together, to get a total score on 'self consumer'. The higher the score, the more the respondent is a 'self consumer'. The same was done for 'social consumer' and 'sacrifice consumer'. This score can vary between 3 and 21 for every type of consumer variable. Then the variable *Type of consumer* was made, by comparing the scores of a respondent on each of the above mentioned variables. If a respondent scored higher on 'self consumer' than on 'social consumer' and 'sacrifice consumer', then this respondent was put in category 1 of the variable *Type of consumer*. Category 2 of this variable is 'social consumer', and category 3 is 'sacrifice consumer'. The respondents that had an equal score on more than one type of consumer were put in category 0, and then filtered out of the data. This decision was made, because those people cannot be put into just one category, and are thus not valuable for the study.

**Product liking.** This variable is used as a control variable. Research shows that product liking has a significant impact on an individual's buying behavior and thus that liking a piece of clothing is an important factor in a person's decision to want/buy this item (Han, Seo & Ko, 2017; De Pelsmacker & Janssens, 2007). It could be that a respondent does not like the clothing that is shown in the advertisement in the survey. If this is the case, it can be expected that this respondent will give a lower score to the question on willingness to buy sustainable fashion. Even more, because in the question on willingness, there is referred to the clothing shown in the advertisement. Besides, it is possible that a respondent likes the clothing in the advertisement, and therefore has a higher score on willingness. To control for this, the following question was asked: *On a scale of 1 to 10, how much did you like the look of the clothing on the previous advertisement?* Respondents answered this question on a scale of 1 (totally did not like) to 10 (totally liked).

**(Subjective) knowledge.** This variable was used for additional analyses, as a dependent variable. An important factor of the types of consumer might possibly be a respondent's knowledge about sustainable fashion (McNeill & Moore, 2015). Therefore, it was examined to what degree the types of consumer differed in their knowledge. This knowledge was measured by the question: *How much do you think you know about sustainable fashion?*, with the answer options 'Far below average' (1), 'Moderately below

average' (2), 'Slightly below average' (3), 'Average' (4), 'Slightly above average' (5), 'Moderately above average' (6) and 'Far above average' (7).

The respondents' knowledge was also measured by an open question: *What, in your opinion, is sustainable fashion?* Respondents answered this with their opinion on the definition and explanation of sustainable fashion. This question was used in the results-section to see if respondents in general understood the main concept of the survey.

**Sustainable lifestyle.** This variable was also used for additional analyses, as a dependent variable, since the degree of having a sustainable lifestyle might also be an important factor of the types of consumer (McNeill & Moore, 2015). When certain individuals live sustainable in general and other individuals do not, it is likely that those individuals differ in the type of consumer they are. This variable was measured with the question: *How sustainable do you live in general in your opinion? (on a scale of 0% to 100%).*

**Demographics.** Finally, some questions on demographics were asked. These questions were about the respondent's gender, age, educational level and country. *Gender* was measured by asking respondents the question: *What is your gender?*, with the answer categories 'Male' (1), 'Female' (2) and 'Other' (3). The variable *Age* was measured by asking: *What is your age?* This was an open question, where respondents can fill in their age. These variables were included in the survey to get an idea of the sample, and to make sure that the sample only includes individuals between the age of 18 and 30. *Educational level* was measured using the question: *What is the highest educational level that you have completed or are currently following?* The answer categories were the following; 'No education completed' (1), 'Primary school' (2), 'High school' (3), 'Intermediate vocational education/associate degree (MBO)' (4), 'Higher vocational education (HBO)' (5), 'Bachelor (University)' (6), 'Master (University)' (7) and 'Doctorate degree' (8). *Country* was measured with the question: *Where are you from?* Respondents answered this question by using a drop-down list, where all countries in the world were represented.

## Analysis

The gathered data was put into the statistical program SPSS. Firstly, the descriptive statistics were requested. This gave an overview of the averages, standard deviations and the minimum and maximum scores. A One-Sample T-Test was done to compare the sample mean with the middle of the scales of the variables. Thereafter, various correlations were conducted to get a first impression on the results and to check for multicollinearity.

To test the hypotheses, A Factorial Between Groups ANOVA was used to test the main effects of *Type of consumer* and *Social influence technique* on *Willingness*, and the moderating effect of *Social influence technique*. Thereafter, an ANCOVA analysis was executed, where the same was tested as in the ANOVA, however, including the covariate *Product liking*. Lastly, two One-Way ANOVA's were executed as follow-up analyses to examine if the three types of consumer differ in their knowledge on sustainable fashion and in their degree of having a sustainable lifestyle. In this way it was tested if those factors play a role in the separation of the types of consumer.

## Results

### Descriptive Statistics

In Table 4 the descriptive statistics of the variables of the current study can be seen. On the scale of *Willingness to buy sustainable fashion* respondents scored significantly higher ( $M = 6.42$ ,  $SD = 2.08$ ) than the middle of the scale ( $t(368) = 8.50$ ,  $p < .001$ ), which indicates that most respondents are moderately willing to buy sustainable fashion. Besides, respondents score significantly higher on the scale of *Product liking* than the middle of the scale ( $t(368) = 3.39$ ,  $p = .001$ ), which means that in general respondents moderately liked the look of the clothing in the advertisement. Furthermore, respondents indicate themselves as knowing slightly below average to average about sustainable fashion ( $M = 3.81$ ,  $SD = 1.42$ ), which is significantly lower than the middle of the scale ( $t(368) = -2.60$ ,  $p = .01$ ). This indicates that the respondents on average do not know much about sustainable fashion. *Lifestyle* shows that respondents score their lifestyle on average as 55.54% sustainable ( $M = 55.54$ ,  $SD = 17.29$ ), which is significantly higher than the middle of the scale ( $t(368) = 5.60$ ,  $p < .001$ ). This shows that respondents see themselves as having a moderately sustainable lifestyle, thus probably sometimes behaving in a sustainable way, and sometimes behaving in a non-sustainable way.

After categorizing the respondents into the categories of *Type of consumer* it can be seen that 193 respondents are 'self consumer', 55 respondents are 'social consumer' and 121 respondents are 'sacrifice consumer'. The answer on the open-ended question on *Knowledge* show that most people have an idea of what sustainable fashion is and how to describe it. Common types of answers are: '*Little pollution and good working circumstances*', '*Brands that provide acceptable working conditions and payment for its workers, plus being environmentally friendlier*' and '*Buying clothing that are more carbon neutral and do not contribute to reproducing inequality. Essentially clothing that is manufactured in a moral and socially just way*'. In sum, almost all answers mention the environment and working

circumstances. This suggests that participants had enough knowledge to understand the topic and main concept of the survey. Two respondents did not answer this question and a few gave a short answer, however overall it can be said that the sample knows what sustainable fashion is. These results also show that the sample of the pre-test and the main survey are similar.

**Correlations**

Besides descriptive statistics, more insights can be gained from looking at bivariate analyses, such as correlations. Since the assumption of normality is not fully met, it is decided to look at Kendall's Tau-b for all variables (Allen et al., 2014). The results are shown in Table 4. *Willingness* is positively correlated with *Product liking* ( $\tau_b = .498, p < .001$ ) (large correlation), *Knowledge* ( $\tau_b = .157, p < .001$ ) (small correlation) and *Lifestyle* ( $\tau_b = .184, p < .001$ ) (small correlation). This means that respondents who are more willing to buy sustainable fashion, also like the products in the advertisement more, have more knowledge about sustainable fashion and have a more sustainable lifestyle. Moreover, *Product liking* is positively, but weakly correlated with both *Knowledge* ( $\tau_b = .135, p = .001$ ) and *Lifestyle* ( $\tau_b = .134, p < .001$ ). This means that when a respondent liked the products in the advertisement more, also have more knowledge about sustainable fashion and have a more sustainable lifestyle. Besides, *Knowledge* is also positively, and moderately, correlated with *Lifestyle* ( $\tau_b = .312, p < .001$ ), which means that a respondent who has more knowledge about sustainable fashion, also has a more sustainable lifestyle. These correlations show that multicollinearity is not a problem, since no extreme high correlations are found.

Table 4. *Descriptive Statistics and Correlations*

|                       | Min. | Max.   | M     | SD    | Age   | Willingness | Product liking | Knowledge | Lifestyle |
|-----------------------|------|--------|-------|-------|-------|-------------|----------------|-----------|-----------|
| <b>Age</b>            | 18   | 30     | 23.00 | 2.22  | -     |             |                |           |           |
| <b>Willingness</b>    | 1.00 | 10.00  | 6.42  | 2.08  | .029  | -           |                |           |           |
| <b>Product liking</b> | 1.00 | 10.00  | 5.87  | 2.10  | .044* | .498***     | -              |           |           |
| <b>Knowledge</b>      | 1    | 7      | 3.81  | 1.42  | .063  | .157***     | .135***        | -         |           |
| <b>Lifestyle</b>      | 5.00 | 100.00 | 55.54 | 17.29 | .051  | .184***     | .134***        | .312***   | -         |

\*  $p < .05$ , \*\*\*  $p < .001$

$N = 369$

**Main Analyses**

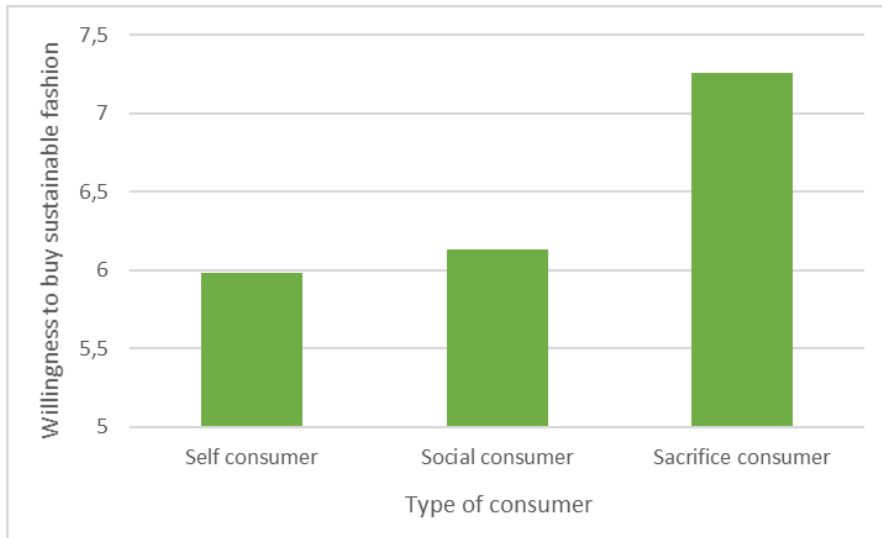
An ANOVA is executed to test the model, with *Willingness* as dependent variable, *Type of consumer* as independent variable, and *Social influence technique* as moderator. Before executing the ANOVA various assumptions are assessed. The assumption of

measurement and independence are met, since every respondent could only fill out the survey once. The assumption of normality is met when looking at the normal Q-Q Plots and histograms, and the assumption of homogeneity is met, since Levene's Test of Equality of Error Variances shows non-significant results ( $F(8, 360) = 1.469, p = .167$ ). After the ANOVA, an ANCOVA is executed to test the same model, however with *Product liking* added as a covariate. Before executing the ANCOVA also various assumptions are assessed. The assumption of normality is checked. The Shapiro-Wilk tests show significant results, which means that the data are not normally distributed. However, when looking at the histograms and normal Q-Q plots, the variables appear to be reasonably normally distributed. Besides, the ANCOVA is considered to be robust against small to moderate violations of the normality assumption (Allen et al., 2014). Therefore, the significant Shapiro-Wilk tests are not seen as a problem. Secondly, the assumption of homogeneity of regression slopes is met, since the Tests of Between-Subjects Effects show non-significant interactions between the independent variable (*Type of consumer*) and the covariate *Product liking* ( $F(2, 359) = 1.999, p = .137$ ), and between the moderating variable (*Social influence technique*) and the covariate *Product liking* ( $F(2, 359) = .866, p = .422$ ). Thirdly, the assumption of linearity is being assessed. Scatterplots show that there appear to be linear relationships, which is why the assumption is met. Lastly, the fifth assumption of homogeneity of variance is met, since the Levene's Test of Equality of Error Variances show non-significant results ( $F(8, 360) = 1.469, p = .167$ ).

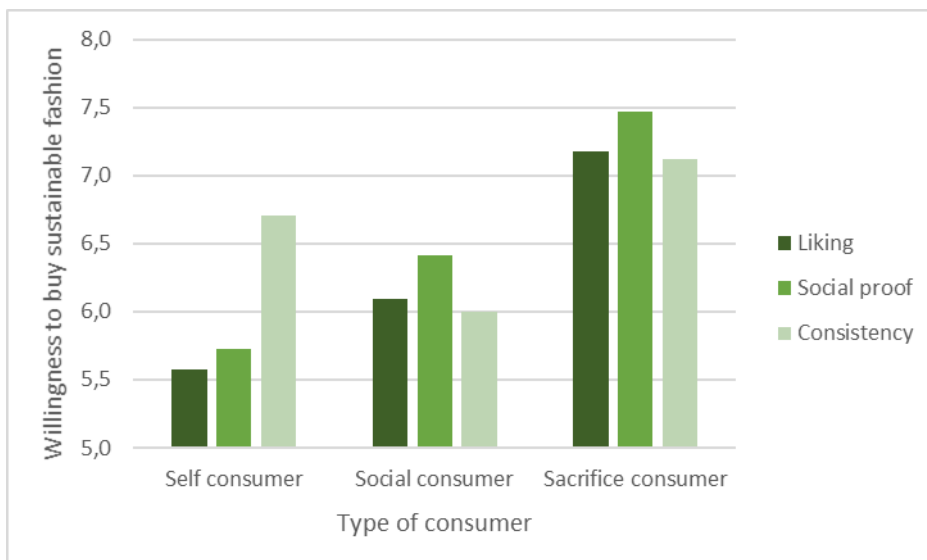
After assessing the assumptions, both the ANOVA and ANCOVA are executed. The results are shown in Table 6 to 9 in Appendix A and in Graphs 1 and 2 below. The results of the ANOVA show that there is a significant relationship between *Type of consumer* and *Willingness* ( $F(2, 360) = 15.261, p < .001, \text{partial } \eta^2 = .078$ ). The ANCOVA results also show this significant relationship, when adjusted for *Product liking* ( $F(2, 359) = 6.592, p = .002, \text{partial } \eta^2 = .035$ ). This means that the mean of *Willingness* differs significantly for the categories of *Type of consumer*. The mean willingness for each type of consumer is shown in Graph 1, where it can be seen that the mean willingness for 'self consumer' is 5.98 ( $SD = 2.17$ ), for 'social consumer' 6.13 ( $SD = 1.67$ ), and for 'sacrifice consumer' 7.26 ( $SD = 1.85$ ). However, these results does not show exactly which types of consumer are significantly different in their willingness. When looking at the Pairwise Comparisons to see how these categories of *Type of consumer* differ in their *Willingness*, results of both ANOVA and ANCOVA show that the category 'Self consumer' differs significantly from the category 'Sacrifice consumer' in their score on *Willingness*, respectively ( $t(360) = 5.435, p < .001$ ).

and ( $t(359) = 2.654, p = .025$ ). 'Sacrifice consumers' score higher on *Willingness* than 'Self consumers' (respectively  $M = 7.26, SD = 1.85$ ;  $M = 5.98, SD = 2.17$ ). Besides, results of both ANOVA and ANCOVA show that the category 'Social consumer' also differs significantly from 'Sacrifice consumer' in their score on *Willingness*, respectively ( $t(360) = 3.263, p = .001$ ) and ( $t(359) = 3.375, p = .002$ ). 'Sacrifice consumers' score higher on *Willingness* than 'Social consumers' (respectively  $M = 7.26, SD = 1.85$ ;  $M = 6.13, SD = 1.67$ ). In both the ANOVA and ANCOVA results, 'Self-consumer' and 'Social consumer' do not differ significantly in their score on *Willingness*, respectively ( $t(360) = .545, p = .586$ ) and ( $t(359) = 1.520, p = .385$ ).

Besides, the results of both ANOVA and ANCOVA show no significant relationship between *Social influence technique* and *Willingness*, respectively ( $F(2, 360) = .755, p = .471$ , partial  $\eta^2 = .004$ ) and ( $F(2, 359) = .673, p = .511$ , partial  $\eta^2 = .004$ ). The interaction shows no significant effect for both analyses either, respectively ( $F(4, 360) = 2.153, p = .074$ , partial  $\eta^2 = .023$ ) and ( $F(4, 359) = 1.784, p = .131$ , partial  $\eta^2 = .019$ ). The visual representation of the results of the ANCOVA are shown in Graph 2. Even though these results are not significant, it is interesting to see the difference in mean willingness for each type of consumer for a specific social influence technique. This graph shows that the mean willingness for 'self consumer' is highest when exposed to 'consistency' ( $M = 6.70, SD = 1.98$ ). For 'social consumer' 'social proof' seems to work best ( $M = 6.42, SD = 1.51$ ), however not much difference is seen with 'liking' and 'consistency'. For 'sacrifice consumer' all social influence techniques also seem to be more or less equally effective with 'social proof' having the highest willingness ( $M = 7.47, SD = 1.93$ ), and all techniques are more effective for 'sacrifice consumer' than for the other types of consumer. The covariate *Product liking* is significantly related to *Willingness* ( $F(1, 359) = 207.169, p < .001$ , partial  $\eta^2 = .366$ ). This means that an individual's amount of liking a sustainable fashion product predicts the individual's willingness to buy this sustainable fashion product.



Graph 1. Means on Willingness to buy sustainable fashion for every type of consumer



Graph 2. Means on Willingness to buy sustainable fashion for every type of consumer separated by social influence technique

### Additional Analyses

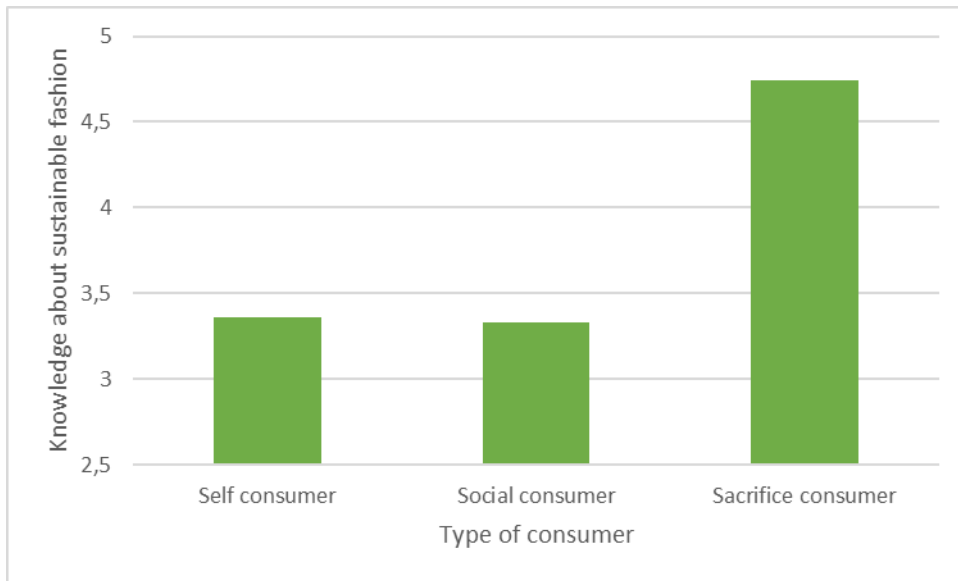
Additional analyses are done to get more insights into how the types of consumer differ from each other on other aspects than willingness to buy sustainable fashion, and possibly to see what aspects could play a role in categorizing them. The goal of these analyses was to examine if the types of consumers differ significantly in their *Knowledge* and *Lifestyle*. Furthermore, as elaborated on above, the ANCOVA results show that there is no significant difference in *Willingness* between ‘self consumer’ and ‘social consumer’. A possible



explanation for this result could be found in the differences between *Type of consumer* on *Knowledge* and *Lifestyle*. If 'self consumer' and 'social consumer' do not differ in their *Knowledge* and *Lifestyle*, this could give insights in the separation of these two types of consumers.

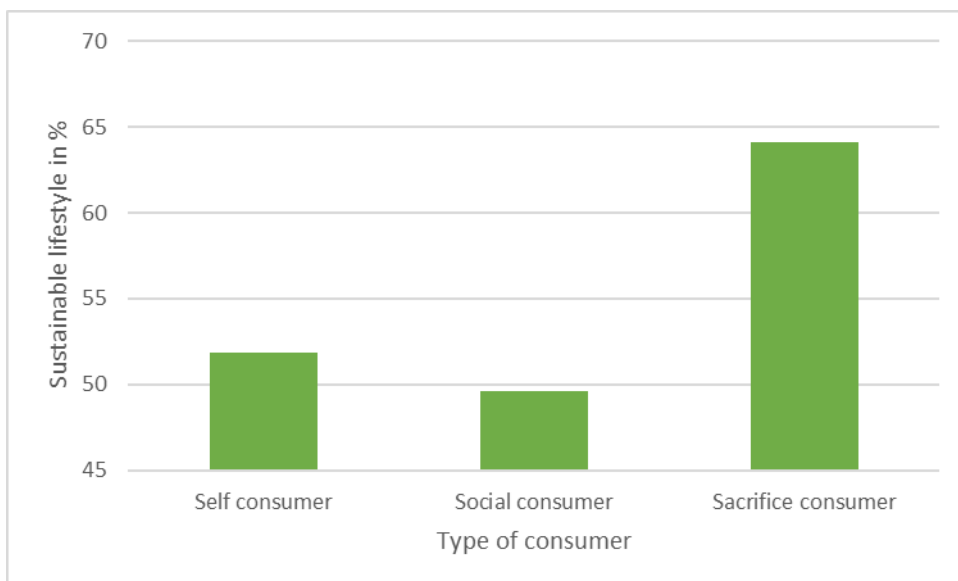
A One-Way Between Groups ANOVA is used two times to test if the categories of *Type of consumer* differ in their average *Knowledge*, and, secondly, to test if the categories of *Type of consumer* differ in their average degree of living a sustainable lifestyle. Therefore, *Type of consumer* is the independent variable in both analyses, and *Knowledge* and *Lifestyle* are separately included in one ANOVA as the dependent variable. Before executing the ANOVA various assumptions have to be met. The assumption of scale of measurement and independence are met, since the dependent variable(s) are interval data. The assumption of normality is met, since in the histograms and Normal Q-Q plots all variables seem normally distributed. The assumption of homogeneity of variance is violated both for the ANOVA including *Knowledge* and *Lifestyle*, since the Levene's tests of homogeneity of variances were significant, respectively ( $F(2, 366) = 4.355, p = .014$ ) ( $F(2, 366) = 5.100, p = .007$ ). Therefore, Games-Howell is chosen as Post-Hoc test, because this shows the results when equal variances are not assumed.

The results of the One-Way Between Groups ANOVA with *Knowledge* as dependent variable show that the categories of *Type of consumer* differ in their mean on *Knowledge* ( $F(2, 366) = 49.166, p < .001$ ). Post-hoc analyses with Games-Howell (using an  $\alpha$  of .05) revealed that 'Sacrifice consumer' ( $M = 4.74, SD = 1.228$ ) had significantly higher scores on *Knowledge* than 'Self consumer' ( $M = 3.36, SD = 1.355$ ) ( $t(366) = 9.36, p < .001$ ) and 'Social consumer' ( $M = 3.33, SD = 1.001$ ) ( $t(366) = 8.10, p < .001$ ). There is no significant difference in *Knowledge* between 'Self consumer' and 'Social consumer' ( $t(366) = .180, p = .982$ ).



Graph 3. Means of Knowledge for every Type of Consumer

The results of the One-Way Between Groups ANOVA with *Lifestyle* as dependent variable show that the categories of *Type of consumer* differ in their mean on *Lifestyle* ( $F(2, 366) = 25.408, p < .001$ ). Post-hoc analyses with Games-Howell (using an  $\alpha$  of .05) revealed that ‘Sacrifice consumer’ ( $M = 64.11, SD = 14.18$ ) had significantly higher scores on *Lifestyle* than ‘Self consumer’ ( $M = 51.85, SD = 17.56$ ) ( $t(366) = 6.78, p < .001$ ) and ‘Social consumer’ ( $M = 49.64, SD = 15.68$ ) ( $t(366) = 5.84, p < .001$ ). There is no significant difference in *Lifestyle* between ‘Self consumer’ and ‘Social consumer’ ( $t(366) = .901, p = .641$ ).



Graph 4. Means of Sustainable Lifestyle for every Type of Consumer

### Conclusion and Discussion

In this study the problem of the fashion industry, specifically fast fashion, and the potential and role of sustainable fashion, were central. The fashion industry is the cause of many environmental problems and bad work- and production conditions (Kant, 2012; de Lenne, 2016). Many people still buy fast fashion, while sustainable fashion would be a better choice to decrease the negative effects of the fashion industry (Bhardwaj & Fairhurst, 2010; McNeill & Moore, 2015; Shen et al., 2014). Different types of consumers regarding sustainable consumption were not often found. McNeill and Moore (2015) were the only ones concluding this distinction in categorizing three types of consumers, however the effect of these certain types of consumer on how willing a person is to buy sustainable fashion was not tested before. Besides, much research is done on social influence techniques, and the effectiveness of using them in consumption is showed (i.a. Salazar et al., 2013; Janssen & Jager, 2001; Iyengar et al., 2009), however the application of those techniques for specific types of consumer has not been examined before. Potentially a social influence technique might be most effective for a specific type of consumer to change their current behavior into more sustainable behavior.

The goal of the current study was to examine if consumers can be categorized into different types, and if these types differ in their willingness to buy sustainable clothing. Moreover, the goal was to examine the difference of the effect of various social influence techniques on the types of consumer. In other words, examine if a certain social influence technique is most effective for a specific type of consumer.

This study found that there is no difference in willingness to buy sustainable fashion between 'Self consumers' and 'Social consumers'. Therefore Hypothesis 1: '*Social consumers' will be more willing to buy sustainable fashion than 'Self consumers'*', is rejected. This is not in line with research of McNeill and Moore (2015), who state that three types of fashion consumers can be distinguished, of which the 'self consumer' differs in consumer behavior regarding sustainable fashion from the 'social consumer'. Besides, it is concluded that 'Sacrifice consumers' are more willing to buy a sustainable piece of clothing than both 'Self-' and 'Social consumers'. Therefore, Hypothesis 2 (*'Sacrifice consumers' will be more willing to buy sustainable fashion than 'Self consumers' and 'Social consumers'*), is confirmed. This is in line with research of McNeill and Moore (2015), who showed that a 'Sacrifice consumer' differs from both a 'Self consumer' and a 'Social consumer' in sustainable fashion consumer behavior.

Furthermore, no difference is found in the effectiveness of social influence techniques for specific types of consumer. In other words, there is no difference in the effect of 'liking' on a 'self consumer', a 'social consumer' and a 'sacrifice consumer' in their willingness to buy sustainable fashion. This result is also found for both 'social proof' and 'consistency'. Therefore, Hypothesis 3 (*'liking' will lead to a higher willingness to buy sustainable fashion for 'self consumers', than for 'social consumers' and 'sacrifice consumers'*), Hypothesis 4 (*'Social proof' will lead to a higher willingness to buy sustainable fashion for 'social consumers', than for 'self consumers' and 'sacrifice consumers'*), and Hypothesis 5 (*Consistency will lead to a higher willingness to buy sustainable fashion for 'sacrifice consumers', than for 'self consumers' and for 'social consumers'*) are all rejected. Besides, no differences were found between the effectiveness of the three social influence techniques on a consumer's willingness to buy sustainable fashion.

Below these conclusions are further discussed. A possibility for not finding a difference in willingness to buy sustainable fashion between 'self consumer' and 'social consumer' could be that these types of consumer belong to one category, and thus one type of consumer. This could be since the current study showed that 'self consumer' and 'social consumer' also did not differ in their knowledge about sustainable fashion, and in the degree of having a sustainable lifestyle, therefore the two types seem similar. Besides that, the three types of consumer are based on research of McNeill and Moore (2015), and are examined for the first time in the current study. Therefore, another possible explanation for this result is that the statements in the survey that measure the types of consumers are not accurate enough. This could be, since around 60 respondents did not fit into one category, but rather in two or even three categories of the types of consumers. Mostly, those respondents fitted into the two categories of 'self consumer' and 'social consumer' or 'self consumer' and 'sacrifice consumer'. This might show that the questions that measure the category 'self consumer' need to be further developed in the survey, since the results also showed that this category is low in reliability. Future research can further develop the statements/questions to measure the construct of *Type of consumer* and maybe extend it with more statements/questions, which might show more difference between the 'self consumer' and the other types of consumer.

Another note of discussion is about the amount of respondents that did not fit into one category of type of consumer. Those people were not included in the final sample, which could mean that individuals with more extremer scores stayed in the sample while respondents with the same scores on two or three categories are not looked at. Moreover, a part of the respondents scored almost equal on two or three of the categories. Sometimes the

difference in scores between the categories was one point. Still they are categorized into the category on which they scored the highest. This could influence the results of this study, while those respondents might be not particularly one type of consumer, and thus might not have a very low or high willingness, or might not be influenced by a certain social influence technique as thought before. Therefore, it could be an option not categorized people into a specific type of consumer, but to use a scale on which to measure people. This scale could for example measure the amount of which people are willing to 'sacrifice', or self-orientation versus other-orientation, where individuals are self-oriented when they focus on their own goals and needs (Groeben, Perren, Stadelmann & von Klitzing, 2011), and, other-oriented when they focus and care about others' goals and needs and want to help others (Groeben, Perren, Stadelmann & von Klitzing, 2011). Future research could do more research on this, and on ways to best measure consumer types and differences between consumers.

A possible explanation for not finding a difference in effectiveness for each social influence technique between the different types of consumers could be that respondents in this study did not pay detailed attention to the advertisement in the survey. A possible consequence of this could be that the social influence technique that is used does not have its desired effect. To overcome this, future research could examine if a difference in the effectiveness between types of consumers could be found when respondents are exposed to the social influence technique for a longer amount of time or in multiple ways. For 'liking', respondents could have personal contact with a brand/store/employee and mimicry could be added in this contact, since research shows that this works in increase liking (Kulesza, Dolinski & Wicher, 2016). Another idea for future research could be to examine these effects for a specific brand, and add the social influence techniques to their sites. Respondents could make an account on the site, and fill out information on which they can be categorized as a certain type of consumer or be put on a scale of self- versus other-oriented. Respondents can be asked to visit the site multiple times, so they are exposed to the technique for a longer time, before they would answer questions on their fashion consumption/behavior.

Possibly consumers can be influenced via knowledge also, since the results showed that consumers differ on this aspect. Making them more knowledgeable could possibly make them more willing to buy sustainable fashion. Another recommendation for future research is to have a more equal distribution of gender and educational level in the sample, since the current sample mostly exists of higher educated women.

In sum, it is clear that more research is needed on this topic to further specify differences between consumers in their consumer behavior regarding sustainable fashion.

Moreover, research is needed to further examine how social influence techniques can be more optimally used for specific consumers, and to explore ways in which they work best.

However, the current study made a valuable contribution to existing literature, since the three types of consumer were not examined before. Moreover, there was no literature on specific types of consumers being exposed to specific types of social influence techniques. Also, a first step is made in examining if knowledge on sustainable fashion and the degree of having a sustainable lifestyle play a role in the differences between consumers. To get more insights into how consumers differ, and how those types of consumer can be influenced into buying sustainable fashion, more research is needed. In that way research can hopefully make our world greener again.

## References

- Ahsmann, N., Bakker, A., Bos, I., Janssen, C., & Van der Vaart, I. (2020). Fast fashion onderzoek: Vermindering van de negatieve impact. *KplusV*.
- Allen, P., Bennett, K., & Heritage, B. (2014). *SPSS statistics version 22: A practical guide*. Cengage Learning Australia.
- Amblee, N., & Bui, T. (2011). Harnessing the influence of social proof in online shopping: The effect of electronic word of mouth on sales of digital microproducts. *International journal of electronic commerce*, 16(2), 91-114.
- Berger, J., & Heath, C. (2007). Where consumers diverge from others: Identity signaling and product domains. *Journal of Consumer Research*, 34(2), 121-134.
- Bhardwaj, V., & Fairhurst, A. (2010). Fast fashion: Response to changes in the fashion industry. *The International Review of Retail, Distribution and Consumer Research*, 20(1), 165-173.
- Christensen, P. N., Rothgerber, H., Wood, W., & Matz, D. C. (2004). Social norms and identity relevance: A motivational approach to normative behavior. *Personality and Social Psychology Bulletin*, 30(10), 1295-1309.
- Cialdini, R.B. (2014). *Influence: Science and practice*. Boston: Pearson.
- Cialdini, R. B., Wosinska, W., Barrett, D. W., Butner, J., & Gornik-Durose, M. (1999). Compliance with a request in two cultures: The differential influence of social proof and commitment/consistency on collectivists and individualists. *Personality and Social Psychology Bulletin*, 25(10), 1242-1253.

- Corraliza, J. A., & Berenguer, J. (2000). Environmental values, beliefs, and actions: A situational approach. *Environment and Behavior*, 32(6), 832-848.
- De Lenne, O. (2016). Can green be the new black? Een toepassing van het geïntegreerd model van gedragsvoorspelling op de relatie tussen blootstelling aan mediaberichten over de sociale verantwoordelijkheid van fast fashion bedrijven en consumenten hun attitudes/koopintenties.
- De Pelsmacker, P., & Janssens, W. (2007). A model for fair trade buying behaviour: The role of perceived quantity and quality of information and of product-specific attitudes. *Journal of Business Ethics*, 75(4), 361-380.
- Green, M. (2015). Where does your t-shirt come from? Follow its epic global journey. *Kqed news*. Retrieved from:  
<https://www.kqed.org/lowdown/7943/making-your-t-shirt-a-journey-around-the-world>
- Han, J., Seo, Y., & Ko, E. (2017). Staging luxury experiences for understanding sustainable fashion consumption: A balance theory application. *Journal of Business Research*, 74, 162-167.
- Henninger, C. E., Alevizou, P. J., & Oates, C. J. (2016). What is sustainable fashion?. *Journal of Fashion Marketing and Management: An International Journal*.
- Hornig, J. S., Su, C. S., & So, S. I. A. (2013, July). Segmenting food festival visitors: Applying the theory of planned behavior and lifestyle. In *Journal of Convention & Event Tourism* (Vol. 14, No. 3, pp. 193-216). Taylor & Francis Group.



Iyengar, R., Han, S., & Gupta, S. (2009). Do friends influence purchases in a social network?.

*Harvard Business School Marketing Unit Working Paper*, (09-123).

Jacob, C., Guéguen, N., Martin, A., & Boulbry, G. (2011). Retail salespeople's mimicry of customers: Effects on consumer behavior. *Journal of Retailing and Consumer Services*, 18(5), 381-388.

Janssen, M. A., & Jager, W. (2001). Fashions, habits and changing preferences: Simulation of psychological factors affecting market dynamics. *Journal of Economic Psychology*, 22(6), 745-772.

Joy, A., Sherry Jr, J. F., Venkatesh, A., Wang, J., & Chan, R. (2012). Fast fashion, sustainability, and the ethical appeal of luxury brands. *Fashion Theory*, 16(3), 273-295.

Kant, R. (2011). Textile dyeing industry an environmental hazard. *Natural Science*, 4(1), 22-26.

Kozar, J. M., & Connell, K. Y. H. (2013). Socially and environmentally responsible apparel consumption: Knowledge, attitudes, and behaviors. *Social Responsibility Journal*.

Kulesza, W., Dolinski, D., & Wicher, P. (2016). Knowing that you mimic me: the link between mimicry, awareness and liking. *Social Influence*, 11(1), 68-74.

Luchs, M. G., Phipps, M., & Hill, T. (2015). Exploring consumer responsibility for sustainable consumption. *Journal of Marketing Management*, 31(13-14), 1449-1471.

McNeill, L., & Moore, R. (2015). Sustainable fashion consumption and the fast fashion conundrum: Fashionable consumers and attitudes to sustainability in clothing choice. *International Journal of Consumer Studies*, 39(3), 212-222.

- Salazar, H. A., Oerlemans, L., & van Stroe-Biezen, S. (2013). Social influence on sustainable consumption: Evidence from a behavioural experiment. *International Journal of Consumer Studies*, 37(2), 172-180.
- Salmon, S. J., De Vet, E., Adriaanse, M. A., Fennis, B. M., Veltkamp, M., & De Ridder, D. T. (2015). Social proof in the supermarket: Promoting healthy choices under low self-control conditions. *Food Quality and Preference*, 45, 113-120.
- Saricam, C., & Okur, N. (2019). Analysing the consumer behavior regarding sustainable fashion using theory of planned behavior. In *Consumer Behaviour and Sustainable Fashion Consumption* (pp. 1-37). Springer, Singapore.
- Shen, B. (2014). Sustainable fashion supply chain: Lessons from H&M. *Sustainability*, 6(9), 6236-6249.
- Shen, B., Zheng, J. H., Chow, P. S., & Chow, K. Y. (2014). Perception of fashion sustainability in online community. *The Journal of the Textile Institute*, 105(9), 971-979.
- Sherman, S. J. (1980). On the self-erasing nature of errors of prediction. *Journal of Personality and Social Psychology*, 39(2), 211.
- Silic, M., & Back, A. (2016). The dark side of social networking sites: Understanding phishing risks. *Computers in Human Behavior*, 60, 35-43.
- Spisak, B. R., Grabo, A. E., Arvey, R. D., & van Vugt, M. (2014). The age of exploration and exploitation: Younger-looking leaders endorsed for change and older-looking leaders endorsed for stability. *The Leadership Quarterly*, 25(5), 805-816.

Sundie, J. M., Cialdini, R. B., Griskevicius, V., & Kenrick, D. T. (2012). The world's (truly) oldest profession: Social influence in evolutionary perspective. *Social Influence*, 7(3), 134-153.

Textile Today. (2018, March 28<sup>th</sup>). Consumer behaviour, fast fashion, and sustainability. Retrieved from: <https://www.textiletoday.com.bd/consumer-behaviour-fast-fashion-sustainability/>

Thaler, R. H., & Sunstein, C. R. (2009). *Nudge: Improving decisions about health, wealth, and happiness*. Penguin.

Thøgersen, J. (2004). A cognitive dissonance interpretation of consistencies and inconsistencies in environmentally responsible behavior. *Journal of Environmental Psychology*, 24(1), 93-103.

Tikir, A., & Lehmann, B. (2011). Climate change, theory of planned behavior and values: A structural equation model with mediation analysis. *Climatic Change*, 104(2), 389-402.

Truett, K. R. (1993). Age differences in conservatism. *Personality and Individual Differences*, 14(3), 405-411.

Vaidyanathan, R., & Aggarwal, P. (2005). Using commitments to drive consistency: Enhancing the effectiveness of cause-related marketing communications. *Journal of Marketing Communications*, 11(4), 231-246.

Whitmarsh, L., & O'Neill, S. (2010). Green identity, green living? The role of pro-environmental self-identity in determining consistency across diverse pro-environmental behaviours. *Journal of Environmental Psychology*, 30(3), 305-314.

Wiseman, M., & Bogner, F. X. (2003). A higher-order model of ecological values and its relationship to personality. *Personality and Individual Differences*, 34(5), 783-794.

Zhenxiang, W., & Lijie, Z. (2011). Case study of online retailing fast fashion industry. *International Journal of e-Education, e-Business, e-Management and e-Learning*, 1(3), 195.

**Appendices**

**Appendix A: Tables factor analyses, ANOVA and ANCOVA and One-Way ANOVA.**

Table 1. *Principal components rotated factor structure of the fifteen items about type of consumer*

| Item   | Loadings |          |          |          |          |
|--|----------|----------|----------|----------|----------|
|  | Factor 1 | Factor 2 | Factor 3 | Factor 4 | Factor 5 |
| 1.3. I prefer to buy clothing that is produced on a sustainable way  | 0.895    |          |          |          |          |
| 2.3. I care about the way my clothing is produced  | 0.892    |          |          |          |          |
| 3.3. My goal when buying clothing is that it caused the least pollution and bad working environments possible  | 0.879    |          |          |          |          |
| 3.1. My goal when buying clothing is that I express my identity, regardless of whether the clothing is a trend in fashion or not   | 0.366    |          |          |          | -0.319   |
| 1.2. I prefer to buy clothing that is liked by my peers  |          | 0.744    |          |          |          |
| 2.2. I care about other people's opinions of my clothes  |          | 0.743    |          |          |          |
| 3.2. My goal when buying clothing is that I go with the trends of fashion  |          | 0.650    |          |          |          |
| 4.3. A possible reason for me to not buy sustainable fashion is that I have the intentions to buy sustainable clothing, but that it is not prevalent enough where I can buy sustainable clothing (in shops and online) |          | 0.516    |          |          |          |
| 4.1. A possible reason for me to not buy sustainable fashion is that I think I do not like sustainable fashion   |          |          | 0.833    |          |          |
| 4.2. A possible reason for me to not buy sustainable fashion is that I think my friends will not like it   |          |          | 0.826    |          |          |
| 5.2. I would only buy sustainable fashion if I see other people (for example peers, friends, celebrities) buying/wearing it  |          |          | 0.497    | -0.440   |          |
| 2.1. I only care about myself liking my clothes  |          |          |          | 0.809    |          |
| 1.1. I buy clothing that I like myself, regardless of what others think or if it is sustainable  |          |          |          | 0.695    |          |
| 5.1. I would only buy sustainable fashion if it is cheaper than other clothing   |          |          | 0.316    |          | 0.773    |
| 5.2. I would only buy sustainable fashion if I know that it is better for the environment and work conditions of people  | 0.383    |          | -0.303   |          | 0.623    |
| <b>Percentage of Variance</b>  | 20.58%   | 17.05%   | 10.37%   | 10.04%   | 7.28%    |

Table 2. *Principal components rotated factor structure of the nine items about type of consumer*

| Item   | Loadings                      |          |          |        |
|--|-------------------------------|----------|----------|--------|
|  | Factor 1                      | Factor 2 | Factor 3 |        |
| 2.3. I care about the way my clothing is produced  | 0.926                         |          |          |        |
| 1.3. I prefer to buy clothing that is produced on a sustainable way  | 0.907                         |          |          |        |
| 3.3. My goal when buying clothing is that it caused the least pollution and bad working environments possible                    | 0.896                         |          |          |        |
| 2.2. I care about other people's opinions of my clothes  |                               | 0.792    |          |        |
| 1.2. I prefer to buy clothing that is liked by my peers  |                               | 0.792    |          |        |
| 3.2. My goal when buying clothing is that I go with the trends of fashion  |                               | 0.705    | 0.411    |        |
| 1.1. I buy clothing that I like myself, regardless of what others think or if it is sustainable                                  |                               |          | 0.780    |        |
| 2.1. I only care about myself liking my clothes  |                               | -0.355   | 0.684    |        |
| 3.1. My goal when buying clothing is that I express my identity, regardless of whether the clothing is a trend in fashion or not |                               |          | 0.356    |        |
|  | <b>Percentage of Variance</b> | 29.99%   | 21.65%   | 14.59% |

Table 3. *Principal components rotated factor structure of the nine items about type of consumer*

| Item   | Loadings                      |          |          |        |
|--|-------------------------------|----------|----------|--------|
|  | Factor 1                      | Factor 2 | Factor 3 |        |
| 1.3. I prefer to buy clothing that is produced on a sustainable way  | 0.885                         |          |          |        |
| 2.3. I care about the way my clothing is produced  | 0.879                         |          |          |        |
| 3.3. My goal when buying clothing is that it caused the least pollution and bad working environments possible                    | 0.863                         |          |          |        |
| 2.2. I care about other people's opinions of my clothes  |                               | 0.840    |          |        |
| 1.2. I prefer to buy clothing that is liked by my peers  |                               | 0.819    |          |        |
| 3.2. My goal when buying clothing is that I go with the trends of fashion  |                               | 0.683    |          |        |
| 3.1. My goal when buying clothing is that I express my identity, regardless of whether the clothing is a trend in fashion or not |                               |          | 0.720    |        |
| 2.1. I only care about myself liking my clothes  |                               | -0.308   | 0.698    |        |
| 1.1. I buy clothing that I like myself, regardless of what others think or if it is sustainable                                  | -0.421                        |          | 0.669    |        |
|  | <b>Percentage of Variance</b> | 29.93%   | 24.28%   | 14.54% |

Table 6. ANOVA Results and Descriptive Statistics for Willingness by Type of Consumer and Social Influence Technique

| Dependent variable: Willingness to buy sustainable fashion |          |      |        |          |          |
|--|----------|------|--------|----------|----------|
| Variable   | Mean     | SD   | n      |          |          |
| Self consumer  |          |      |        |          |          |
| Liking   | 5.57     | 2.08 | 70     |          |          |
| Social proof   | 5.73     | 2.30 | 62     |          |          |
| Consistency  | 6.70     | 1.98 | 61     |          |          |
| Total  | 5.98     | 2.17 | 193    |          |          |
| Social consumer  |          |      |        |          |          |
| Liking   | 6.10     | 1.89 | 21     |          |          |
| Social proof   | 6.42     | 1.51 | 12     |          |          |
| Consistency  | 6.00     | 1.57 | 22     |          |          |
| Total  | 6.13     | 1.67 | 55     |          |          |
| Sacrifice consumer   |          |      |        |          |          |
| Liking   | 7.17     | 1.69 | 35     |          |          |
| Social proof   | 7.47     | 1.93 | 43     |          |          |
| Consistency  | 7.12     | 1.92 | 43     |          |          |
| Total  | 7.26     | 1.85 | 121    |          |          |
| Total  |          |      |        |          |          |
| Liking   | 6.10     | 2.05 | 126    |          |          |
| Social proof   | 6.44     | 2.24 | 117    |          |          |
| Consistency  | 6.72     | 1.92 | 126    |          |          |
| Total  | 6.42     | 2.08 | 369    |          |          |
| Source   | SS       | df   | MS     | F        | $\eta^2$ |
| Type of consumer   | 119.630  | 2    | 59.815 | 15.261** | .078     |
| Social influence technique                                 | 5.919    | 2    | 2.960  | .755     | .004     |
| Type of consumer * Social influence technique              | 33.746   | 4    | 8.437  | 2.153    | .023     |
| Error  | 1410.984 | 360  | 3.919  |          |          |

Note:  $R^2 = .113$ , adj.  $R^2 = .093$ .

\*\*  $p < .01$

Table 7. ANOVA Comparisons of Mean Differences in Willingness by Type of Consumer

| Comparison           | Estimated Mean Difference | Standard Error of Difference | Bonferroni Adjusted 95% CI |
|----------------------|---------------------------|------------------------------|----------------------------|
| Self vs. Social      | -.170                     | .312                         | -.783, .443                |
| Self vs. Sacrifice   | -1.250**                  | .230                         | -1.703, -.797              |
| Social vs. Sacrifice | -1.080**                  | .331                         | -1.731, -.429              |

Note: Self = Self consumer, Social = Social consumer, and Sacrifice = Sacrifice consumer.

\*\*  $p < .01$ , where p-values are adjusted using the Bonferroni method.

Table 8. ANCOVA Results and Descriptive Statistics for Willingness by Type of Consumer and Social Influence Technique, adjusted for the covariate Product liking

| Dependent variable: Willingness to buy sustainable fashion |         |     |         |            |          |
|--|---------|-----|---------|------------|----------|
| Source   | SS      | df  | MS      | F          | $\eta^2$ |
| Type of consumer   | 32.857  | 2   | 16.428  | 6.592**    | .035     |
| Social influence technique                                 | 3.353   | 2   | 1.677   | .673       | .004     |
| Type of consumer * Social influence technique              | 17.781  | 4   | 4.445   | 1.784      | .019     |
| Product liking   | 516.299 | 1   | 516.299 | 207.169*** | .366     |
| Error  | 894.685 | 359 | 2.492   |            |          |

Note:  $R^2 = .437$ , adj.  $R^2 = .423$ .

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$

Table 9. ANCOVA Comparisons of Mean Differences in Willingness by Type of Consumer

| Comparison           | Estimated Mean Difference | Standard Error of Difference | Bonferroni Adjusted 95% CI |
|----------------------|---------------------------|------------------------------|----------------------------|
| Self vs. Social      | .383                      | .252                         | -.222, .988                |
| Self vs. Sacrifice   | -.507*                    | .191                         | -.966, -.048               |
| Social vs. Sacrifice | -.891**                   | .264                         | -1.526, -.255              |

Note: Self = Self consumer, Social = Social consumer, and Sacrifice = Sacrifice consumer.

\*  $p < .05$ , \*\*  $p < .01$ , where p-values are adjusted using the Bonferroni method.



Table 10. *One-Way ANOVA Means and Standard Deviations on the Measure of Knowledge and Lifestyle as a Function of Type of Consumer*

| Type of consumer   | <i>n</i> | Knowledge |           | Lifestyle |           |
|--------------------|----------|-----------|-----------|-----------|-----------|
|                    |          | <i>M</i>  | <i>SD</i> | <i>M</i>  | <i>SD</i> |
| Self consumer      | 193      | 3.36      | 1.355     | 51.85     | 17.56     |
| Social consumer    | 55       | 3.33      | 1.001     | 49.64     | 15.68     |
| Sacrifice consumer | 121      | 4.74      | 1.228     | 64.11     | 14.18     |
| Total              | 369      | 3.81      | 1.423     | 55.54     | 17.29     |

*Note.* The maximum score on *Knowledge* is 7 and on *Lifestyle* 100.

Table 11. *One-Way Analysis of Variance of Knowledge by Type of Consumer*

| Source         | <i>df</i> | <i>SS</i> | <i>MS</i> | <i>F</i> | <i>p</i> |
|----------------|-----------|-----------|-----------|----------|----------|
| Between groups | 2         | 157.840   | 78.920    | 49.166   | .000     |
| Within groups  | 366       | 587.499   | 1.605     |          |          |
| Total          | 368       | 745.339   |           |          |          |




Table 12. *One-Way Analysis of Variance of Lifestyle by Type of Consumer*

| Source         | <i>df</i> | <i>SS</i>  | <i>MS</i> | <i>F</i> | <i>p</i> |
|----------------|-----------|------------|-----------|----------|----------|
| Between groups | 2         | 13419.331  | 6709.665  | 25.408   | .000     |
| Within groups  | 366       | 96652.268  | 264.077   |          |          |
| Total          | 368       | 110071.599 |           |          |          |

**Appendix B: Pre-test survey**




Q1. On a scale of 1 to 7, how much do you agree with and/or identify yourself with the following statements?

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| I buy clothing that I like myself, regardless of what others think or if it is sustainable |  |
| I prefer to buy clothing that is liked by my peers   |  |
| I prefer to buy clothing that is produced on a sustainable way                             |  |




Q2. On a scale of 1 to 7, how much do you agree with and/or identify yourself with the following statements?

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| I only care about myself liking my clothes         |  |
| I care about other people's opinions of my clothes |  |
| I care about the way my clothing is produced       |  |




Q3. On a scale of 1 to 7, my goal when buying clothing is...

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|   |  |
|---|--|
| ... that I express my identity, regardless of whether the clothing is a trend in fashion or not |  |
| ... that I go with the trends of fashion  |  |
| ... that it caused the least pollution and bad working environments possible                    |  |

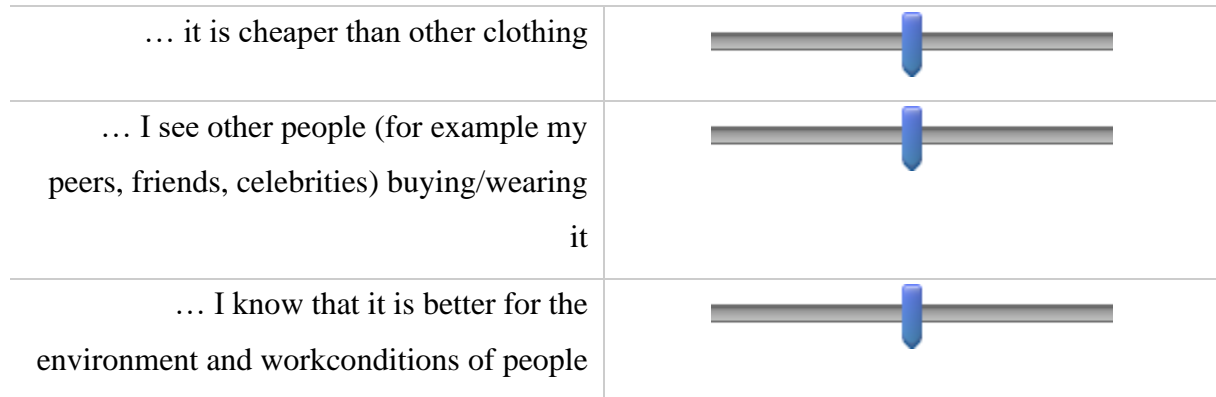
Q4. On a scale of 1 to 7, a possible reason for me to not buy sustainable fashion (and thus buy regular/fast fashion) is...

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| ... that I think I do not like sustainable fashion   |  |
| ... that I think my friends will not like it   |  |
| ... that I have the intentions to buy sustainable clothing, but that it is not prevalent enough where I can buy sustainable clothing (in shops and online) |  |

Q5. On a scale of 1 to 7, I would only buy sustainable fashion if...

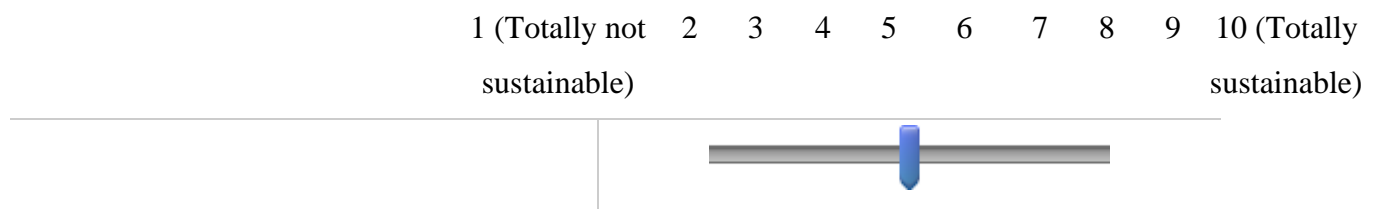
1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree



Q6. What, in your opinion, is sustainable fashion?

\_\_\_\_\_

Q7. How sustainable, on a scale of 1 to 10, do you live in general in your opinion?



Q8. When you go shopping to buy new clothing, what is the chance that you buy something sustainable? (on a scale of 0% to 100%)



Q9. What is your gender?

- Male (1)
- Female (2)
- Other (3)

Q10. What is your year of birth?

\_\_\_\_\_

Q11. What is the highest educational level that you have completed or are currently following?

- No education completed (1)
- Primary school (2)
- High school (3)
- Intermediate vocational education/associate degree (MBO) (4)
- Higher vocational education (HBO) (5)
- Bachelor (University) (6)
- Master (University) (7)
- Doctorate degree (8)

**Appendix C: Main experimental survey**

Q1. What is your gender?

- Male (1)
- Female (2)
- Other (3)

Q2. What is your age?

---

*Skip To: End of Survey If Condition: What is your age? Is Less Than 18. Skip To: End of Survey.*

*Skip To: End of Survey If Condition: What is your age? Is Greater Than 30. Skip To: End of Survey.*

Q3. What is the highest educational level that you have completed or are currently following?

- No education completed (1)
- Primary school (2)
- High school (3)
- Intermediate vocational education/associate degree (MBO) (4)
- Higher vocational education (HBO) (5)
- Bachelor (University) (6)
- Master (University) (7)
- Doctorate degree (8)

Q4. Where are you from?

▼ Afghanistan (1) ... Zimbabwe (1357)

When you go to the next page, an advertisement will be shown. Please read the text and look at the advertisement with attention. Only then you will contribute to my research.

*Randomize: Q6 or Q7 & Q8 or Q9.*

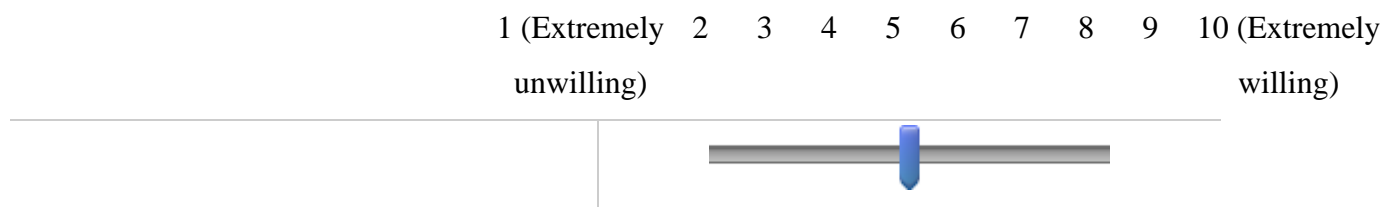
---



Nowadays, more and more young people like you are buying and wearing sustainable clothing. It is growing in popularity. Almost all of your peers have a piece of sustainable clothing in their closet.



Q6. On a scale of 1 to 10, how willing would you be to buy a piece of sustainable clothing, as shown in the advertisement above?



A lot of people in the world work in bad working conditions to produce clothing. They work a lot of hours without a break in an unsafe building.

Next to that, there is a lot of pollution in the world. The fashion industry is a major contributor to this pollution. Due to the fabric paint of the clothing, the amount of water needed to produce clothes and the microplastics in the clothing, many rivers are being polluted. And this is not the only way the fashion industry causes pollution.

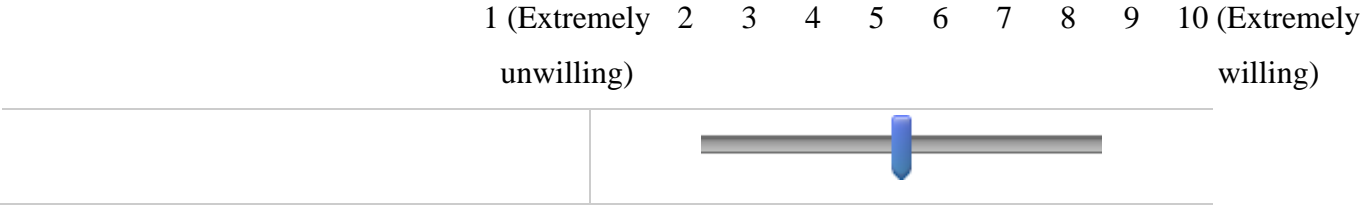
Q7. Do you think this should be changed?

- Yes (9)
- No (10)
- No opinion (11)

Help to improve working conditions and save our planet!  
Do something for the environment



Q8. On a scale of 1 to 10, how willing would you be to buy a piece of sustainable clothing, as shown in the advertisement above?



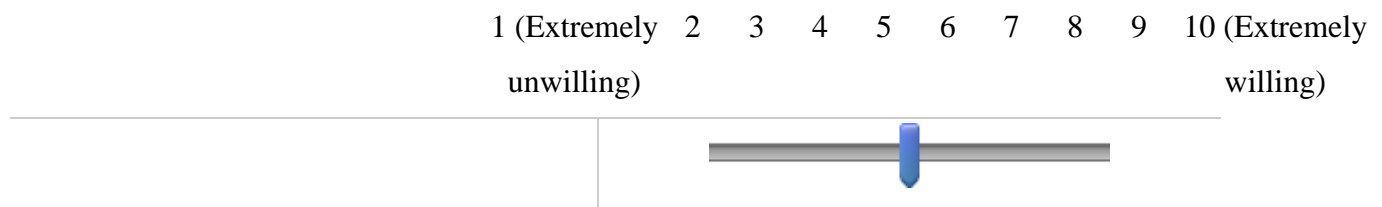
Sustainable fashion brands are known for their helpfulness towards customers and meet the needs of these customers. They have an average of 90% customer satisfaction. Together with the customer, these brands find clothing that fit the style and identity of the customer.

We are happy to help you find clothing that fits your style.

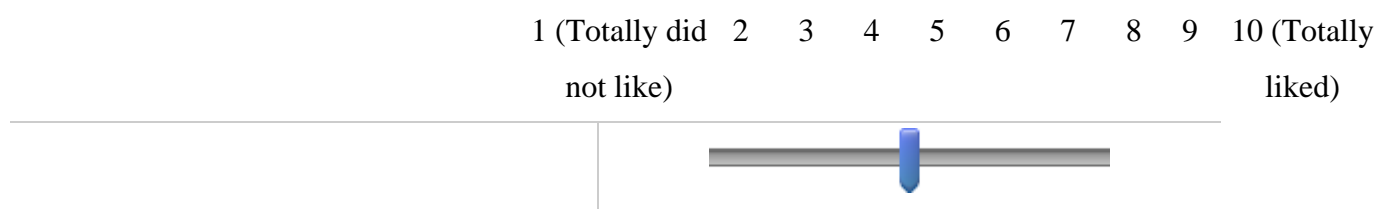
Send us a message and express your identity! 



Q9. On a scale of 1 to 10, how willing would you be to buy a piece of sustainable clothing, as shown in the advertisement above?






Q10. On a scale of 1 to 10, how much did you like the look of the clothing on the previous advertisement?






Q11. On a scale of 1 to 7, how much do you agree with and/or identify yourself with the following statements?

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| I buy clothing that I like myself, regardless of what others think or if it is sustainable |  |
| I prefer to buy clothing that is liked by my peers   |  |
| I prefer to buy clothing that is produced on a sustainable way                             |  |




Q12. On a scale of 1 to 7, how much do you agree with and/or identify yourself with the following statements?

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| I only care about myself liking my clothes         |  |
| I care about other people's opinions of my clothes |  |
| I care about the way my clothing is produced       |  |

Q13. On a scale of 1 to 7, my goal when buying clothing is...

1. Strongly disagree    2. Disagree    3. Somewhat disagree    4. Neither agree nor disagree    5. Somewhat agree    6. Agree    7. Strongly agree

|  |  |
|--|--|
| <p>... that I express my identity, regardless of whether the clothing is a trend in fashion or not</p> |  |
| <p>... that I go with the trends of fashion</p>  |  |
| <p>... that it caused the least pollution and bad working environments possible</p>                    |  |

Q14. What, in your opinion, is sustainable fashion?

---

Q15. How much do think you know about sustainable fashion?

- Far below average (26)
- Moderately below average (27)
- Slightly below average (28)
- Average (29)
- Slightly above average (30)
- Moderately above average (31)
- Far above average (32)

Q16. How sustainable do you live in general in your opinion? (on a scale of 0% to 100%)

0 (Totally not sustainable)    10    20    30    40    50    60    70    80    90    100 (Totally sustainable)



Q17. When you go shopping to buy new clothing, what is the chance that you buy something sustainable? (on a scale of 0% to 100%)

0    10    20    30    40    50    60    70    80    90    100

