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HOW AWARENESS LEVELS OF ENVIRONMENTAL AND ETHICAL RISKS AFFECT CONSUMER'S PERCEPTIONS OF FAST FASHION

By

Antonina Stragapede

A thesis submitted to the faculty of The University of Mississippi in partial fulfillment of the requirements of the Sally McDonnell Barksdale Honors College.

Oxford, MS May 2023

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ABSTRACT

ANTONINA STRAGAPEDE: How Awareness Levels of Environmental and Ethical Risks Affect Consumer's Perceptions of Fast Fashion

Under the direction of Dr. Laurie Babin

The fast fashion industry is known for its low prices, quick inventory, and its ability to keep up with runway styles. Yet, the amount of risk that comes along with their processes has been kept hidden. The lenient policies in international countries have given the fast fashion industry leverage to create tons of dangerous carbon emissions, as well as keep labor at an inhumane level. The point of our study was to try to create awareness of both ethical and environmental risks through a randomly distributed intervention. Participants were also encouraged to take part in our longitudinal study to determine if there would be an actual change in attitudes toward fast fashion with the factor of time. Another goal of this study was to investigate what factors drove participants to purchase fast fashion such as price, social media, or peers. Our last goal was to attempt to specify which kind of risk affected participants more for sustainable fashion companies to use in advertising.

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1. Introduction:

Fast fashion is an ongoing trend that is skyrocketing in worldwide clothing markets. The fast fashion business model is such a success because of its low prices and fast product rotations that encourage over-consumption. By the mid-1970s, many fashion brands began rapidly copying runway styles while producing garments at much lower costs (Tokalti, 2008). For example, a higher-end brand may only manufacture and put new items out once a month, but a well-known fast fashion company, like Shein, produces thousands of new products *daily*. Shein can churn out clothes so quickly due to almost their whole supply chain being based in the same areas of China. Nam (2003) refers to this as an "all-in-one" complex, most of whose core operations take place within a two-kilometer radius of its central area. This has led to short process times and unparalleled success. Shein does not have any regional warehouses or in-person stores which means that their assembly line, shipments, and any item down to the zippers are made in one place.

For consumers, fast fashion is so popular because it keeps up with trends quickly, the prices are obscenely cheap, and they can dispose of and get new clothes faster. Although, limited research has been done on their awareness of the dangerous risks of fast fashion

2. Literature Review:

2.1 Fast Fashion's Supply Chain:

The concept of fast fashion can be referred to as a strategic business plan. This type of strategy focuses on creating a fast-paced supply chain in order to produce merchandise that keeps up with customer demands (McNeil & Moore, 2015). Due to the current consumer fashion trends of offering a variety of product assortment, the complexity of the supply chain and short productlife cycles have drastically increased (Barnes & Lea-Greenwood, 2006). Fast fashion supply chains have a core focus to cater to customer demands for new merchandise while also maintaining short lead times in production and logistics. Weinswig (2017) claims that fast fashion manufacturers can bring products from design to sale in as little as a few days, focusing on responding to consumers' demands for immediacy and fashionable innovation. These companies make this possible by keeping an "agile" supply chain, meaning it can quickly respond to changes or mistakes through highly analyzed data and seamless communication. An agile supply chain is also related to product variability and the ability to adapt to market changes quickly. Fast fashion supply chains also tend to overproduce their clothing as a result of demand uncertainty. Because mass production in fast fashion greatly benefits economies of scale, these companies prefer to overproduce rather than stock out as this increases the results of customer satisfaction.

Even though this supply chain strategy sounds appealing for businesses' profit, it is widely complex and comes with a lot of risks. Variations in demand for products such as clothing are rapidly changing due to high consumer expectations. This creates an unpredictable market while also setting up the company's products to be perishable. The perishability of products leads them to have a short-product life cycle. A short product life cycle requires high levels of managerial ability as well as an investment of a massive amount of resources only for the product to eventually decline. With globally wide and complex production lines, as well as the pressures of cost and lead time, the execution of sustainability in textile supply chains is challenging. The fast-paced rotation of turning raw materials into finished clothing has significant negative environmental and social impacts. LoMonaco-Benzing & Ha-Brookshire supports how incorporating sustainability in the supply chain is a value-added process. Their research examined the personal and corporate moral values of textile supply chains through interviews and observations of supply chain executives. The reason fast fashion supply chains are unsustainable is that supply chain leaders do not value the importance of social responsibility. Another study found how the adoption of an environmentally managed system in Chinese firms affected the performance in profits, sales, and operational efficiency. Li & Wu (2017) analyzed 22 events and protocols of the new EMS (environmentally managed system), which resulted in a decline in all 3 aspects of efficiency. With the prioritization of reducing the buying cycle and lead time processes for delivering new fashionable products, fast fashion's supply chains are strictly focused on satisfying present customer demand in order to improve financial performance.

2.2 Environmental Risks:

In China, according to the World Bank, 17 to 20 percent of industrial water pollution comes from textile dyeing and treatment (WBO 2019). The fashion industry is currently responsible for more annual carbon emissions than all international flights and maritime shipping combined (Le, 2020). The fabrics in fast fashion clothing are mostly made up of nylon, acrylic, and elestable. Yet, according to the Textile Exchange's 2019 Preferred Fibers & Materials Report, polyester is the most widely used synthetic fiber and is now found in over half of all textile products. The production of polyester is particularly harmful since it uses petroleum and is not biodegradable. Polyester is produced from polyethylene terephthalate, (PET) which is a type of plastic derived from crude oil and natural gas, also used to make items such as plastic water bottles (Atiwesh et al., 2021). According to the World Bank Organization, the massive amount of plastic in clothing means that the textile sector accounts for 15% of total plastic use. Every year the textile sector requires 93 billion cubic meters of water, which is enough to meet the consumption needs of five million people and is responsible for around 20% of industrial water pollution as a result of garment treatment and dying. (CWR, April 2011). The fast fashion industry has left a heavy carbon mark for up to 10% of total global carbon emissions and is estimated to increase by 50% by 2030 (WBO, April 2019).

2.3 Ethical Risks

Not only are fast fashion brands environmentally concerning, but they are also ethically unsuitable. For one thing, China has adopted a similar low-cost outsourcing model, meaning that an item labeled as "Made in China" could be manufactured elsewhere in Asia before being sent to China for final assembly and shipping to customers (Garagon, 2021). Due to lenient environmental and social laws in China, local enforcement has rampant corruption. This means Chinese clothing manufacturers can pollute at their free will and pay small violation fees compared to their profit. As for laborers, the abundant labor force that previously lived below the poverty line is willing to work for the cheapest hourly rate. This shows how China can produce clothing at such low prices due to the cultural differences in the environment and livable wages (CWR, 2011). Cultural difference is known as one of the main challenges in global supply chains.

Figure 1

How Much Does a Bangladesh Worker make on a \$30 Priced Shirt?



BREAKDOWN OF COSTS OF A T-SHIRT

Note: Based on costs in European market in 2020. This figure shows that the factory takes 4% as profit, (USD 1.24), which leaves only .06% of profit for a Bangladeshi worker totaling around 18 euro cents (\$1.80 USD). But, the retailer will take 59% (USD 18.35). From "Poverty Wages" by Clean Clothes Campaign, n.d. (https://cleanclothes.org/poverty-wages). CC BY-ND.

2.4 Consumer Awareness of Fast Fashion Risks:

The lack of education is the first problem of fast fashion. According to a recent survey, 58 percent of women aged 16 to 24 don't know what "fast fashion" even means (Henniger et al., 2019). This shows how limited the knowledge of what consumers know about the outcomes of purchasing fast fashion. 29% of those respondents refer to fast-fashion clothing as clothes that can be purchased "more conveniently," rather than knowing the true reason how fast-fashion gets its name, which is from their dangerous cycle of supply chains.

Through the Theory of Planned Behavior, researchers found that Gen Y's attributes, intentions, and behaviors towards recycling clothing found that favorable sustainable consumption leads to actual behavioral responses. In other words, the more eco-conscious they are in everyday life, the less likely they are to purchase fast fashion products (Cesarina et al., 2020). As mentioned earlier, the only focus of fast fashion supply chains is meeting customer demand. With awareness of the irreversible risks the fast fashion companies take, customers may decrease their want for fast clothing and look for more sustainable options.





Note: Panel (a) is the price consumption curve and Panel (b) is the supply-demand curve. In context, as more people are aware of environmental issues in fast fashion, consumers tend to prefer natural fabrics in clothing which leads to the fast fashion demand curve to shift out. On the other hand, natural clothing fabrics tend to be more expensive than fast fashion which leads the supply curve for sustainable products to shift up. As a result, these two lines cancel each other out which leads to two possible outcomes depending on which side dominates (Zhang et., al 2021).

Based on the economic theory of consumer behavior and the graph above, as more consumers are aware of environmental issues and the importance of sustainability in supply chains, consumers are drawn to more sustainable and durable fashion products rather than nonbiodegradable clothing. The demand curve for eco-friendly clothes shifts out.

On the other hand, most eco-friendly materials are more expensive, so a higher price may dissuade customers from purchasing clothes with sustainabilitry features. As a result, the supply curve for eco-friendly clothes shifts up. These two forces are opposite and cancel each other out. This reflects the contradictory behavior of consumers who refer to themselves as conscious consumers but are unwilling to pay the higher price for sustainable clothing (Zhang et al., 2021).

A UK study researched knowledge of sustainability issues in fast fashion brands by curating 20 questions in the categories of social equity, child labor, and environmental issues. Among 128 participants (between 18-27 years old), approximately 5% of them had any knowledge in total. Females were more prone to know about environmental and child labor issues, while men were more prone to know more about social equity (Zhang et al., 2021).

In a current study, Gomes de Oliveria et al., (2022), examines the perceptions of consumers who are loyal to the concept of slow fashion. For reference, fast fashion can be considered as a poorly constructed item that may diminish its physical ability, causing the consumer to dispose of it. When it comes to businesses that focus on slow fashion, they plan to have an eco-conscious core, with quality that will last for a long time. The study compared the opinions of consumers who perceive themselves as eco-friendly and willing to pay more for it, and those who are not. In summary, the study found that although slow fashion consumers are more satisfied with buying products derived from environmentally caring businesses when asked the survey question, they are not willing to pay more for the product.

According to Nunes et al. (2016), fast fashion consumers are motivated by emotional, cognitive, and social factors. In addition, Joy et al. (2015) found out that the possibility of having access to clothes that are very similar to luxury ones has led young people to consume fast fashion, even though they often share a concern for environmental and social issues. This is contradictory behavior between fast fashion and slow fashion consumers. The study suggested that companies need to invest in the use of media, which can be the most effective way to communicate their practices to attract more eco-conscious consumers (Gomes de Oliveria et al., 2022). Following this, another study investigated how college students' exposure to recycling/reusing information through various sources, such as education, media, and interpersonal communication, can affect their attitudes, intention, and behavior towards such. The results showed that obtaining recycling information through *media* sources led college students to have a positive attitude toward their recycling/reuse intention and behavior (Noh, 2021).

Gen Z & Y are very adapted to expecting quickness in everything. They have grown to desire efficiency and ease in the products they are buying, which fast fashion checks all the boxes for. Gen Z & Y's main fashion focus is to keep up with quick trends that they see through social media, the internet, and their peers. Unfortunately, fast Fashion companies are the only ones that can keep up with the ever-going clothing trends. On the other hand, Gen Z & Y are our only hope for change. With the right education that will pique their interest, their behaviors and intentions toward fast fashion have the potential to shift.

3. Research Questions:

Research questions were developed by recognizing the lack of awareness of fast fashion, especially in those who purchase fast fashion the most. By studying consumers' knowledge and

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attitudes towards the risks of fast fashion, we will try to find which kind of issue sticks out to consumers more: environmental or ethical. This will support existing studies' recommendations by finding which type of issue will connect with consumers more for businesses to attract an ecoconscious consumer. Not only will our research try to examine the increase in awareness, but we are curious if this information will stick with participants after they partake in our research. Based on our Time 1 vs. Time 2 study, we will try to see if there is a true change in purchase behavior and perceptions. To keep respondents' answers fair, we will randomly give out written media posts explaining two kinds of issues. Media posts were found to keep people ages 18-22 more interested than any other kind of communication service. One-third of media posts will be about environmental risks in fast fashion, the other would be about ethical risks in fast fashion and the last group will have no media post at all to keep this study controlled. These media posts will be offered to read before answering any questions in the survey.

- 1. Will the overall knowledge of fast fashion risks affect consumers' behavior toward purchasing it?
- 2. What are the main factors that cause consumers to purchase fast fashion?
- 3. Will the type of fast fashion risks (ethical or environmental) affect one consumer more than the other?
- 4. After taking the first survey, will participants show an actual change in their behavior or perceptions of fast fashion in the second survey?

4. Methodology:

A survey study was conducted online through SONA Systems which is run by the Department of Marketing at the University of Mississippi. Participants received their intervention in the format of a fictional media post that was either subjected to the environmental or ethical risks of fast fashion and was only exposed to one of the two. This study was a longitudinal study that has two waves of measurement. Fictional media posts were used to see if this affected participants' answers compared to our Time 1 study in which no intervention was given. Participants took one survey in the first week of February 2023, which acted as our Time 1 section. Time 1 collected items such as awareness of fast fashion, awareness of fast fashion risks, purchase behavior of fast fashion, and personal attitudes toward purchasing fast fashion. Participants then took another one in the third week of February 2023, which acted as our Time 2 section. In Time 2, participants were randomly exposed to one out of two interventions that they were encouraged to read before taking the survey. The survey collected the same items concerning attitudes, feelings, and purchase behavior in order to see if participants' responses changed or remained the same. Time 2 also asked if participants are willing or already have purchased a sustainable alternative to fast fashion. To keep our study controlled, the same questions based on personal attitudes were placed in both Time 1 and Time 2 to see if our interventions changed participants' responses.

5. Participants:

Since our study's data was collected from a university-run website, participants must be the University of Mississippi students with ranging age from 18-26. Time 1 had 71 participants with a mean age of 21.16, 77% of whom were females, 23% were male, 62.5% were senior classification and 50% were currently employed while in school. Time 2 had 76 participants and a mean age of 21.3, 74% were females, 26% were male, 63% were classified as seniors and 50% were employed while in school as well. Participants were encouraged to take our survey by being rewarded with extra credit towards their final grade in the course that our surveys were offered. Because this is a longitudinal study, we needed to assure that the same respondents were

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participating in Time 1 as well as Time 2 in order to find a true difference in attitude or not. In this case, participants were asked to give the last four digits of their phone numbers and were reassured that after we had matched their digits to their names in both studies, that data would be erased and not used any further.

6. Procedure:

Once respondents agreed to participate in our surveys, respondents were asked different kinds of questions in two different surveys. The first survey had no exposure to any intervention and was divided up into 5 parts. First, participants responded to questions that asked about general demographics about themselves. The first question in section one was a ratio-based question that stated, "The concept of fast fashion, to me, means:" From then on, the survey was based on a Likert scale labeled 0-9 (0 = not at all aware, 9 = highly aware). Section 1 continued to ask about prior knowledge, if any, of fast fashion and the risks that come with it. These items measured awareness of both aspects of fast fashion risks, such as environmental and ethical, based on Zhang, Zhang, and Zou (2021). Section 2 asked about a history of purchasing fast fashion, such as, "I have purchased from a fast fashion company before." If participants had purchased fast fashion before, they were able to move forward in the survey of section 3. Section 3 asked for their reasonings behind purchasing, such as price, social media, family, or friends which were also based on Zhang, Zhang, and Zou (2021), such as "Social media affects my purchasing decisions towards fast fashion products." Sections 1-3 were asked first so participants were not immediately primed to the topic of our study. Finally, participants were asked the same questions that also took place in Time 2. This measured personal attitudes and feelings toward purchasing fast fashion, as well as attitudes and feelings toward sustainable clothing and practices. Both items were based on Zhang, Zhang, and Zhou (2021) as well as Oliveira,

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Miranda, and Dias (2022). The questions that measured attitudes and feelings toward fast fashion such as "I feel guilty when I purchase fast fashion" were based on a Likert scale labeled 0-9 (0=highly disagree, 9=highly agree). The questions that measured attitudes and feelings toward sustainable clothing and practices such as "I feel honored if I chose an eco-friendly fashion product/brand." were based on a Likert scale labeled 0-9 (0=highly disagree, 9=highly agree).

In two weeks, time, the same participants were asked to take a second survey. Before the second survey was given, participants were randomly exposed to one of two fictional media posts (see Figure 3). These interventions were either environmentally-based or ethically based. Participants saw either one of the two posts given. Each post had real statistics pulled from Aitwish (2021), China Water Risk Organization (2011), & World Bank Organization (2019) as well as a picture attached. Some of the questions that were shown in Time 1 such as, "I believe that organizations should have mandatory environmental care practices" or "I believe that organizations should have mandatory ethical care practices" were used to see if responses were more extreme toward one risk than another based on the topic of the intervention given (environmental or ethical). To see if there was an actual behavior change since Time 1, questions that measured future purchases of fast fashion such as, "How likely is it, in the near future, that you will purchase fast fashion products?" were used. Questions in Time 2, such as "I will, or already made an effort to buy sustainable clothing" also measured if participants showed future behavior of purchasing sustainable clothing as an alternative to fast fashion.

Ethical-Based Intervention



Even though fast fashion is quick to keep up with trends and is very affordable, the leniency of manufacturing laws for fast fashion businesses allows them to pay their workers close to nothing.

Dana Thomas, an author of "Fashionolpolis: The Price of Fast Fashion & Future of Clothes" shares her story with The New York Times about her trip to Bangladesh and interviewed two survivors of a textile factory in Bangladesh when 1100 people died in Rana Plaza in 2013. Between 2006 and 2012, more than 500 garment workers died in factory fires. Bangladesh factories make 4% profit for \$30, and the workers only make .06% of that, which is equivalent to 18 cents for every t-shirt made.

Even though consumers themselves cannot stop the evil tactics of fast fashion assembly lines, they can focus on being socially conscious the next time they purchase.





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Environmental-Based Intervention



Even though fast fashion is quick to keep up with trends and is very affordable, the fast fashion industry is currently responsible for more annual carbon emissions than all international flights and maritime shipping combined (Le, 2020).

...

According to the World Bank Organization, the massive amount of plastic in clothing means that the textile sector accounts for 15% of total plastic use. Every year the textile sector requires 93 billion cubic meters of water, which is enough to meet the consumption needs of five million people. As for textiles wastes that are discarded, 85% of it will go to landfill and will not be biodegradable.

Every time a consumer throws out a bag of clothes, most of the synthetic fibers will not degrade in landfill which contributes to the global emission of methane, a potent, heat- trapping gas that can potentially spread around the world. Unfortunately, the profit margins for fast fashion businesses are too good to give up, and it is up to consumers to be socially responsible.



7. Results

7.1 Time 1 Results

The first objective we wanted to explore is what word came to mind when asked what fast fashion meant to consumers. We grouped our findings into categories such as cheap, trends, location, or negative words. Twenty out of seventy participants related fast fashion as cheap, 6 out of 70 related fast fashion to a company, 14 related fast fashion to the word trend, and 7 related fast fashion to negative words such as harmful or unsustainable. Another objective we wanted to explore is who was purchasing fast fashion and/or sustainable fashion. When asked if they have purchased fast fashion in the past, 83.6% of participants reported yes, and 15.1% reported no. Next, we determined who has or has not purchased fast fashion by testing the relationship of gender. 94.6% of participants that were women reported that they have bought fast fashion. 46.6% of men have reported that they have purchased fast fashion before. This concludes that the women in our sample have purchased fast fashion more than men. ($\chi 2 =$ 21.221, p<.05). Women also reported having purchased fast fashion more often than men (MEN=3.43, WOMEN=5.32, t=-2.03, p<.05). When asked if they have purchased sustainable fashion in the past, 91.8% reported yes, and 6.8% reported no. Next, we determined who has or has not purchased sustainable fashion by testing the relationship of gender. There was no significant difference between men and women and their history of purchasing sustainable fashion ($\chi 2 = 1.535$, p=.464). We then wanted to determine who reported to have or have not purchased fast fashion by testing the relationship of employment. There was no significant difference between employment and history of purchasing fast fashion ($\chi 2 = .001$, p=.978). We also wanted to determine who reported to have or have not purchased sustainable fashion by

testing the relationship of employment. There was no significant difference between employment and history of purchasing sustainable fashion ($\chi 2 = 1.444$, p=.229).

The next objective we wanted to explore in Time 1 was what factors lead participants to purchase fast fashion or sustainable fashion. Participants reported they are unlikely to purchase fast fashion because their friends do (m=3.74, t=3.113, p<.05). There was no significance between participants who purchase fast fashion to keep up with trends (m=4.74, t=-.827, p>.05). Participants reported they are likely to purchase fast fashion because of social media (m=5.93, t=3.13, p<.05). They also reported they are likely to purchase sustainable fashion because of social media (m=5.78, t=3.069, p<.05). Participants reported that family is unlikely to influence their purchase of fast fashion (m=3.49, t=-4.968, p<.05). There was no significance between participants and if their family influenced their purchase of sustainable fashion (m=4.94, t=-.215, p>.05). Participants reported that they are likely to purchase fast fashion because it is cheap (m=7.13, t=29.29, p<.05).

The last objective we wanted to explore was their initial awareness of fast fashion effects before any intervention was given. Participants claimed to be aware of environmental issues (m=6.81, t=28.217, p=<.05). Participants also claimed to be aware of ethical issues (m=6.96, t=31.793, p<.05). There was no significant difference between the awareness of ethical or environmental risks (ENVIRONMENTAL=6.81, ETHICAL=6.96 t=-1.418, p>.05).

7.2 Time 1 vs. Time 2 Results

We used a repeated measure analysis of variance. Time (two levels) was the withinsubject factor, and our fictional social media appeal was the between-subjects factor. There was a total of 41 participants who equally participated in both Time 1 and Time 2 surveys based on their matching the last four digits of their phone numbers. Our objective was to try to determine if one condition affected the participant more than the other as well as if the effect of time changed the participant's answers significantly. When asked if participants felt guilty after they purchase fast fashion, there was no significant effect of time, meaning the feelings of guilt did not change collapsed across the appeal condition (F (1,33) = .619, p=.437). There was also no significant interaction of time and appeal (F (1,33) = 1.489, p=.231). When asked if participants felt angry toward unethical protocols, there was no significant effect of time, meaning the feelings of anger did not change collapsed across the appeal condition (F (1,41) = .631, p=.432). There was also no significant interaction of time and appeal (F (1,41) = 2.381, p=.130). When asked if participants felt disgusted about waste, there was no significant difference in time and appeal meaning the feeling of disgust did not change collapsed across appeal condition (F (1,41)) =.203, p=.655). There was also no significant interaction of time and appeal (F = (1,41) = 2.594, p=.115). When participants were asked if they felt honored to choose an eco-friendly fashion product, there was no significant effect of time, meaning the feelings of honor did not change collapsed across appeal condition (F (1,41) = .002, p=.964). There was also no significant interaction of time and appeal (F (1,41) = .433, p=.514). When asked if participants felt interested in a fashion brand that engages in sustainable fashion, there was no significant effect of time, meaning the feelings of interest did not change collapsed across the appeal condition (F (1,41)) =.037, p=.849). There was also no significant interaction of time and appeal (F (1,41) = .088, p=.768). When asked if participants believed that organizations should have mandatory environmental care practices, there was no significant effect of time, meaning their beliefs did not change collapsed across appeal condition (F (1,41) = .05, p=.825). There was also no significant interaction of time and appeal (F (1,41) = .195, p=.662). When asked if participants believed that organizations should have mandatory ethical care practices, there was no

significant effect of time, meaning the feelings of belief did not change collapsed across the appeal condition (F (1,41) =.124, p=.727). There was also no significant interaction of time and appeal (F (1,41) = .734, p=.397). When asked if participants consider themselves responsible consumers with the environmental issue in mind, there was no significant effect of time (F (1,41)=.941,p=.337). There was also no significant interaction of time and appeal (F (1,41)=.317, p=.576). When asked if participants consider themselves responsible consumers with the ethical issue in mind, there was no significant effect of time (F (1,41)=.576). When asked if participants consider themselves responsible consumers with the ethical

In conclusion to our Time 1 vs. Time 2 results, there was no significance in any of our tests. Even though the differences were not significant, the pattern of results shows that our ethical-based condition affected participants' responses more than the environmental condition. For example, Figure 5 shows the results of the question pertaining to guilt after purchasing fast fashion. The blue bars show participants who saw the ethical-based condition in Time 2, and the red bars show participants who saw the environmental condition in Time 2. Even though not significant, it does show a clear increase in guilt in Time 1 vs Time 2 for the ethical condition.

An initial research question was to determine if one type of risk would affect participants' answers more than another. In our survey, we asked questions about feelings about both ethical and environmental risks, yet it seems that the pattern of results showed that the ethical condition affected participants' answers no matter what the topic of the question was. For example, Figure 6 shows the results of the question pertaining to feelings of anger towards unethical protocols. Even though not significant, the pattern shows a clear increase in anger among those who were shown condition 1, which was the ethical one. Yet, Figure 7 shows the results of the question pertaining to the disgust of excessive waste and still shows a clear increase in only the ones who saw condition 1. Another pattern to mention was the fact that participants considered themselves

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more eco-conscious consumers, no matter what condition was given. As shown in Figure 8, a clear increase is shown in both conditions for Time 2.

Figure 5

Estimated Marginal Means of Guilt



Estimated Marginal Means of Anger



Estimated Marginal Means of Disgust



Estimated Marginal Means of Responsible Consumers





7.3 Time 2 Results

Our Time 2 survey asked questions that were not asked in Time 1 in order to measure their likeliness of future purchases as well as if their condition had any effect on it. Participants reported they are likely to purchase fast fashion in the future (m=6.29, t=5.891, p<.05). Participants also reported they are likely to be willing to pay extra for sustainable fashion (m=6.77, t=9.003, p<.05). Students also reported that they are likely to try to purchase sustainable fashion (m=5.44, t=2.106, p<.05).

Next, we wanted to determine if these responses differed between the two conditions. Condition 1 is our ethical-based media post and Condition 2 is our environmental-based media post. There was no significant difference between participants' likeliness to purchase fast fashion in the future and their given condition (M1=6.47, M2=6.13, t=.791, p=.431). There was no significant difference between participants' likeliness to purchase sustainable fashion in the near future (m=5.47, M2= 5.40, t=.177, p=.860). There was also no significant difference between their willingness to pay extra for sustainable products and the condition given (M1=6.84, M2=6.73, t=.294, p=.770).

8. Conclusions:

In conclusion to our Time 1 results and our initial research questions, there were a lot of significant results pertaining to initial awareness as well as factors of purchase. Participants are most likely to purchase fast fashion due to social media. Their family and friends are the least likely to influence their purchase behavior. More participants have reported that they purchase sustainable fashion over fast fashion by 8.2%. Participants reported that they are aware of both ethical and environmental fast fashion risks separately, but when compared together there was no significant difference in which one had more awareness. Even though it was not significant, the pattern of results shows that participants are aware of environmental risks more than ethical ones. In conclusion to our Time 1 vs. Time 2 results, there was no significance in any of our tests. Even though the differences were not significant, the pattern of results shows that our ethical-based condition affected participants' responses more than the environmental condition. For example, Figure 5 shows the results of the question pertaining to guilt after purchasing fast fashion. The blue bars show participants who saw the ethical-based condition in Time 2, and the red bars show participants who saw the environmental condition in Time 2. Even though not significant, it does show a clear increase in guilt in Time 1 vs Time 2 for the ethical condition.

An initial research question was to determine if one type of risk would affect participants' answers more than another. In our survey, we asked questions about feelings about both ethical and environmental risks, yet it seems that the pattern of results showed that the ethical condition affected participants' answers no matter what the topic of the question was. For example, Figure 6 shows the results of the question pertaining to feelings of anger towards unethical protocols. Even though not significant, the pattern shows a clear increase in anger among those who were shown condition 1, which was the ethical one. Yet, Figure 7 shows the results of the question pertaining to the disgust of excessive waste and still shows a clear increase in only the ones who saw condition 1. Another pattern to mention was the fact that participants considered themselves more eco-conscious consumers, no matter what condition was given. As shown in Figure 8, a clear increase is shown in both conditions for Time 2.

Our Time 2 results showed significant differences in their willingness to pay extra for sustainable fashion as well as try to purchase from sustainable brands. On the contrary, participants also reported that they are still likely to purchase fast fashion in the future.

9. Limitations:

There were many limitations in our study due to the low number of participants in Time 1 and Time 2, which made the sample size even smaller for those who took both Time 1 and Time 2. If we had a bigger pool of those who took Time 1 and Time 2, we would have a greater chance of participants who took both surveys in order to potentially see a bigger change of behavior with the factor of time. Our survey also consisted of more than 70% females in both Time 1 and Time 2. Although this may be representative of fast fashion consumers nationally, we did not have enough male participants to determine that. Another big limitation was the fact that participants seemed to have reacted poorly to our condition 2, which was the environmentally based media

post. Even though our results were not significant, the pattern shows a clear decrease in answers after the condition was given. Our interpretation of this was that participants were more reactive to condition 1 because there were human figures in the media post, and condition 2 just showed a picture of a landfill with no human action.

10. Future Recommendations:

For future research, we recommend using a larger sample size in Time 1 and Time 2 as well as emphasizing getting more matches of participants to have a better comparison of Time 1 vs Time 2 responses. We also recommend creating a different condition 2 with human action relating to environmental risk in order to have equal effects for conditions 1 and 2. As for managerial recommendations, corporations should implement and report environmental impact reports at the end of each quarter such as an EIS (Environmental Impact Statement). This will hold companies accountable for their corporate social responsibilities such as contributing to sustainable manufacturing or committing to sourcing their materials from suppliers that treat their workers well. These reports should also be public for consumers to increase awareness of the corporation's social impacts.

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