

College Students' Awareness, Attitudes, and Buying Behaviors Involving Sustainable
Methods in the Textile Industry

By:

Meena Swaminathan

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By:

Meena Swaminathan

APPROVED:

Dr. DeAnna Kempf
Department of Marketing

Dr. Vince Smith
Department of Marketing

Dr. Jasmin Kwon Vu
Department of Human Sciences

Dr. Philip E. Phillips, Associate Dean
University Honors College

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Abstract

This thesis explores college students' awareness, attitudes, and buying behaviors involving sustainable clothing due to the increasing concern with climate change and resource depletion. For this project, we surveyed undergraduate college students regarding their awareness of eco-friendly clothing, their attitudes towards sustainable initiatives, and their interest in purchasing sustainably-produced clothing given certain variables (e.g., price, quality, brand, etc.). We also measured the level of environmental concern among college students and how strong the correlation is between consumers' eco-friendly attitudes and their willingness to pay a price premium for sustainable textiles (their buying behaviors). On average, respondents care about the environment, but they feel they are not aware of sustainable production methods that go into making textiles. There was a significant positive correlation between organic food and organic clothing consumption as well as a significant positive correlation between college students' care for the environment and their willingness to pay a higher price. We also found that there is a higher favorability among college students towards sustainability than there is willingness to pay a premium. With this information, our goal is to help marketing executives and companies understand consumers' attitudes and their likely reactions to sustainable initiatives in a marketing context.

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Introduction

In the modern world, the topic of taking care of the environment and reducing toxic waste has been a recurring theme due to the “resource depletion, environment destruction and global warming, worsening the environment issues we face today” (Na and Dong, 2015). With natural resources being depleted at an accelerated pace, many companies do a cost-benefit analysis to decide whether sustainability initiatives are worthwhile to fund and practice. According to a paper published by the European Commission titled “Green Stimulus Measures,” at the end of 2009, approximately 16.3 % or \$ 521 billion of all fiscal measures were allocated to green stimulus programs, i.e. policies seeking to reduce CO emissions. Green policies, such as The Paris Agreement (2015), have been put in place by the United Nations to aid the efforts to protect and sustain our environment (“UNITED NATIONS Climate Change - Summit 2019”). These concerns have led to sustainable initiatives in an industry most people have not thought much about: the textile industry.

In recent years, clothing manufacturers and other businesses in the textile industry have started to take a more sustainable approach to the way that clothing is made. H&M, a Swedish fast-fashion company known for mixing quality and fashion in an affordable way, has “constructed its sustainable supply chain in developing eco-materials, providing safety training, monitoring sustainable manufacturing, reducing carbon emissions in distribution, and promoting eco-fashion” (Shen, 2014). Another retailer that has implemented sustainable initiatives is Nike. Nike has been known to incorporate green initiatives, and they also have a sustainable products line that is made using recycled polyester. The company also strives to use renewable energy sources (“9 Companies With Great Sustainable Initiatives”).

Many department stores have also implemented green options. For instance, Kohl's recently sent out customer surveys regarding sustainability in their products (specifically, clothing) and asked customers to express their attitudes towards sustainability and whether or not they would be interested in purchasing organic clothing at Kohl's. Their survey asks questions regarding the customer's familiarity with clothing that is organic, low impact, waterless, low carbon facility, recycled polyester, hemp, and air washed. Other survey questions ask to what degree a customer would be willing to buy a piece of clothing from Kohl's if they implemented sustainable initiatives and if that person has bought sustainable/organic clothes before. These questions that Kohl's asked in their survey will likely be used to determine whether it is worth selling clothes that are environment-friendly.

Background Literature

Several studies have been published on consumers' perceptions of sustainability in the textile industry. One such study, by Hustvedt and Dickson (2009), investigated consumer attitudes towards buying organic cotton clothing, the effects of consumer perceptions on self-identity and its influence on attitudes towards sustainable clothing. They study the effects of environmental concern on consumer attitudes towards sustainable clothing, which is usually defined as the degree to which people are aware and show concern for the environment as well as supporting initiatives to solve these problems as a society or individually (Hustvedt and Dickson, 2009). They found that many of their respondents are more motivated by how they feel the benefits will impact them rather than how their input will positively impact the environment. In general, there is more research involving perceptions towards organic food than there is on organic or sustainably produced clothing. Considering the relevance of sustainability in the modern world, we felt that

there needed to be more research done on organic clothing consumers since this is a relatively new topic.

Another study conducted by Kang, Liu, and Kim in 2013, found that college students' product knowledge, perceptions of personal relevance, and effectiveness of the product greatly affected their attitudes and willingness to pay for sustainable apparel. Consumers' products knowledge has to do with how aware they are of sustainable products and their level of environmental concern as a result of that knowledge. Previous researchers have found that those who purchase clothing with concern for the environment feel that they are contributing to solving environmental problems compared to those who are less knowledgeable on the subject (Kang, J., Liu, C., Kim, S., 2013). Perceptions of personal relevance refers to how a consumer can integrate a new object or behavior into his/her lifestyle, values, and self-image. Not surprisingly, when a consumer finds that an issue is relevant to their lifestyle and beliefs, they become more involved with that issue. Consumer perceptions on product effectiveness also greatly impacts consumers' reactions towards sustainable clothing, because if consumers feel that their purchases have the potential to reduce waste in the environment, they will become more socially-conscious of their purchases.

A similar study by Ellis, McCracken, and Skuza in 2012 that explored consumer beliefs about organic clothing with regards to willingness to pay for sustainable textiles found that predictors of willingness to pay included previous organic foods purchases and perceived product quality. They also found that consumers who consider environmental issues when making purchase decisions do so based on product qualities; they also found that price is less of a concern for these individuals (Ellis, McCracken, and Skuza, 2012). A related study by Hustvedt and Bernard in 2008 examined the consumer willingness to pay regarding organic fiber. The main

attributes included fiber origin, fiber type, and the production method, and the study investigated consumer attitudes towards different organic fiber labels in clothing. The Texas-based study found that participants were willing to pay a premium for organic cotton socks that were produced in Texas as opposed to US- produced socks. Hustvedt and Bernard also found that fiber type and fiber origin mattered to consumers, with the greatest premium for organic socks being \$1.86. This shows that organic labelling is worth more to consumers and that further research and marketing is needed for retailers to sell organic products to US consumers who haven't purchased organically before (Hustvedt and Bernard, 2008).

From a social responsibility viewpoint, companies have tried to implement sustainable initiatives in their business model as well, so that their brand is easily recognizable as being socially concerned and ethical. This is further supported by an article called "9 Companies with Great Environmental Initiatives," because it is well- known that green initiatives "save on costs, reuse resources and meet compliance requirements, but they also help to create brand recognition among customers." By showing that the company cares about environmental approaches to their company's mission, customers can feel like the company has goals that go beyond the organization itself. The same article mentions that investing in Research and Development (R&D) efforts to support social change are focused on creating green products as well as the processes that go into making them. With all of these measures in place, it is safe to say that an environmentally-conscious mindset of the general public has become more common.

Retailers have also implemented sustainable measures, which is important because retailers act as gatekeepers between producers and consumers. Retailers are highly influential, because they "have various means of influencing social and environmental sustainability. For example, they can improve the sustainability of their products and processes, such as their transports, packaging, and

assortment” (Wiese, Zielke, and Toporowski, 2015). Because retailing companies have so much influence over critical business processes, they have the corporate social responsibility to behave in an ethical manner and to address their customers’ concerns about this issue.

In regards to sustainable products and brands that are mentioned in the same academic article, research on sustainability in retailing should focus on how green products enhance the retailer’s image, create customer loyalty, and increase interest in other market segments. The results of the research done by Wiese, Zielke, and Toporowski focus on how effective sustainability is for a company’s success through the use of the Triple Bottom Line Model (includes three dimensions: economic, environmental, and social) which has been integrated into business processes to promote sustainability in the business environment. One of their suggestions was to promote internet shopping more than brick-and-mortar stores, because there are less CO₂ emissions emitted in the atmosphere when shopping online. They mentioned that retailers can motivate their consumers to modify their travel behaviors by consolidating shopping trips and using public transport. These are just one of the many initiatives that they suggested that companies incorporate in their business model, due to the relevance of green consumption.

Two goals of sustainable clothing production are using less water and creating organic textiles that have not been treated with excessive chemicals (Shen, 2014). Zara is another fast-fashion company, which, like H&M, relies on rapid clothing recycling cycles. Other sustainable methods include cruelty-free initiatives that some fashion designers implement; this is true with Stella McCartney, who designs her own sustainable clothing lines, because she does not use fur or leather in her designs (Joy et al., 2012). Others, like Mara Hoffman, use recycled fibers to produce clothing. These practices have become prominent in the textile industry in recent years, and it is important to note the call to action that many brands and designers are heeding to lessen

environmental harm from excessive waste and pollution that are byproducts of clothing production.

Companies are taking protective and preventative measures towards this issue. For example, “companies representing about 12.5% of the market have signed up to a 2020 commitment by an industry group, the Global Fashion Agenda, that’s called for measures such as using water more efficiently, developing more sustainable fibers and inventing novel recycling systems” (Catelli and Mulligan, 2019). Along with this, individual companies have put their own measures into effect; some examples include Adidas and Prada SpA, both working towards using only recycled plastics and replacing synthetic materials like nylon and polyester. Although Prada has previously been bashed by animal rights groups for the usage for fur and leather, they have now partnered with Gucci and Burberry Group PLC in banning these fabrics from the runway (Catelli and Mulligan, 2019). This leads to the discussion of cruelty-free fashion, because of how cruel, unethical, and unsustainable animal testing is; with harmful chemicals being poured into rabbits’ eyes and guinea pigs and mice being fed large doses of “newly invented chemicals and ingredients” to the point where they get sick. Cruelty-free products use less chemicals that could negatively affect the individual as well as the environment (Chitrakorn, 2019).

Thesis Statement: This project began with an analysis of consumers’ (specifically college students’) attitudes towards sustainable clothing, with parallels drawn from the adoption of the green consumerism movement in the eighties, which includes the market evolution of organic and non-GMO foods. Through survey research, the degree of sustainability that college students adopt in their everyday life was measured, specifically among their purchases of sustainable clothing. This study also assessed consumer willingness to pay a price premium for sustainable clothing products (i.e. the level of attitude-behavior inconsistency). Finally, this thesis sought to understand

the marketing implications of sustainability in clothing and develop recommendations for marketers.

Conceptual Framework: Given the prevalence of environmental issues in the news media and the fact that today's college students have grown up in a world that focused on the environment and green living, we hypothesize that college students care about this issue. However, because "sustainable clothing is relatively new to the field of research," college students may not be informed about green production methods (Hustvedt and Dickson, 2009). We think college students may be more aware of these social issues compared to older generations, because according to a Nielsen global report on sustainability, "about 75 percent of Millennials are altering their buying habits with the environment in mind, compared to 34 percent of Baby Boomers" (Mullen). This leads us to propose the following hypotheses:

H1: College students generally perceive sustainability in a favorable light, because Millennials see sustainable and organic products as important and prioritize it as "being important for me and for the world" (Mullen, 2018).

H2: College students do not believe they are well-informed about sustainable production methods with respect to textiles because they may not be informed about sustainable textile methods.

We think there is a positive correlation between consumers' preferences for organic food and their views on organic clothing, because organic food consumers "have concerns about farming production processes that are broader than pesticide use" (Hustvedt and Dickson, 2009). This can lead us to assume that many socially-conscious consumers who care about farming

production processes for food may also care about sustainable production processes for clothing. This suggests the following hypothesis:

H3: There is a positive correlation between organic food consumption and organic clothing with respect to consumer attitudes and behaviors.

There is a significant amount of empirical research finding that even consumers who are concerned about the environment are still reluctant to pay a price premium for sustainable goods (e.g., Carrington, Neville, Whitwell, 2010; Ellis, McCracken, and Skuza, 2012). According to Carrington, Neville, and Whitwell in a 2010 study, a person who views sustainability in a favorable light may not be willing to pay a premium for it, especially since “30% of consumers stated that they would purchase ethically, only 3% actually do.” Similarly, Ellis, McCracken, and Skuza (2012) found that consumers who pay for their own clothing are not willing to pay a price premium. Although buying sustainably produced clothing is appealing to the environmentally concerned consumer, we believe that for our population, which consist of college students, stated concern for the environment will exceed their willingness to pay a price premium for sustainably produced goods, leading to the following hypotheses:

H4: There is a significant positive correlation between college students’ attitudes and their willingness to pay a specific price premium.

H5: Favorability towards sustainable clothing will be greater than respondent’s willingness to pay a premium.

Other Research Questions:

We explored several additional issues for which we did not specifically hypothesize. One such issue is the effect of gender with respect to purchasing sustainable clothing. According to prior research on this, men and women react differently to organic, fair trade (FT) products, because men are more interested in the benefits that these products will provide to them, and women care about the processes that go into making these products (de Leeuw et al., 2014).

We also asked respondents about their environmentally related behaviors such as recycling and reduction of solid waste, and about their households of origin's recycling behaviors. Our survey also includes a question asking respondents to rate the importance of several factors they consider when selecting a piece of clothing, including price, quality, sustainability, fit, and style. We hope to ascertain the relative importance of sustainability versus these other factors.

Methodology

In order to gain insight into consumer's attitudes and behaviors with regards to sustainably-produced clothing, we conducted a survey on Qualtrics, an online survey software. Undergraduate college students were recruited through word-of-mouth and in-class announcements, and the survey link was sent to participants via email. We were specifically interested in recruiting college students for our target demographic, because "they represent the next group of consumers entering the marketplace" (Hustvedt and Bernard, 2008). After obtaining IRB approval (shown in Appendix 1), our survey was administered, which took about ten minutes to complete.

The survey consists of six sections. These sections are: Consumer Awareness, Consumer Attitudes, Consumer Buying Behavior, Sustainable Practices in Everyday Life, Implications, and Demographics. The Consumer Awareness section includes questions on whether

or not college students are aware of sustainable clothing production methods and if they know of any celebrities who endorse sustainable clothing. The Consumer Attitudes Section asks questions on how consumers perceive sustainability as well as what they think about it for the future. The Consumer Buying Behavior section asks participants to report their behavior with regard to sustainable clothing purchases and if it is something they value when shopping for clothes.

The Sustainable Practices in Everyday Life section asked questions about whether college students have implemented sustainable practices, such as reusing materials, recycling and upcycling (making new clothing out of old clothing once you are finished using it), in their everyday lives growing up. This would lead most reasonable researchers to believe that someone who practices sustainability in their everyday life would be more conscious about the detrimental effects of clothing that has too much water content or uses real fur or leather, for example, and what that can do to the environment. The Implications section asks participants to write out what they think are the implications of using dyes, chemicals and other harmful production methods for the environment. In this section, many participants also were asked what they believe are some steps that we should take to achieve the maximum positive impacts regarding sustainability in the textile industry. The Demographics sections briefly asked participants their age, sex, year in college, and employment status.

Sample Characteristics

We collected 179 completed surveys. A brief description of the sample characteristics are as follows. The majority of the participants who took the survey were around the ages of 18-22 (87% of participants) and nearly 66% of participants were female. The majority of participants were upperclassmen, with 64% of participants being juniors and seniors and 56% of the participants worked part-time. The actual survey is reproduced in Appendix 2.

Results

Our results confirmed that many college-aged students are concerned with the environment, but they do not believe they are knowledgeable about sustainable production methods in the textile industry. There was a significant positive correlation between organic food and organic clothing among college students. As suspected, we found that they also focus on budget more when it comes to buying clothing, even over trendiness and quality, with sustainability of the clothing and/or brand to be the least important factor when looking for clothing. This leads us to confirm our hypothesis that college students care about sustainability, but they are less willing to pay a price premium for green clothing.

Hypothesis Testing:

To test H1, the mean score was calculated on a composite measure of environmental concern. The five items we used were how relevant, important, and green they consider themselves to be. These measures also calculated how respondents feel about greenhouse gases and how well-read they are on current events regarding sustainability. This composite scale showed a high level of reliability (Cronbach's $\alpha=0.811$). The mean for this composite measure (1-5 scale) was 3.42, with S.D.=0.834, proving to be significantly above the midpoint ($t_{177}= 14.73$, $p<0.000$), thus lending support to H1.

To test H2, which states that the respondents do not believe themselves to be well informed on sustainability issues in the clothing industry, the mean on this 5- point scale was 3.04 (SD = 1.3), which is slightly above the midpoint. This mean was then compared to the mean of another item measuring their level of concern with sustainability in clothing. That mean was 3.48 (S.D. =

.77). A paired t-test using these two measures showed that this difference in means was statistically significant ($t_{178} = 5.35, p < .000$), thus supporting H2.

Although college students care about sustainability, it is shown that many feel that they are not as sustainable as they would like to be. Only 7 surveyed participants said they did not care about the topic, but 86 of participants reported that there is not enough information or education on this topic, 78 participants reported a lack of time (43.6%) and 77 reported a lack of availability (43.0%). This confirms our hypothesis that although many college students are concerned about this issue for the future, they feel they are not informed about this topic.

Additionally, in another question, respondents were asked to indicate the reasons why they do not live a highly sustainable/environmentally friendly lifestyle. The most frequent answer was that they did not have enough education/information on the topic of sustainability (86 of 179 respondents, or 48%). This provides additional support for H2.

To test H3, which states that there is a significant positive correlation between organic food and attitudes towards organic clothing, we found that there was a significant positive correlation with the Pearson Correlation Value being 0.324, which is highly statistically significant ($p < 0.000$), supporting H3. We got this by constructing a composite measure which was the sum of two items of comparing organic and non-GMO material in food. This was then compared with a composite measure of four items regarding how valued sustainability is when shopping for clothing. This composite measure shows acceptable reliability ($\alpha = 0.749$).

To test H4, which hypothesizes there to be a correlation between caring about sustainable clothing and the willingness to pay a higher price, the Pearson Correlation Coefficient was 0.594, showing that the correlation is statistically significant ($p < 0.000$), which supports H4. We also

calculated the correlation between willingness to pay and the composite measures for environmental concern, which was 0.416 ($p < 0.000$), further supporting H4.

To test H5, which states that the respondents' favorability towards sustainable clothing will be greater than their willingness to pay a premium, the mean for caring about sustainable clothing on this 5- point scale was 3.48 ($SD = 0.767$). This composite measure was then compared to the mean of another item measuring their willingness to pay a higher price. That mean was 3.09 ($S.D. = 1.004$). A paired t-test using these two measures showed that this difference in means was statistically significant ($t_{177} = 6.247$, $p < 0.000$), thus supporting H5.

Other Findings:

In addition to the hypotheses tests reported above, we explored several other issues related to clothing purchase decisions and environmental attitudes and behaviors. The most interesting of these findings is described in this section.

We analyzed whether gender had any significant effects in consumers' attitudes and behaviors. While there is some prior evidence suggesting that females tend to report higher levels of environmental concern and sustainable behaviors (de Leeuw et al, 2014), we did not find any statistically significant differences in these variables based on gender in our sample. It is clear that both males and females feel that sustainability is a relevant and important topic, with both averages over 4 on a 5-point scale. The means for males and females were 4.15 and 4.22 respectively, showing that both genders feel this topic is relevant; however, the differences between were not statistically significant.

The results of H5 suggest that while it is easy to be concerned with the environment, it is much harder to put that concern into action. Consumers are not very likely to be willing to pay a price premium for environmentally- friendly clothing, even though they display a high level of environmental concern. This speaks to attitude-behavior consistency. To explore this issue, in our survey, we asked respondents what factors stop them from leading the sustainable, environmentally- friendly lifestyle they would like to lead. Forty-two of the 179 respondents (23%) say they do, in fact, lead a sustainable lifestyle. The number one reason listed is that they do not have enough information or education on sustainability. The next most frequent reasons indicated are a lack of time and a lack of availability. Only 7 out of 179 respondents indicated that they did not care about the environmental impact of their lifestyle, and another 32 (18%) said that it was not worth it or was not relevant to them. The complete list of their reported reasons for not living green are shown in Chart 1 in Appendix 3.

We measured consumer's attitudes towards various sustainability issues regarding non-GMO materials and the ethics behind fur, silk, and leather. The means of these measures are shown in Table 1 in Appendix 4. From this table, we can see that on average, respondents reported sustainability to be a highly relevant topic. (mean=4.19 on a 5-point scale). More respondents reported that they are more aware of the ethical impacts of fur, than in leather or silk, with silk having the lowest average of 2.62. There is some awareness of the ethical impacts of leather and silk, but there is more awareness regarding ethics with the use of fur. As previously suspected, we also noted that many respondents are more aware and value non-GMO material in food than in clothing, perhaps because, as mentioned earlier, there has not been as much research done in the field of organic/sustainable clothing.

Another finding we explored is whether or not respondents do research on sustainable textiles before shopping, indicating consumer involvement. Very few of the respondents reported doing research on sustainable textiles before shopping (mean=1.46 on a 5-point scale). It seems that the means for consumer attitudes on concern and value for the environment is quite high because the majority of consumers believe sustainability to be a relevant issue to also be concerned for in the future (with the average for that being 4.30). We also expected college students to be concerned with budget, and we found budget to be one of the most important, if not the most important, aspect of buying sustainable clothing, with a mean of 4.13 on a 5-point scale. These figures can be seen in Table 2 in Appendix 4.

Regarding consumer buying behaviors, we analyzed how involved respondents are when looking for different types of organic labels. According to what we saw, the majority of consumers aren't as attentive to the organic/recycled labels when shopping for clothing, although close to 100 participants said that they sometimes look for the organic label when shopping. We noted that the college students in our sample were more likely to look for the organic label in food rather than in clothing because there has been more research in the field of organic food. As consumer knowledge expands on the topic of sustainability outside of food, it is fair to assume that consumers may look for the earth-friendly, biodegradable, and organic labels for clothing as well. These labels are on a 3-point scale (Never-Sometimes-Always), and the results are shown in Chart 3 in Appendix 3.

Regarding consumer reports of important variables in clothing, we found that sustainability of the clothing or brand is the least important factor compared to other variables such as quality, price, and attractiveness. Even trendy style is second-to-last compared to the price and quality. Although there is concern for sustainability among college students, this concern is not translated into actual behaviors regarding the purchase of clothing. This question was on a 1-5 scale with 1

being “Not at All Important” and 5 being “Very Important.” The results are shown in Table 5 in Appendix 4.

Aside from what they find important in clothing, we asked respondents about their own eco-friendly behaviors, which required them to rank their level of agreement on a 1-7 scale with the following statements in Table 4. The means for other eco-friendly behaviors such as using reusable water bottles and shopping bags (5.83 and 5.54 respectively) are higher than normal, showing that despite not feeling educated enough on the topic of sustainable clothing, college students care enough about this topic to reuse and reduce.

Along with reusing and reducing, it seems that respondents are also eco-friendly when it comes to disposition of clothing. According to Chart 2 in Appendix 3, 46% of college students donate their clothes to charity and 38% of students give it to a sibling or a friend, which makes up the majority of this sample. Since both of these methods are highly sustainable, it shows that college students dispose of their clothing in an eco-friendly way; this is shown when even upcycling clothing has a higher percentage than just throwing away clothing (9% and 7% respectively). Looking into this can give insight into how sustainable college students are in regards to clothing.

If respondents report eco-friendly habits like reusing and reducing as well as sustainable clothing disposal methods, we also looked into family sustainable habits to see if participants engaged in sustainable behaviors growing up, because that may give insight into how they feel about sustainability. It is shown that 41% of participants recycled regularly although the majority of consumers do not look for the recycled label when shopping. It is also shown that 43% of participants reported that they did “None of the Above,” which was the highest percentage in this section. It is interesting to note that although 43% of college students have said that they never

discussed sustainability in their households, it is apparent that many still partake in eco-friendly behaviors regarding the disposal of clothing and reusing water bottles and shopping bags. The results are shown in Table 3 Appendix 3.

We also noticed that the majority of consumers would prefer sustainable clothing if budget was not an issue, with the average for that being 4.30. It is also significant note that proximity is an important factor to take into consideration if a business wants to market to college students, because many participants reported that they would purchase sustainable clothing if a local store was selling it; the average for this was 3.5 on a 5-point scale. The results from this section led us to find out the price premium that a college student would be willing to pay; this also takes into account whether someone who cares about sustainability would be willing to pay higher for a sustainably-produced piece of clothing.

When asked in the open-ended section of the survey about how an individual can achieve sustainability, many respondents said that educating people on the benefits and importance of sustainability and recycling properly and regularly are key. Eliminating the by-products of factory waste as well as using all- natural fibers like cotton and hemp are important to achieving the maximum positive impacts of sustainability according to the college-age students in this research. Shopping at thrift stores more often was also mentioned and buying less clothing in general can also lessen the waste that comes from clothing production. Wearing clothes longer and encouraging the donation of clothes to charities after usage is something that can benefit not only the environment, but also other humans in need, and is something that many participants brought up. Minimizing purchases of animal skins and moving away from child labor were topics that were brought up that could lead to further research in this area (see **Further Research**).

A key point about what methods a society should take to promote sustainability from a marketing perspective is an increase of advertisements and commercials on the benefits of green living. A portion of the company's budget should be reserved for effective advertising campaigns to further these actions. Including promotional posters and more distinctive clothing tags in stores was also mentioned in this section of the survey to bring sustainability to the forefront of public knowledge. Some responses even mentioned that the responsibility to make sustainable clothing is more on the corporation than on the individual; this is because corporations need to make those options easily available and fairly priced leading to higher conversion rates among budget-conscious college students.

Over time, information about sustainable brands and eco-friendly techniques should be incorporated into the education system to build awareness. Every individual can strive to learn more about the brands that he or she wears, and restrictions should be implemented on clothing manufacturing waste. One idea offered by a respondent suggested that non-biodegradable clothing should be priced higher so that there is less demand for them. This may be an effective method for the college student that cares about sustainability but does not want to pay a high price for the item(s).

Discussion

Generally speaking, this study has shown that, on average, college students are highly concerned with the environment, with a specific concern for sustainable clothing. However, we found that that their concern and interest in these issues is greater than their actual knowledge on green living. In fact, they listed a lack of information and education as the number one reason they do not act on their attitudes toward sustainable clothing. These findings suggest that sustainability

may be a highly effective and important issue for marketers to address to increase the value of their product offerings in consumers' minds. However, our findings also suggest that marketers may, first, need to educate the consumer as to how clothing production may impact the environment, and what steps are possible for producers to improve sustainability. Then, after this is accomplished, the goal would be to raise the consumer's awareness of these sustainable initiatives through advertising campaigns and labelling products that inform consumers of the increased value offered by the company's eco-friendly products.

We suggest that companies should provide consumer education for sustainable textiles and ways to do that would include allocating a part of their budget towards green measures and including that as a part of their values and corporate culture; examples of this would include employee training and recruitment processes. Creating a focus on the company's values and integrating those values into everyday routine shows that the company practices what they preach. Another suggestion would be for institutions, such as universities, include mandatory learning modules on various social issues for college general education courses.

However, with any company or institution, incorporating these initiatives could come with a financial detriment to the business, which can lead to even greater costs to the consumer. Clothing producers, in particular, may get the brunt of this, because our results indicate that the portion of the population that is comprised of college students is not necessarily willing to pay more for sustainable clothing, which is highly consistent with other research in this area. This puts environmentally- concerned clothing manufacturers in a very challenging position. Highly ethical producers will find greater value in "doing the right thing" regarding sustainability and will likely take these steps in their production methods. Hopefully, by effectively communicating these

sustainable advantages to their target customers, they can remain profitable. This may be a process that is achieved over the long run, as awareness and understanding of sustainability initiatives increases across society.

In addition to educating college students about sustainable textiles and clothing production methods, we also found that there is a correlation between consumers' attitudes toward organic food and their views toward sustainable clothing. This suggests that the growth in awareness and value placed on environmental issues related to clothing may follow a similar path over time as what has been seen in the growth of consumer concern for organic foods. In other words, awareness will build over time through education and advertising and more consumers will begin to value and seek out those products that are organic, and they will become more willing to pay a premium for these products.

Conclusions and Limitations

After conducting this research, it is fair to conclude that college students care about sustainability and want to contribute to the efforts of a cleaner environment, but they feel unaware of the ways to maintain it. Since college students are a large cohort going into the marketplace, their needs and values need to be taken into consideration by marketers. Based on our results, it is evident that college students do not do research on sustainable clothes or brands before going shopping, nor are they willing to pay a price premium for sustainable clothing. Not surprisingly, it is evident that price is a major factor in college students' clothing buying decisions. Our respondents indicated that they would prefer to purchase sustainable clothing if budget was not an issue. Although many consumers feel they are not sustainable enough, it is evident that the majority of consumers practice sustainable habits such as recycling, using a reusable water bottle, donating

their used clothing to charity, and giving their clothing to a sibling or friend. Based on our findings, it is apparent that there is a significant positive correlation between organic food and organic clothing consumptions. It is logical that an individual who buys organic food would be interested in incorporating green living into their lifestyle.

Based on the data, it is also fair to conclude that marketers should take these considerations into account, and first educate college students on sustainable production methods before advertising products and labelling that are sustainable. Since the majority of college students are budget-conscious and look for quality, it would be important for marketers to highlight those aspects of their campaign on sustainable products.

Although we tried to make our sample size as representative of the population as possible, there are still some limitations to our research, as there is with any research. One of the limitations is that there is always room for a larger sample size. Even though we had 179 people in our sample size, a larger sample size is always better to analyze; this is because the representation would be more accurate, can provide more accurate averages, and identify outliers better. Another limitation is that sometimes there is self-selection bias (also known as response bias), because people who care about sustainability may be more likely to fill out the survey as opposed to people who do not care. Even with filling out the survey, the number of responses shown on Qualtrics includes all of the participants, rather than the people who took the time to take the entire survey. There can also be bias in participant answers, because sometimes, participants want to answer favorably rather than with their own opinions; this is because “people respond with answers they believe to be socially acceptable, overstating the importance of ethical considerations in their buying behavior” (Carrington, Neville, and Whitwell, 2010).

Further Research

Further research can be done regarding sustainability and environmental friendliness with respect to other product categories. For example, research could be conducted on consumers' attitudes toward ethical skincare, Fair Trade products, cruelty-free products, and products certified as not using child labor. Like with organic food and organic clothing, the popularity of organic skincare has also started to skyrocket with Ulta promoting brands like Glossier and Burt's Bees. Skincare is a lifestyle for most people, similar to food and clothing, and striving for the organic production and consumption of these products seem relevant in this socially-conscious day and age. Along with this, Fair Trade products are made with the intention of providing ethical treatment of workers and farmers and advocating for sustainable environmental practices and production methods ("Why Fair Trade - Why Buy Fair Trade").

This leads into the topic of cruelty-free products and the buying behaviors of college students (or another demographic) regarding products not tested on animals. With ethical processes going hand-in-hand with sustainable initiatives, a Nielson survey found that "more than 1,000 adults found that 'not tested on animals' was the most important packaging claim amongst consumers of beauty products, with 57 percent of respondents selecting this over competing claims. More than 43 percent of respondents said they would be willing to pay more for products that had not been tested on animals" (Chitrakorn, 2019) Due to this, future researchers can investigate the effectiveness of these claims among various target market segments.

Moving away from child labor was something that several respondents mentioned in their responses to an open-ended question asking for recommendations for achieving sustainability. The use of child labor is obviously unethical and often associated with fast-fashion that is produced

cheaply and leads to waste in the environment. The rapid production of clothing in an effort to make profit fast, along with trying to respond quickly to trends leads to an excess of clothing that ends up going to waste encouraging a disposable attitude among consumers (Catelli and Mulligan, 2019). Advocating for ethical working conditions, as well as the usage of organic fibers for production, can ameliorate the situation when it comes to protecting the environment. It is evident that college students care about the environment; they just need more education/information for them to act on it.

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Appendix 1: IRB Materials

IRB

INSTITUTIONAL REVIEW BOARD

Office of Research Compliance,
010A Sam Ingram Building,
2269 Middle Tennessee Blvd
Murfreesboro, TN 37129



IRBN007 – EXEMPTION DETERMINATION NOTICE

Thursday, August 22, 2019

Principal Investigator **Meena Swaminathan** (Student)
Faculty Advisor DeAnna Kempf
Co-Investigators Jasmin Kwon*
Investigator Email(s) *ms9q@mtmail.mtsu.edu; dkempf@mtsu.edu; jasmin.kwon@mtsu.edu*
Department Marketing and *Textiles, Merchandising and Design

Protocol Title ***College students' awareness, attitudes, and buying behaviors involving sustainable methods in the textile industry***
Protocol ID **19-1259**

Dear Investigator(s),

The above identified research proposal has been reviewed by the MTSU Institutional Review Board (IRB) through the **EXEMPT** review mechanism under 45 CFR 46.101(b)(2) within the research category (2) *Educational Tests*. A summary of the IRB action and other particulars in regard to this protocol application is tabulated as shown below:

IRB Action	EXEMPT from further IRB review***	Date	8/22/19
Date of Expiration	8/31/2020		
Sample Size	100 (ONE HUNDRED)		
Participant Pool	Healthy adults (18 or older) - college students		
Exceptions	Qualtrics survey is approved with restrictions		
Mandatory Restrictions	1. Participants must be 18 years or older 2. Informed consent must be obtained from the participants 3. Identifying information must not be collected		
Restrictions	1. All restrictions for exemption apply. 2. Mandatory informed consent with age-verification to be administered prior to the survey. 3. NOT approved for in person (direct) data collection; ONLY online interaction via Qualtrics		
Approved IRB Templates	1. IRB Informed consent, 2. Recruitment IRB recruitment email. and 3. Non-IRB verbal recruitment script (on file)		
Funding	NONE		
Comments	NONE		

***Although this exemption determination allows above defined protocol from further IRB review, such as continuing review, MTSU IRB will continue to give regulatory oversight to ensure compliance.

Summary of Post-approval Requirements:

The investigator(s) indicated in this notification should read and abide by all applicable post-approval conditions (Visit <https://www.mtsu.edu/irb/FAQ/PostApprovalResponsibilities.php> for more information)

- PI must close-out this protocol by submitting a final report before **8/31/2020**; if more time is needed to complete the data collection, the PI must request an extension. **NO REMINDRES WILL BE SENT. Failure to close-out (or request extension) may result in penalties** including cancellation of the data collected using this protocol or withholding student diploma.
- IRB approval must be obtained for all types of amendments, such as:
 - Addition/removal of subject population and sample size
 - Change in investigators
 - Changes to the research sites – appropriate permission letter(s) from may be needed if the study will be conducted at a non-MTSU location
 - Alternation to funding
- Modifications to procedures must be clearly described in an addendum request form and the proposed changes must not be incorporated without an approval
- The proposed change must be consistent with the approved protocol and comply with exemption requirements
- Research-related injuries to the participants and other events , such as, deviations & misconduct, must be reported within 48 hours of such events to compliance@mtsu.edu

Post-approval Protocol Amendments:

The current MTSU IRB policies allow the investigators to implement minor and significant amendments that would not result in the cancellation of the protocol's eligibility for exemption. **Only THREE procedural amendment requests will be entertained per year. This amendment restriction does not apply to minor changes such as language usage and addition/removal of research personnel.**

Date	Amendment(s)	IRB Comments
NONE	NONE.	NONE

Post-approval IRB Actions:

Date	IRB Action(s)	IRB Comments
NONE	NONE.	NONE

Mandatory Data Storage Requirement: All research-related records (signed consent forms, investigator training and etc.) must be retained by the PI or the faculty advisor (if the PI is a student) at the secure location mentioned in the protocol application. The data must be stored for at least three (3) years after the study is closed. Subsequently, the data may be destroyed in a manner that maintains confidentiality and anonymity of the research subjects. **The IRB reserves the right to modify/update the approval criteria or change/cancel the terms listed in this notice.** Be advised that IRB also reserves the right to inspect or audit your records if needed.

Sincerely,

Institutional Review Board
Middle Tennessee State University

Quick Links:

- Post-approval Responsibilities: <http://www.mtsu.edu/irb/FAQ/PostApprovalResponsibilities.php>
- Expedited Procedures: <http://www.mtsu.edu/irb/FAQ/PostApprovalResponsibilities.php>

Appendix 2: Survey

Primary Investigator: Meena Swaminathan

PI Department & College: Marketing, Jones College of Business

Faculty Advisors (if PI is a student): Dr. DeAnna Kempf and Dr. Jasmin Kwon

Protocol Title: College Students' Awareness, Attitudes, and Buying Behaviors Involving Sustainable Methods in the Textile Industry

Protocol ID: 19-1259

Approval Date: 08/20/2019

Expiration Date: 08/31/2020

Information and Disclosure Section

1. **Purpose:** This research project is designed to help us evaluate college students' attitudes and behaviors related to clothing purchases. We are specifically interested in consumers' attitudes toward organic or sustainably produced clothing.
2. **Description:** This is a short online survey. It is completely anonymous and respondents will not be identified in any way.
3. **Duration:** The whole activity should take about 10 minutes.

Here are your rights as a participant:

Your participation in this research is voluntary. You may skip any item that you don't want to answer, and you may stop the experiment at any time (but see the note below). If you leave an item blank by either not clicking or entering a response, you may be warned that you missed one, just in case it was an accident. But you can continue the study without entering a response if you didn't want to answer any questions. Some items may require a response to accurately present the survey.

4. **Risks & Discomforts:** None.

5. **Benefits:** There are no direct benefits to the participant. However, this study is being conducted for an honors thesis with the goal is to increase our knowledge of consumers' attitudes and behaviors related to organic or sustainably made clothing.

6. **Identifiable Information:** You will NOT be asked to provide identifiable personal information.

7. **Compensation:** There is no compensation for participating in this study.

8. **Confidentiality.** All efforts, within reason, will be made to keep your personal information private but total privacy cannot be promised. Your information may be shared with MTSU or the government, such as the Middle Tennessee State University Institutional Review Board, Federal Government Office for Human Research Protections, *if* you or someone else is in danger or if we are required to do so by law.

9. **Contact Information.** If you should have any questions about this research study or possibly injury, please feel free to contact Meena Swaminathan by telephone 615-423-8537 or by email msg9@mtmail.mtsu.edu OR my faculty advisors, Dr. DeAnna Kempf (DeAnna.Kempf@mts.edu; 615-898-2997) and Dr. Jasmin Kwon (Jasmin.Kwon@mts.edu; 615-904-8340). You can also contact the MTSU Office of compliance via telephone (615 494 8918) or by email (compliance@mts.edu). This contact information will be presented again at the end of the experiment.

Q23

Participant Response Section

I have read this informed consent document pertaining to the above identified research

Yes

No

Skip To: End of Survey If Participant Response Section I have read this informed consent document pertaining to the above i... = No

Q24 The research procedures to be conducted are clear to me

- Yes
- No

Skip To: End of Survey If The research procedures to be conducted are clear to me = No

Q25 I confirm I am 18 years or older.

- Yes
- No

Skip To: End of Survey If I confirm I am 18 years or older. = No

Q26 By clicking below, I affirm that I freely and voluntarily choose to participate in this study. I understand I can withdraw from this study at any time without facing any consequences.

- NO I do not consent
- Yes I consent

Skip To: End of Survey If By clicking below, I affirm that I freely and voluntarily choose to participate in this study. ... = NO I do not consent

End of Block: Block 2

Start of Block: Thank you for agreeing to participate in this survey!

Q21 This survey is focused on sustainability issues in clothing production – that is, issues such as the environmental friendliness of the production methods of the clothing or of the fabric itself, including organic farming methods used to produce the raw materials used in

the clothing, etc. In general, “sustainability” refers to the earth-friendliness of the materials used in the clothing or in its production methods.

Q1 Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I am aware of sustainable production issues in the textile industry.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I value sustainability when looking for clothes.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I value non-GMO (genetically modified organisms) material in clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I value non-GMO material in food.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think about the ethical impact of fur in clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think about the ethical impact of leather in clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think about the ethical impact of silk in clothing.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know of celebrities and brands that endorse sustainability.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q2 Please indicate your level of agreement with the following statements:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think that sustainability is a relevant and important issue.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I consider myself to be a green consumer.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I care about clothing recycling patterns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think that sustainability is something that we should be concerned about in the future.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q3 How well do the following statements describe your behaviors?

	Does not describe me	Describes me slightly well	Describes me moderately well	Describes me very well	Describes me extremely well
I read news articles on the greenhouse effect and other environmental concerns.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think about the effects that greenhouse gases have on the environment.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I do research on sustainable textiles before I go clothing shopping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q4 How much do you agree with the following statements regarding sustainability when making your clothing purchases?

	Strongly disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
Budget is important to me when considering the purchase of sustainably-produced products.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
The environmental friendliness of garment content is important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>



Q5 If you don't consider yourself as leading a sustainable (or environmentally friendly) lifestyle, what are the major reasons that you do not? Please check all that apply:

- Lack of Availability
 - Lack of Time
 - Not raised in a household where this was discussed
 - Not enough information/education on the subject
 - Not relevant to me
 - Not enough benefits for me or for the environment
 - Don't care about sustainability
 - I do believe that I generally live an environmentally friendly lifestyle.
-

Q6 Please rate the importance to you of each of the following factors when making your clothing purchases.

	Not at all important	Slightly important	Moderately important	Very important	Extremely important
Quality of Material	<input type="radio"/>				
Price	<input type="radio"/>				
Sustainability/Environmental Friendliness of the clothing or brand	<input type="radio"/>				
Attractiveness	<input type="radio"/>				
Trendy Style	<input type="radio"/>				

Q7 Please indicate your level of agreement with the following statements regarding shopping for clothing:

Strongly Disagree

Disagree

Neither agree nor disagree

Agree

Strongly agree

I would be willing to pay a higher price for a sustainably-produced clothing item.

I would prefer sustainable clothing if budget was not an issue.

Before going shopping, I am likely to do some research regarding sustainable clothing brands.

Once I'm in the store, if I happened to see a sustainability tag/label (even if I wasn't actively looking for it), I am more likely to purchase it.

When I go clothing shopping next time, I am likely to purchase a sustainably-produced piece of clothing.

If a local store was available that only sold sustainably-produced clothing, I would be likely to buy things from there.

I would buy organic clothing to support organic farming even if I have to go out of my way to do so.

Q8 Please indicate how often you engage in the following shopping behaviors:

	Never	Sometimes	Always
When I shop for food, I look for the organic label	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When I shop for clothing, I often look for the biodegradable/earth-friendly tag	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pay attention to the sustainability/recycled tag for clothing whenever I go shopping.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to make sure that my clothes are made from recycled materials.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q9 What do you do with clothing once you are finished using it? Click on all that apply.

- Throw it away
 - Donate it to charity
 - Give it to sibling or friend
 - Up-cycle (make new clothing out of it)
-

Q10 Please indicate your level of agreement with the following statements regarding environmentally related behaviors:

	Strongly disagree	Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Agree	Strongly agree
I recycle whenever possible.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often use a reusable water bottle	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often use a reusable bag whenever I go shopping	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q11 When I was growing up, my family: (Please click on all that apply.)

- Recycled regularly
- Regularly bought and ate organic food.
- Discussed and/or displayed a general concern for the environment.
- None of the above.

Q12 Please indicate your level of agreement with the following statement:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I feel that there are negative effects of the dyes and chemicals used in apparel production	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Display This Question:

If Please indicate your level of agreement with the following statement: = Agree

And Please indicate your level of agreement with the following statement: = Strongly agree

Q13 If you selected Agree or Strongly Agree, please briefly describe the negative effects below:

Q14 Please indicate your level of agreement with the following statement:

	Strongly disagree	Disagree	Neither agree nor disagree	Agree	Strongly agree
I think there is a detrimental effect on the environment when buying clothing made of synthetic textiles such as polyester and nylon.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Q15 What are some steps you believe that an individual, as well as a society, should take to achieve the maximum positive impacts regarding sustainability in the textile industry?

Q16

The following four demographic questions are used only to classify your answers with other respondents who share similar characteristics.

Please type your age in the space below:

Q17 Sex

- Male
 - Female
-

Q18 Class Standing

- Freshman
 - Sophomore
 - Junior
 - Senior
 - Other
-

Q19 Employment Status

- Full- time
- Part- time
- Not Currently Employed

End of Block: Thank you for agreeing to participate in this survey!

Start of Block: Thank you for your participation!

Appendix 3: Charts

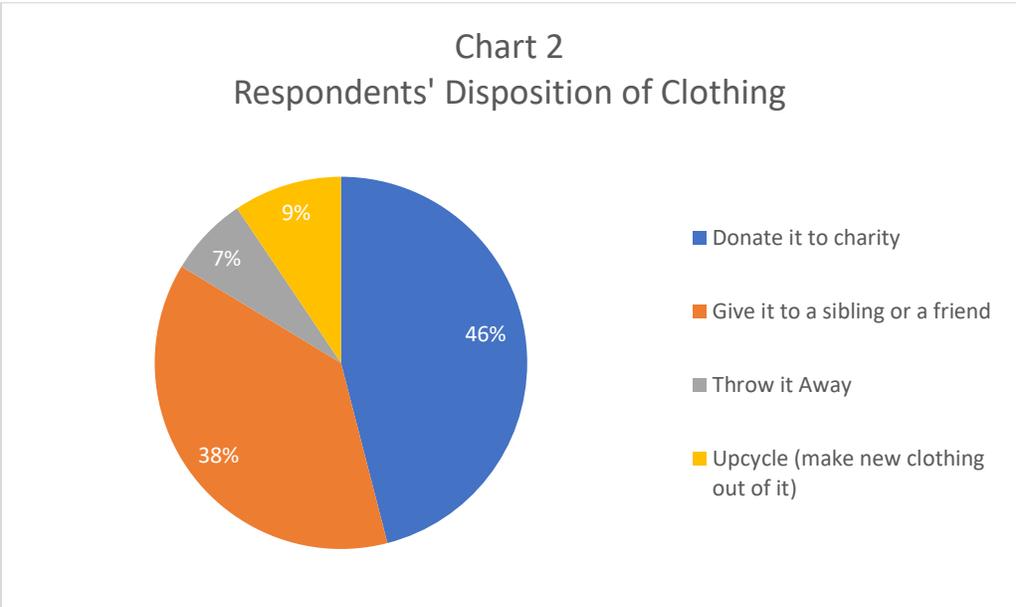
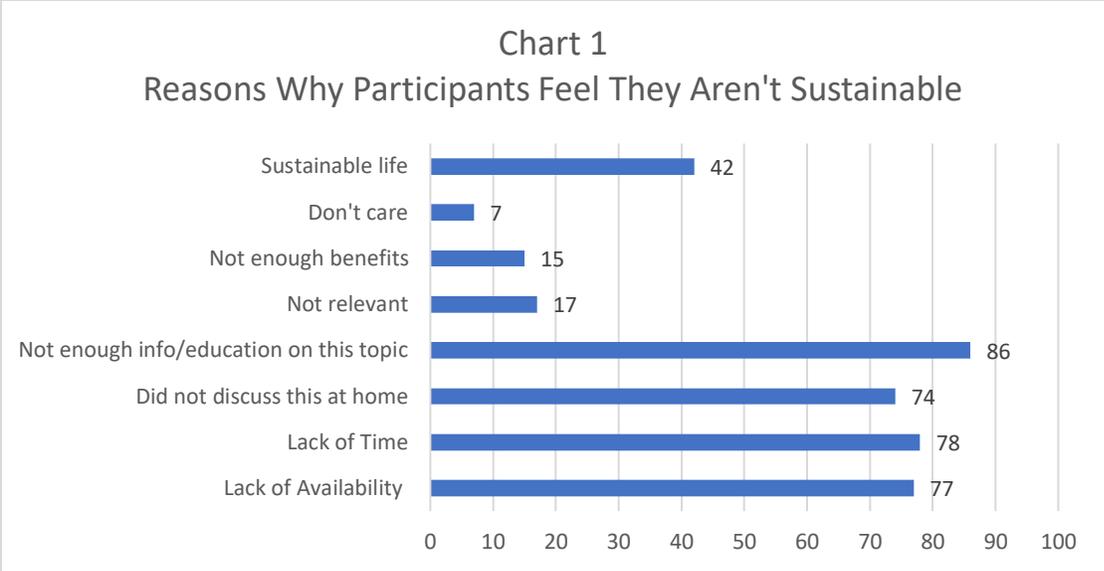
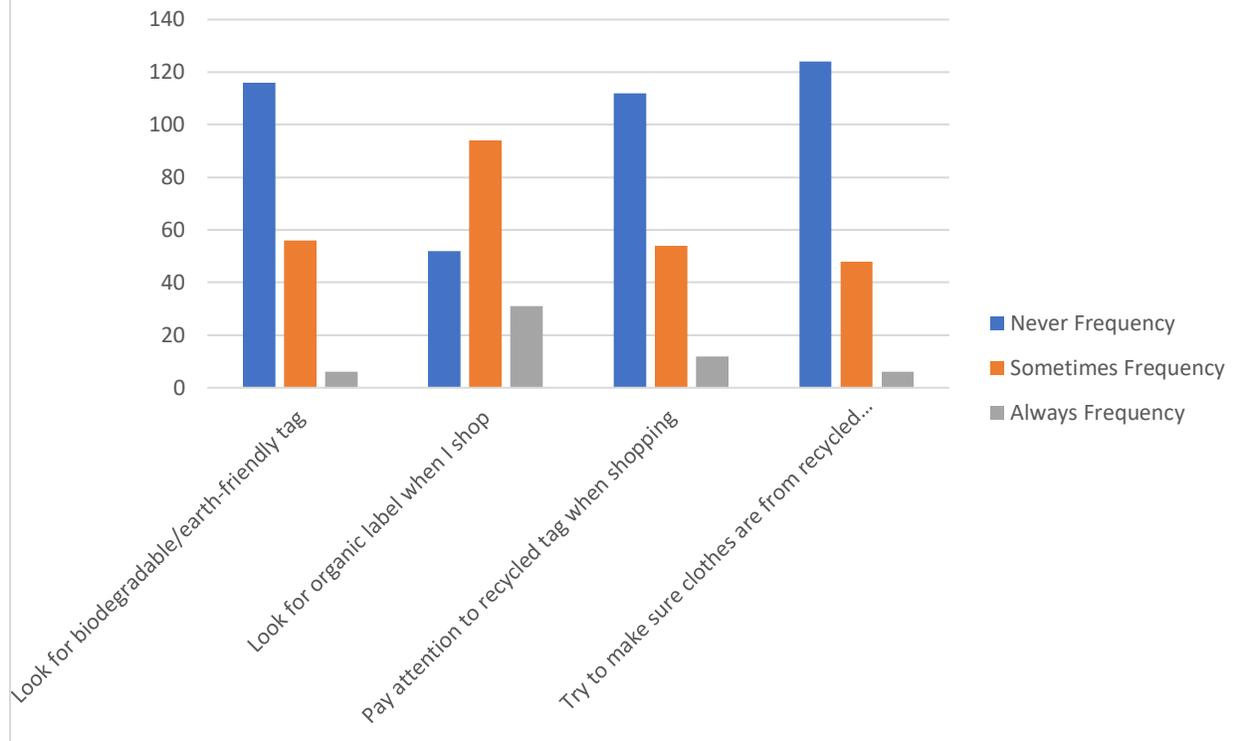


Chart 3
Frequency of Participants' Buying Behavior



Appendix 4: Tables

Table 1 Consumer Attitudes Regarding Ethical Issues:

Consumer Attitudes	Mean	Std. Deviation
I am aware of sustainable production issues in the textile industry.	3.02	1.30
I value sustainability when looking for clothes.	3.49	1.05
I Value Non- GMO material in clothes	2.88	1.12
I Value Non-GMO material in food	3.44	1.24
I think about the ethical impact of fur in clothing.	3.51	1.28
I think about the ethical impact of leather in clothing.	3.15	1.28
I think about the ethical impact of silk in clothing.	2.62	1.13
I know of celebrities and brands that endorse sustainability.	3.08	1.22
I think that sustainability is a relevant and important issue.	4.19	0.91

Table 2 Consumer Environmental Concern and Value:

Consumer Environmental Concern	Mean	Std. Deviation
I consider myself to be a Green Consumer	3.07	0.98
I think sustainability is something we should have future concern for	4.30	0.90
I read news articles on the greenhouse effect and other environmental issues	2.47	1.28
I think about the effects of greenhouse gases	3.09	1.37
I do research on sustainable textiles before shopping	1.46	0.80
Budget is important to me when considering the purchase of green products	4.13	1.00

Table 3 Environmental Behaviors of Family of Origin:

Eco-friendly family behaviors	# Reporting	% of Respondents
Recycled Regularly	74	41%
Regularly bought and ate organic food	32	18%
Discussed Environmental Issues	54	30%
None of the Above	76	43%

Table 4 Respondent's Own Environmental Behaviors:

Respondents' eco-friendly behaviors	Mean	Std. Deviation
Recycle Whenever Possible	5.54	1.378
Often use reusable water bottle	5.83	1.624
Often use reusable bag when shopping	4.37	1.883

Table 5 Report of Importance:

Importance	Quality	Price	Sustainability of clothing or brand	Attractiveness	Trendy Style
Mean	3.87	4.41	2.70	4.07	3.06
Std. Deviation	0.923	0.742	1.02	0.914	1.286