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THESIS

FASHION AND SUSTAINABILITY: INCREASING KNOWLEDGE ABOUT SLOW
FASHION THROUGH AN EDUCATIONAL MODULE

Submitted by

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ABSTRACT

FASHION AND SUSTAINABILITY: INCREASING KNOWLEDGE ABOUT SLOW FASHION THROUGH AN EDUCATIONAL MODULE

The over consumptive behaviors in society often cause a great deal of environmental impact. Many consumers are unaware of their impact when they purchase low quality, inexpensive apparel items, sometimes referred to as “fast fashion.” The fast fashion business model is based upon inexpensive, low-quality garments, quick production and sale, and high consumption. A sustainable alternative is the “slow fashion” business model, where consumers invest in the quality of the garment and are encouraged to hold onto it longer. The purpose of this study was to understand whether exposure to education about slow fashion regarding its environmental benefits would influence consumers’ attitude and purchase intentions toward slow fashion products. This study used the Theory of Planned Behavior with the additional variables of environmental values, shopping values, and knowledge of slow fashion. The methodology took place in three phases: a focus group, pre-educational survey and educational module to measure pre- and post-education differences, and post-educational survey, resulting in 163 usable responses for further analyses. Results showed that the educational module increased young adult consumers’ knowledge of slow fashion and attitudes towards slow fashion; however, purchase intention did not change. Among the additional variables to the Theory of Planned Behavior, results showed that only environmental values had significant influence in young adult consumers’ attitudes and purchase intentions towards slow fashion and that subjective knowledge was the strongest predictor of young adult consumers’ perceived behavioral control.

From the original framework of the Theory of Planned Behavior, attitude and perceived behavioral control were significant in predicting young adult consumers' purchase intentions towards slow fashion, subjective norm was not a significant predictor of purchase intention towards slow fashion. Discussion about the theoretical and managerial implications of the study was provided.

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DEFINITION OF TERMS

Attitude - Attitude is a function of behavioral beliefs, which characterize the individual's supposed consequences of the behavior (Ajzen, 1991; Eagly & Chaiken, 1993).

Environmental values - a set of beliefs of the way the environment should be (Corbett, 2006).

Fast fashion - inexpensive or cheap clothing that is considered fashionable. It is characterized by high-speed production and consumption (Joy et al., 2012).

Knowledge - can be divided into subjective, referring to what an individual's confidence in his or her knowledge, and objective, what an individual actually knows (Brucks, 1985; Corbett, 2006).

Perceived behavioral control - Perceived behavior control is an individual's perception of how easy or difficult it will be to execute the behavior, which is determined by control beliefs, which are beliefs about the probability that an individual has the resources and opportunities that are necessary to perform the behavior or achieve a goal (Ajzen, 1991; Eagly & Chaiken, 1993).

Purchase intention – “Intentions are assumed to capture the motivational factors that influence a behavior; they are indications of how hard people are willing to try, of how much effort they are willing to exert, in order to perform the behavior. As a general rule, the stronger the intention to engage in a behavior, the more likely should be its performance” (Ajzen, 1991, p. 181).

Shopping values – shopping value recognizes both a utilitarian outcome resulting from some type of conscious pursuit of an intended consequence and an outcome related more to

spontaneous hedonic responses captures a basic duality of rewards for much human behavior (Babin et al., 1994, p. 645)

Slow fashion - an alternative business model to fast fashion. Its focuses are on the value of local resources, transparent production, and sustainable and sensorial products. The consumer should think of the garment as an investment and choose to repair it rather than to dispose of it (Clark, 2008).

Subjective norm - The subjective norm is a function of normative beliefs, which represents what the individual perceives others that are close to them to believe about engagement in a behavior. (Ajzen, 1991; Eagly & Chaiken, 1993).

Sustainability - meeting the needs of the present without compromising the needs of the future generations (World Commission on Environment and Development-Brundtland Report, 1987).

Sustainable consumption - an “umbrella term” that combines meeting needs, improved quality of life, increasing use of renewable energy sources, minimizing waste, and looking at the entire product lifecycle (Oslo Round Table on Sustainable Production and Consumption, 1994).

CHAPTER 1

INTRODUCTION

Justification

Interest in sustainability has grown over the past several decades and is expected to keep growing as human societies continue to face challenges with natural resources depletion and a growing population. Sustainability studies are all encompassing; numerous articles showing how every field of study can be related to sustainability. Because there are not yet ready solutions for the many global challenges, continued research in sustainability is necessary. The World Commission on Environment and Development (1987) defines sustainability as meeting the current generation's needs without compromising the needs of future generations. Other definitions of sustainability typically include the triple bottom line concept, which incorporates the environment, people, and the economy. Often these are modeled as three separate, but interlocking circles. However, the nested model (see Figure 1) shows that the economy and people must exist within the boundaries of the environment; without a functioning environment, people and the economy cannot exist. Contrary to the concept of sustainability, our current economy is primarily based on growth; therefore business models are based upon coming up with new and better products and then selling as much as possible. To become more sustainable, there must be a shift in the economy where businesses are more focused on stability than on maximizing their growth (Crane, 2010). Sustainability is about balance and the way our economy is currently operating is unstable for the environment, therefore affecting people negatively (Crane, 2010; Honoré, 2004).

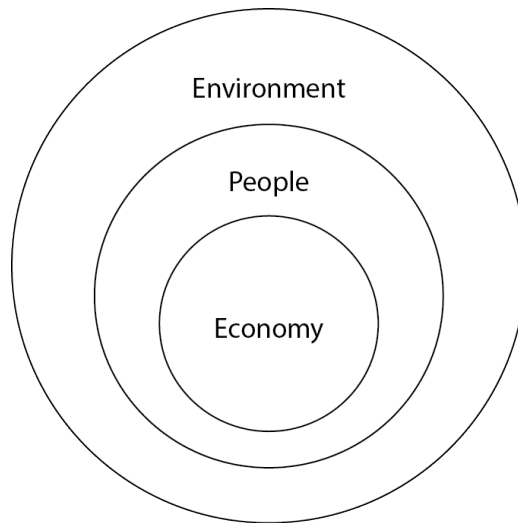


Figure 1: Three Nested Dependencies (Timpson, Dunbar, Kimmel, Bruyere, Newman, & Mizia, 2006)

In her book, *Sustainable Fashion and Textiles: Design Journeys*, Fletcher (2008) points out that as the interest in sustainability continues to grow, there is an increased initiative to understand more about the issues related to sustainability in the textile and apparel industry. The textiles and apparel industry has started to go through changes as it faces resource shortages, new channels of distribution, and shifts in the global economy (Pookulangara & Shepard, 2012). This type of industry shift indicates that sustainability is a complex issue without a clear right answer, which can be confusing and frustrating for apparel companies. Apparel companies will need to be content by creating more sustainable solutions for products and processes and updating their products as more knowledge on sustainability is discovered (Shedroff, 2009).

One sustainability-related issue in the textile and apparel industry is our consumption behaviors. The rate at which humans consume things, especially North Americans, is not sustainable. We have created a throwaway society where many of the things we purchase are disposable or not expected to last a long time (Fletcher, 2010). Our consumption habits have had a profound effect on both our local communities and global environments. For example, in 2008

it was estimated that 1 million kilograms of clothing were sent to the landfill (Waste Online as cited in Morgan & Birtwistle, 2009). In New York City, an estimated 2,000,000 tons of textiles are disposed of each year; about 45% of those textiles are usable in some way and about 10% are still wearable (Flynn, 2014). Corbett (2006) defines consumerism as a process, rather than a single product. Our consumption drives businesses to produce more products that are “newer” or “better” which then encourage individuals to feel that they need the newest and best products, discarding the older clothes. This type of throwaway culture is especially evident in the fast fashion business model, which is shaped by copying runway trends and having products in the stores within several weeks (Joy, Sherry, Venkatesh, Wang, & Chan, 2012). Watson and Yan (2013) found that the fast fashion consumer prioritize being on trend and enjoys the shopping experience with fast fashion retailers.

The fast fashion business model, focused on high volume and high consumption, leads to the disposal of large amounts of clothing (Joy et al., 2012). Disposal can mean throwing away, donating to a thrift store, or resale (Blackwell, Miniard, & Engel, 2005). Many believe that the fast fashion business model cannot be changed, but Fletcher assures “We created it. We can create something else” (p. 263, 2010). While there will be a transition period as the apparel industry changes, it is possible to change the apparel industry because it is consumer demands that continues to drive the fast fashion model (Crane, 2010; Fletcher, 2010). Morgan and Birtwistle (2009) found that many young female consumers are unaware of where and how clothing is made, the environmental consequences of clothing production, and how to properly dispose of clothing, which indicates the possibility that increased knowledge might help consumers to make more sustainable decisions.

An emerging alternative to the high volume, high consumption fast fashion business model is slow fashion. Slow fashion is an apparel business model that is based upon values and goals that incorporate awareness, responsibility, and forging relationships between creators and consumers (Fletcher, 2010). Recent trends have shown that independent fashion designers in Canada are using the slow fashion business model to further differentiate themselves from the increasingly popular fast fashion retailers (Leslie, Brail, & Hunt, 2014). The term “slow fashion” has developed recently, yet the concept is based upon returning to a time when the consumer knew who made their clothes and had a greater awareness of where their clothing came from. Because slow fashion is an emerging business model, there are few academic studies in this area and consumers may not have the knowledge of its environmental benefits or know where to shop for this type of clothing. Pookulangara and Shepard (2012), in an exploratory study in which young adult consumers were interviewed in the Southwestern United States, found that young adult consumers viewed slow fashion as an ideal lifestyle that they would work towards but felt they could not currently afford it. Respondents in their study did not feel that they had enough knowledge to make an ethical decision.

Slow fashion is a sustainable alternative to fast fashion because consumers are encouraged to hold onto their clothing longer and develop an emotional attachment to it, therefore disposing of less clothing over time. By examining whether, and to what extent, consumers understand the benefits of slow fashion and the environmental impact of fast fashion, clothing manufacturers will be able to more effectively market slow fashion products. If more consumers gain the knowledge of what slow fashion is and how it is a more sustainable alternative to fast fashion, there could be a shift away from consumption habits driven by fast fashion and towards more sustainable consumerism.

Purpose of the Study

The purpose of this research is to understand whether exposure to education about slow fashion regarding its environmental benefits along with the negative environmental impacts of fast fashion will influence consumers' attitude and purchase intentions toward slow fashion products. In particular, this work will use the Theory of Planned Behavior with the addition of psychographic variables (i.e. environmental values, shopping values, knowledge of slow fashion and fast fashion) to understand the current level of knowledge about the environmental impacts of fast fashion, the benefits of slow fashion, and the purchasing behaviors of young adult consumers. The study will examine consumers' attitudes and purchase intentions toward slow fashion products before and after an educational module. An educational module on the environmental impacts of fast fashion and the benefits of slow fashion will be created for this study to test young adult consumers' knowledge, attitudes, and purchase intentions toward slow fashion. Specific research questions to be answered by this study are:

1. Can an educational module help increase young adult consumers' knowledge of slow fashion?
2. Can an educational module help change young adult consumers' attitude toward slow fashion?
3. Can an educational module help change young adult consumers' purchase intentions toward slow fashion?
4. Whether and how do young adult consumers' environmental values, shopping values, and knowledge of slow fashion impact their a) attitudes, b) subjective norm, and c) perceived behavioral control toward slow fashion?
5. Whether and how do young adult consumers' attitudes, subjective norm, and perceived behavioral control impact their purchase intentions toward slow fashion?

Overall the aims of this study are to educate young adult consumers on the impacts of their apparel purchasing decisions and to encourage them to take a deeper look at where their clothing comes from. The results of this study may appeal to slow fashion companies who want to branch

out to young adult consumers. Slow fashion is a relatively new term and concept and this study will add to the growing body of literature in the area.

Conceptual Framework of the Study

The theoretical framework for this study is the Theory of Planned Behavior with additional motivational factors. The Theory of Planned Behavior was chosen to examine the different factors that affect a consumer's purchase intention toward slow fashion. This theory has been applied in many studies examining environmental behavior as well as studies specifically related to the textile and apparel industry.

The Theory of Planned Behavior. In 1947, Fishbein and Ajzen demonstrated that there are correlations between attitudes and behaviors. For example, a general attitude toward sustainability would correlate with buying environmentally friendly products (Eagly & Chaiken, 1993). Based on this correlation between attitude and behavior, the Theory of Reasoned Action was created to provide “a model of the psychological processes that mediate observed relations between attitudes and behaviors” (Eagly & Chaiken, 1993, p. 168). The Theory of Reasoned Action uses attitudes and subjective norms as determinants for an individual's behavioral intention. This theory evolved to include perceived behavioral control and became the Theory of Planned Behavior (Eagly & Chaiken, 1993). The Theory of Reasoned Action is still valid for behavior controlled wholly by desire, but this evolution of the Theory of Planned Behavior is applied to behaviors that are not completely under volitional control, such as purchasing behaviors where economic factors play a role in decision-making.

The Theory of Planned Behavior has four components that inform the end behavior: attitude, subjective norm, perceived behavioral control, and intention (See Figure 2). Attitude is a function of behavioral beliefs, which characterize the individual's supposed consequences of the

behavior (Ajzen, 1991; Eagly & Chaiken, 1993). The subjective norm is a function of normative beliefs, which represents what the individual perceives others that are close to the individual to believe about engagement in a behavior (Ajzen, 1991; Eagly & Chaiken, 1993). Perceived behavior control is an individual's perception of how easy or difficult it will be to execute the behavior, which is determined by control beliefs. Control beliefs are beliefs about the probability that an individual has the resources and opportunities that are necessary to perform the behavior or achieve a goal (Ajzen, 1991; Eagly & Chaiken, 1993). These three components work together to inform an individual's behavioral intention, which then predicts an individual's actual behavior. It must be noted that intention and behavior are not to be used interchangeably (Ajzen, 1991; Eagly & Chaiken, 1993). The model of the Theory of Planned Behavior can be seen below, showing the relationships among the components.

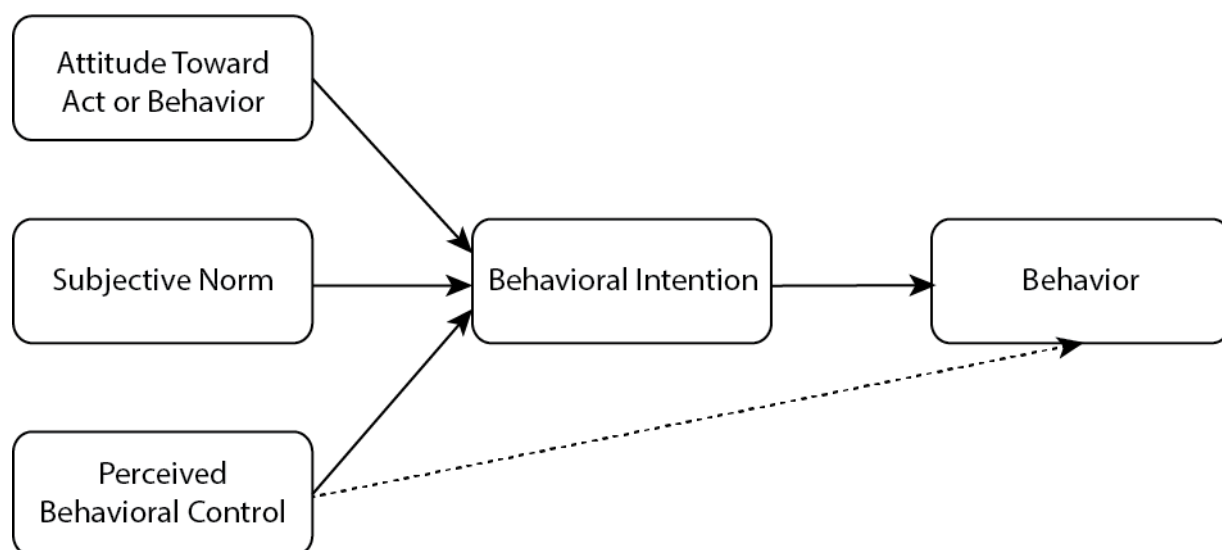


Figure 2: The Theory of Planned Behavior (Ajzen, 1991)

Additional variables. A conclusion of psychological research is that attitudes are only part of what predicts behavior; other factors such as resources and knowledge also inform behavior (Kang, Liu, & Kim, 2013). Three additional variables (i.e., environmental values, shopping

values, and knowledge) are incorporated in the Theory of Planned Behavior in this study to better understand young adult consumers' purchase intentions toward slow fashion.

Environmental values are a set of beliefs that an individual has about how the environment should be viewed (Corbett, 2006). Shopping values are usually divided into hedonic, referring to the pleasure found in shopping, and utilitarian, referring to a chore-like activity (Loureiro & Araujo, 2014; Babin, Darden, & Griffin, 1994). Knowledge, affecting a consumer's decision-making process, can be divided into subjective, referring to what an individual's confidence in his or her knowledge, and objective, what an individual actually knows (Brucks, 1985; Corbett, 2006).

These three variables are added to the Theory of Planned Behavior (see Figure 3) to be used as a guide for this study. Ideally, increased knowledge on the environmental impacts of fast fashion and the benefits of slow fashion will affect young adult consumers' attitude which will help them to develop more sustainable purchase intentions. This research also seeks to understand if consumers' environmental values and shopping values impact their purchase intentions toward slow fashion through attitude, subjective norm, and perceived behavioral control.

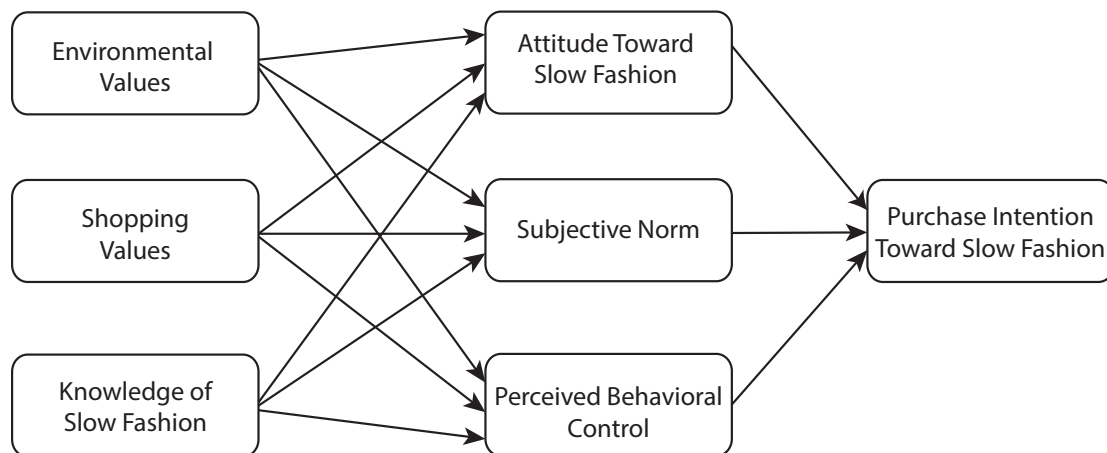


Figure 3: The Conceptual Framework of the Current Study

Potential Contributions

The overall goal of this study is to educate young adults on the environmental impact of their purchasing behaviors of fast fashion products and to enrich the knowledge about slow fashion. Increased awareness about clothing products could encourage consumers to shop for clothing in a more environmentally responsible way. The results of this study may appeal to slow fashion apparel companies that want consumers to understand more about their purchases. Investigating how consumers' knowledge affects their purchase intentions could reveal information about possible ways to encourage sustainable behavior.

Research in sustainability is very important as we continue to face issues with the increasing population, changing climate, and degradation of our environment. There is a need for a more sustainable alternative as the textile and apparel industry is driven by the low cost, low quality, high consumption model that fast fashion operates on (Fletcher, 2010). Beginning the process of changing our behavior now by increasing the knowledge about fast fashion will help to reduce the burden that future generations have in achieving sustainability.

CHAPTER II

LITERATURE REVIEW

Sustainability in the Textile and Apparel Industry

Sustainability is popularly defined as meeting the needs of the present without compromising the needs of the future generations (World Commission on Environment and Development-Brundtland Report, 1987). This common definition is used to help people better understand what sustainability means and what its goals are. The Oslo Round Table on Sustainable Production and Consumption (1994) recognized that sustainable consumption is an “umbrella term” that combines meeting needs, improved quality of life, increasing use of renewable energy sources, minimizing waste, and looking at the entire product lifecycle.

Industry research shows that for effective implementation of sustainable business practices, the passion of the head or founder is typically the driving force for incorporating sustainability throughout a large firm (Beard, 2008). The environmental interests of the company can trickle out to the consumers, who might only learn of environmental issues through company marketing. Many companies have taken environmental initiatives. For instance, Prana has partnered with bluesign to build a more sustainable supply chain. “The bluesign® System is the highest standard in the textile industry for environmental health and safety and chemical management. It takes into account air and water emissions, as well as occupational health and resource productivity when crafting its guidelines” (Prana, 2014). One important aspect of sustainability is to be transparent and to communicate company business practices to the consumer. Sustainably oriented brands can partner with bluesign and choose to be more transparent with their supply chain (Bluesign, 2013). Each product produced under the bluesign regulations is

given a label, allowing the consumer to know more about the supply chain of the product and the company is able to build brand credibility as the supply chain becomes more transparent (Bluesign, 2013).

Historically, the textile and apparel industry has had one of the least transparent supply chains. Currently, many companies do not have complete interaction throughout their entire supply chain, giving no transparency to how materials or products are made (Chouinard & Brown, 2007). This lack of transparency in the supply chain is an issue because consumers passively trust manufacturer's tests of quality and sustainability, without questioning the traceability of the products they are purchasing (Hepburn, 2013). However, there are companies, like Prana, that are working towards complete transparency with their consumers. Patagonia, for example, has created "The Footprint Chronicles" so that consumers can trace the fabric, components, and the production of their garment (Polley, 2012). This act of transparency has required Patagonia to take a deeper look at where their materials are coming from. A recent challenge that the company faced is tracing their down insulation to confirm that it had been ethically sourced. Patagonia can now verify that all of the down used in their jackets sourced from geese that were not force-fed or live plucked. Patagonia began this project in 2007 and is currently the only brand that has been able to do it, though the project is encouraging more companies to be more transparent in their supply chain (Patagonia, 2014).

The sustainability of the design and development of products has been greatly researched in academics. It is understood that more knowledge is needed in the apparel industry on extending product lifecycle to promote sustainable development (Niinimäki & Koskinen, 2011). Prothero, McDonagh, and Dobscha (2010) state that sustainability is now being seen through a more holistic and global lens, influencing the products consumers want to purchase. Many design

models for sustainable products have been proposed, including “Design for Sustainability (DfS), which seeks to embed sustainability into design by incorporating the social, economic, and institutional aspects into products (Spagenberg, Fuad-Luke, & Blincoe, 2010).

Following the design of sustainable products, the supply chain and production have also been examined from a sustainability viewpoint. According to Jørgensen and Jenson (2012), companies have many different strategies in how they make their supply chain more sustainable, such as supplier relations and sourcing. There must be drivers to make changes in the supply chain and production, which can come from the internal company, the market, or any context (i.e., a law) that forces companies to make changes (Caniato, Caridi, Crippa, & Moretto 2012). Sustainability in the supply chain and production can be seen in many ways from environmentally friendly materials, less energy used, less water, less emissions.

The way companies communicate their sustainable practices to consumers is very important because there could be a change in materials or increase in price. When Patagonia switched from conventional cotton to organic cotton, they needed to find a way to communicate the increase in cost and the change in the material to the consumer (Chouinard & Brown, 1997). Consumers tend to be more receptive to messages that place importance on the environmental benefits of materials rather than the negative environmental impacts of the non-sustainable option (Hustvelt & Dickson, 2008; Chouinard & Brown, 1997). Marketing the benefits of a sustainable method of producing and highlighting the negative impacts of the alternative could be effective in increasing the amount of consumers that purchase sustainably (Hustvedt & Dickson, 2008). Jørgensen and Jenson (2012) found that there are various ways companies can convey their sustainable practices to the consumer through eco-labeling, but that additional labeling, such as in the form of a hang-tag, explaining the environmental impacts had little

impact on consumers purchasing behaviors. Phau and Ong (2007) found that shoppers had better responses to product-related messages, rather than cause-related messages when it came to environmental claims about products. However, there is still confusion surrounding the wording and understanding of what sustainability related words mean (Thomas, 2008). These issues may be confusing to consumers that would like to shop more sustainably, but do not have adequate knowledge.

Brinkman's paper suggests that the combination of business ethics and consumer behavior could be profitable (2004). A study by Cowan and Kinley (2014) shows that factors such as environmental attitude and knowledge, perceived environmental impact, and past purchases impact adult consumers purchase intentions towards environmentally friendly apparel. Salazar, Oerlemans, and Van Stroe-Biezen (2013) show that there is evidence of social influence or "herd behavior" when young adult consumers make purchasing decisions related to sustainability and that social norms play a large role in behavior. Consumers that are more dependent on others' opinions often have less confidence in their purchasing decisions and the products they select (Loueiro & Araujo, 2014, p. 399).

Fast Fashion

Fletcher (2008) defines fast fashion as a "combination of high speed production-tracking sales with electronic tills, and just-in-time manufacturing that now makes it possible to turn a design sketch or a sample into a finished product in as little as three weeks" (p. 161). Similar to the fast food industry, the fast fashion business model is defined by high speed, high volume, and high consumption. For both food and fashion, "fast" does not just refer to the speed, it is an economic tool used to increase product and grow profit (Fletcher, 2010).

“Fast” also refers to the rate of disposal as these products are designed with the intention that they will only last 10 washes (Joy, Sherry, Venkatesh, Wang, & Chang, 2012). With this in mind, designers focus on making these items on trend and spend less consideration on the quality of the fabric or the construction, which allows price points of fast fashion products to be kept very low. There is quick turnover, leaving consumers with very little guilt about their purchases and the later disposal of these products (Joy et al., 2012). What many fast fashion consumers do not realize is the passivity of their fashion purchases; they are not connecting with the garment or the process in which the product made. There is no interaction with the maker or the process of creating the garment, leaving disappointment, and then disappointment again with the disposal of clothing when consumers grow tired of the clothing or it is no longer on trend (Fletcher, 2008).

Fast Fashion Brands. Many brands have chosen to operate on this fast fashion business model such as H&M, Zara, Forever 21, Uniqlo, and Joe Fresh. The fast fashion business model practiced by these companies leaves consumers with little or no emotional connection to their garments as they are mainly focusing on what is new and on trend at low prices (Fletcher, 2008). Consumers are left unaware of the negative environmental impact of their decisions to shop at these stores or that there is an alternative option for them. Fast fashion brands keep price points very low. The majority of tops sold at Forever 21 are \$15 or under (Forever 21, 2015). H&M has a slightly higher price point with many tops being \$20 and under (H&M, 2015).

Consumer Characteristics. In a study by Morgan and Birtwistle (2009), more than 50% of their young adult female participants purchased fashion garments every two weeks and more than 75% bought something every month. They like the excitement of shopping and typically purchase frequently and in quantity (Watson & Yan, 2013). Research has also shown that fast fashion consumers are often described as “pleasure seeking hedonists” who are primarily

concerned with their immediate satisfaction, rather than the well being of the planet (Crane, 2010). Because of the low price points of fast fashion products, many young consumers expect to purchase similar products at a low price (Morgan & Birtwistle, 2009). The consumers that purchase fast fashion are typically more concerned with being “on trend” at lower prices than the environmental impact of their clothing (Morgan & Birtwistle, 2009). A conventional fast fashion consumer typically has a low level of environmental concern, or if there is environmental concern, the consumer may find shopping for sustainable products inconvenient (Cowan & Kinley, 2014).

The fast fashion consumer can also experience barriers to pro-environmental consumption. The consumer may not have enough knowledge to know where to shop for environmental products and may not feel that it is urgent enough to do the research. Environmental degradation is gradual and consumers tend to feel that there will always be time to find a solution. In a blog study on motivational drivers of avoidance, Kim, Choo, and Yoon (2012) found that there are consumers that avoid fast fashion retailers because of its environmental impacts and low quality. Institutional factors, such as lack of infrastructure, can be also barriers for pro-environmental behavior. Kollmuss and Agyeman (2002) found that economic factors play a huge role in consumers’ decisions and there is a lack in understanding of consumers purchase intentions toward sustainable products and how they actually spend their money.

Environmental impact of fast fashion. There is an unmistakable correlation between increased textile and clothing waste and fast fashion (Morgan & Birtwistle, 2009). Fast fashion consumers feel little guilt about the disposal of these items, mostly because of the low price point at which they purchased them and the same low price point for buying new clothing. Many fast fashion consumers choose to discard their clothing because they have grown tired of the look,

not because the clothing is worn out or at the end of its useful life (Fletcher, 2008). Fast fashion items are designed with a short lifecycle and little emphasis on quality. Consumers are discarding clothing at a higher rate than before because it has become easy to purchase cheap, on-trend clothing from fast-fashion retailers (Morgan & Birtwistle, 2009). A great deal of energy is used to create these garments but they have a shorter life span where the least expensive option is often to just buy new instead of repairing worn clothes (Wanders, 2009). This fast fashion business model has existed partially because disposal costs are externalized and consumers are not affected (Cooper, 2005). Externalized costs mean that individual consumers do not feel the costs in their wallets, rather costs are seen through increased damage to the environment and the depletion of natural resources due to the supply chain demands (Fletcher, 2010 p. 261). The true cost of something includes the combination of social, environmental and financial costs (Shedroff, 2009).

Fast fashion clothing products are not easily recyclable because they tend to have a synthetic nature (Morgan & Birtwistle, 2009). One option for disposal is to take items to a thrift store; however, thrift stores are now receiving so many donations that they have excess clothing that they will not be able to sell. This overconsumption phenomenon has led to the majority of clothing donated to thrift stores being donated again to African countries (Claudio, 2007). Consumers are left unaware of the effects of their purchasing behaviors and continue making the same decisions. Increased consumer awareness of the supply chain and fate of clothing, especially fast fashion clothing that is designed with a shorter product lifecycle in mind, is the best hope for sustainability (Claudio, 2007). This increased awareness is one of the core values of slow fashion, a sustainable alternative to fast fashion.

Slow Fashion

As a society, consumers are obsessed with speed, however this does not always win. Evolution is based on survival of the fittest, not survival of the fastest (Honoré, 2004). Our obsession with speed has gone so far that we now devour natural resources faster than they can be replenished (Honoré, 2004). The obsession with speed in our economy emphasizes quantity over quality, leaving less time for quality control, and allowing errors to happen (Honoré, 2004). Slow can be defined as calm, receptive, and reflective. Slow does not always refer to a speed, more a state of mind where presence and attentiveness are encouraged (Parkins & Craig, 2006). It is about finding the right speed and achieving a balance between fast and slow speeds. Going slower can help people to live a more fulfilled life and to be more productive (Honoré, 2004).

The term “slow fashion” arose from the slow food movement that began with a group of Italian activists who were used to long meals and a regionalized cuisine as a response to the expanding fast food movement (Fletcher, 2010). “Slow food began as the defense of the quiet material pleasures of cooking and eating and has since grown into a vehicle for reconnecting to the communities and bioregions through the food on their plates” (Fletcher, 2010, p. 261). Strauss and Fuad-Luke (2008) created a set of principles for slow design, which can be applied to fashion design, product design, or any other type of design. These principles were created to serve as a tool or as a guide, not absolute truths. The first principle is to reveal materials or processes that have been forgotten, for instance local manufacturing. The second principle is to expand beyond perceived functionalities; this could be to reuse a garment in a different way from originally intended. The third principle is effective consumption, which can be seen as the consumer thinking about their true needs before purchasing. The fourth principle is to engage across the supply chain, meaning that the end consumer would understand more about the supply

chain for example, the agricultural processes that produced the cotton. The fifth principle is to encourage participation from users, where the consumer could help to create the garment. The sixth and last principle is to evolve and adapt to changes environments and systems over time, meaning that processes should constantly evolve to become more efficient as new technology is developed. This principle also relates to the durability of these products, as that are intended to last a long time and evolve as trends change.

These principles guide the design and development process, encouraging designers and consumers to think differently about the clothing they wear and to reconnect with an older, simpler way of living (Strauss & Fuad-Luke, 2008). These principles can be applied to the textile and apparel industry in various ways. Different ways of manufacturing garments can be revealed and applied to modern designs. Clothing items can expand past their original function to continue to be used. Consumers can spend more time reflecting on the purchase and become more aware of their individual impact. Supply chains can become more transparent and honest. Consumers can take a more active role in shopping by researching more about their clothes and making more sustainable purchases. Clothing design can evolve over time to adapt to different environments and systems.

An alternative, though not the direct opposite, of fast fashion is slow fashion. Slow fashion is a relatively new concept in the textile and apparel industry, therefore the definition is still evolving (Pookulangara & Shephard, 2013). Clark (2008) defines three goals of slow fashion as valuing local resources and distributed economies, transparent production systems, and creating sustainable and sensorial products. This movement rejects the large-scale, expedited models that are the standard for industry today. In this same way, slow fashion urges consumers to reconnect with an old way of living, encouraging them to take a more active role in their purchasing

decision. Pookulangara and Shephard (2013) proposed a slow fashion process across the design, production, and consumption phases (see Figure 4).

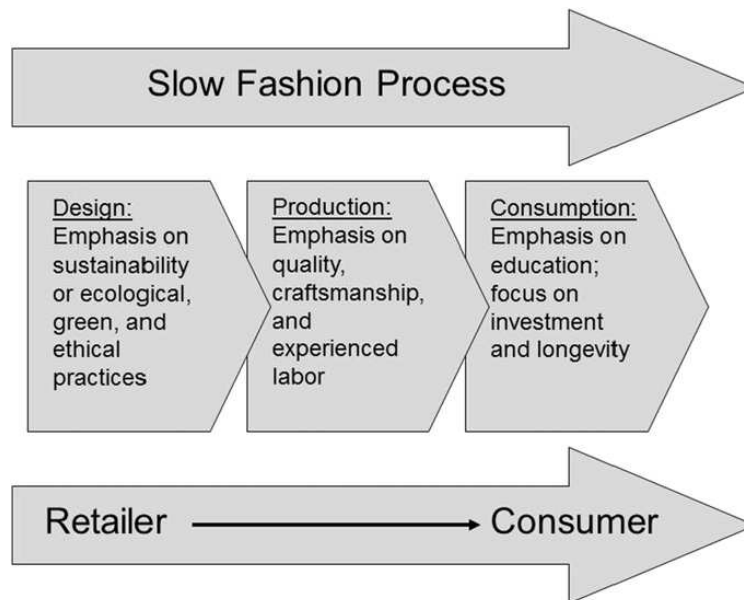


Figure 4: The slow fashion process, reprinted from “Slow fashion movement: Understanding consumer perceptions – An exploratory study by S. Pookulangara and A. Shephard, 2013, *Journal of retailing and consumer services*, 20, p. 202.

Slow fashion is based on different values than those of the fast fashion industry. It should be made clear that slow fashion is not the same business model but with classic designs, nor is it the same production model with longer lead times; it is an entirely different way of designing and producing (Fletcher, 2010). Slow fashion has the potential to create a new beauty that includes abstract and emotional factors that are the foundation of consumers’ choices (Clark, 2008). The emotional connection between the consumer and the garment is a key component to slow fashion and encouraging consumers to dispose of less and purchase more durable garments. Local design and manufacturing is also encouraged as consumers can then take a more active role in their shopping experience by engaging with the maker of their garments. Jung and Jin (2014) identify five dimensions of slow fashion that show it is a broader concept that just

sustainable apparel. These dimensions are equity, localism, authenticity, exclusivity or diversity, functionality.

Slow fashion brands. Localism helps to create a less cloned society because different products are sold in different areas. Based in North Alabama, Alabama Chanin employs local women to produce slow fashion products using old world craft, couture style, and organic materials. Garments are sewn by hand and seamstresses are prepared with lessons of mindfulness and are told they should love their thread to help the consumer create an emotional bond with the garments (Fletcher, 2008). The prices of Alabama Chanin's garments range from a few hundred to a few thousand depending on the amount of detail in the garment. The company also has several DIY options for clothing and housewares (Alabama Chanin, 2015). Another company that employs a slow fashion business model is Voormi, located in Pagosa Springs, Colorado. It is part of their business plan to reconnect with a time when people made things from materials that are close to them. As part of this ethic, Voormi sources wool from local high elevation growing regions and the company has found that because of the sheep's high elevation, their wool fibers have a greater crimp, making it warmer (Voormi, 2014). Voormi's jackets are in the \$200-\$250 range and their base layers are \$129 (Voormi, 2015). Another Colorado brand, Melanzana, has been making garments in Leadville for over 20 years. They reject the "grow-at-all-costs" mentality, have a loyal following of customers, and are authentic without having to say it (Langlois, 2014). Melanzana uses the same Polartec fabric as its mass-produced competitors and their popular micro-grid hoodie retails at \$69 (Melanzana, 2013). The passion of the company for slow fashion business practices can trickle out to the consumer, allowing the consumer to create an emotional bond with their clothing. This deeper connection with clothing is a big step towards more sustainable consumption.

Larger companies can be considered slow fashion as well. Eileen Fisher sells classic clothing that consumers can feel good about purchasing. The company has information about the supply chain and descriptions of the wording surrounding the clothing label easily accessible on their website so that consumers can have a greater understanding of their garments. The company asks for their clothing back when the consumer is done with it so that they can recycle it. Eileen Fisher wants to be an example of what business practices they feel should be universal. They were the first U.S. fashion company to become bluesign certified and they continue to examine their practices and strive to be more sustainable (Eileen Fisher, 2015). The company has plans to become 100% sustainable by the year 2020 and has defined eight categories in this challenge: materials, chemistry, water, carbon, conscious business practices, fair wages & benefits, worker voice, and worker & community happiness (Ritchie, 2015).

Consumer characteristics. The relationship between the consumer and maker and the emotional bond that a consumer has with a product are key components of slow fashion, and this is possible on a smaller scale model than the fast fashion business model. Slow fashion brings a new vision to sustainable design; consumer pleasure is built from awareness and responsibility, not constant consumption. Because of this increased awareness and responsibility, consumers are more likely to form an emotional bond with their clothing, helping consumers to keep their clothing longer and take better care of it (Wanders, 2009). A component of slow fashion is appropriateness, which refers to making a product long-lasting by making it useful for a long time, which is different from just making a product durable or last a long time (Shedroff, 2009). A consumer will continue to use or wear a long-lasting product for a long period of time and then choose to repair or upgrade the product instead of dispose of it (Fletcher, 2008). Emphasis is

placed on slowing production and consumption, therefore overproduction and excess are reduced (Wanders, 2009).

The design emphasis is on quality throughout the development process including the environment, business model, and working conditions (Fletcher, 2008). Consumers invest in the integrity of the product because they know the source. By looking deeper into the process, consumers develop a greater appreciation of the product (Wanders, 2009). Because of the increased awareness of slow fashion, local design and manufacturing is almost encouraged. Local design and manufacturing means a smaller environmental footprint and the supply chain can be more transparent to the consumer. With local design and manufacturing, the consumer is more able to understand the processes and have a deeper connection with their garment.

Few studies have examined the slow fashion consumer, but it can be inferred that the slow fashion consumer is believed to have different characteristics than the fast fashion consumer. Relevant studies have revealed that the slow fashion consumer makes purchases that compliment their existing wardrobe. Slow fashion is based on timeless style and quality and the consumer will think about how these purchases will fit with things already owned and how these items will expand their wardrobe (Pookulangara & Shephard, 2012). This consumer places emphasis on fit, quality, and investment, which is a strong contrast to the fast fashion consumer who focuses on quantity rather than quality (Watson & Yan, 2013). Pookulangara and Shephard's (2012) study sought to better define slow fashion and its consumers. The young consumers stated that the slow fashion lifestyle was more suited for their parents' generation unless the economic times were hard and they were looking to reduce consumption. The young adult consumer places a higher priority on dressing on trend. The researchers concluded that consumers do not know enough about slow fashion to make an informed decision.

Environmental impact of slow fashion. The slow fashion design process is more involved than the fast fashion design process. Clothing is more thoroughly examined for quality and it is made sure that the style is appropriate and will last for many years to come (Fletcher, 2008). Slow fashion has less of an environmental impact because consumers are encouraged to buy less and dispose of less, therefore not creating as much clothing waste as the fast fashion business model. There is also a great potential to contribute to a local economy because localism is encouraged in slow fashion. A localized and smaller supply chain decreases the need for materials and products to be shipped across the world, lessening the footprint that slow fashion products have (Clark, 2008). Pookulangara and Shepard (2012) found that the slow fashion consumer is typically more environmentally conscious of their purchase decisions. The consumers want to invest in the process of their garment and the garment itself. This emotional investment and attention to quality leaves the consumer disposing of less.

Factors Influencing Consumer Purchase Intentions

The Theory of Planned Behavior has four components that inform the consumer's end behavior: attitude, subjective norm, perceived behavioral control, and intention. Attitude, subjective norm, and perceived behavioral control work together to inform an individual's behavioral intention, which then predicts the individual's actual behavior (Eagly & Chaiken, 1993; Ajzen, 1991). The Theory of Planned Behavior is widely used in academic studies regarding sustainable purchase intentions and behaviors. Dowd and Burke (2013) performed a study that examined consumers' intentions to purchase sustainably sourced food and found that health and ethical values were predictors of intentions to purchase sustainably sourced food. Using the Theory of Planned Behavior with the addition of measures for the moral bases of behavior, Arvola, Vassallo, Dean, Lampila, Saba, Lähteenmäki, and Shepherd (2008) found that

using a moral dimension to market organic food is justified because of the impact it has on consumers' attitudes, subjective norms, and perceived behavioral control because consumers feel more of a need to shop sustainably. Lee and Yun (2014) found that positive attitudes towards organic foods were formed from "perceptions of the nutritional content, ecological welfare, and sensory appeal attributes" (p. 266). These improved attitudes ultimately led to an intention to purchase organic food. In a study on the impact of food-related values, such as purchasing organic food because of ethical and/or moral values, on purchase intention, Hauser, Nussbeck, and Jonas (2013) found that food-related values have a large role in food consumption.

The Theory of Planned Behavior has also been used in the area of textile and apparel. Kang et al. (2013) used the Theory of Planned Behavior to measure how consumer's knowledge, perceived effectiveness and perceived personal relevance on the consumption of sustainable apparel. Organic cotton clothing was the main clothing example for sustainable apparel being studied in their study. Although this study examines the correlation between knowledge and purchasing behavioral intention, it did not measure change in behavior due to increased knowledge. Salazar et al. (2013) found that young adult consumers are influenced by the subjective norms and exhibit "herd behavior", or acting in a way that is perceived as acceptable by their peers, when it comes to shopping and must feel like it is normal to shop for sustainable clothing items.

Additional Variables

Environmental values. Environmental values are a set of beliefs that an individual has about how the environment should be viewed (Corbett, 2006). Historically, nature has been seen as having endless resources that are there for the taking. However, as our resources have depleted, there has been a shift to being more efficient with the resources we use and conserving

what we have (Corbett, 2006). The development of an environmental ideology begins in childhood, as childhood experiences in nature are one of the strongest correlations with pro-environmental behavior (Kollmouss & Agyeman, 2010; Corbett 2006). Direct experiences, those involving actual physical contact with nature, are stronger than indirect experiences, which are more restricted and managed, for correlations between attitudes and behaviors (Kollmouss & Agyeman, 2010; Corbett, 2006). These direct experiences, ones in which the person is out in nature themselves, can lead to an individual feeling a sense of place, which is very important to the development of environmental values. This emotional attachment to a place can lead to an individual caring a great deal about how the place is used (Corbett, 2006).

Environmental values are often targeted in advertising campaigns because those values are linked with emotions that consumers have about the environment. Antonetti and Maklan (2014) suggest that emotional targets are more effective than factual information when persuading consumers to make more sustainable choices. These choices can lead to guilt or pride about purchasing a product. “Consumers should learn from experiencing guilt or pride that they are personally responsible for bringing about negative or positive outcome through their consumption choices” (Antonetti & Maklan, 2014, p.122). These strong emotions should lead consumers to recognize the responsibilities they have when making purchasing decisions. Hauser et al. (2013) found that consumer had a more positive attitude towards organic food because of their environmental values. As consumers become more aware of the environmental impact of fast fashion they could begin to feel guilt from their purchase and could be more proud to wear a slow fashion-clothing item. These environmental values are likely to influence consumers’ attitudes, therefore impacting their purchasing decisions. With stronger

environmental values, consumers are more likely to have a more positive attitude towards slow fashion.

Shopping values. Shopping values are often divided into utilitarian and hedonic values for describing shopping's rewards. The utilitarian values are more often related to shopping as a chore or an errand. With utilitarian shopping, the consumer is searching for an intended outcome (Babin et al., 1994). Hedonic values are more related to the spontaneous nature of shopping. This is a more subjective and personal act of shopping involving instant gratification, love for the act of shopping, and fulfilling desires (Babin et al., 1994). When consumers shop at department stores or on the Internet, they tend to experience more hedonic shopping values more than when shopping at a discount store because they feel they are escaping from their everyday lives (Seo & Li, 2008).

Hedonic shopping values have been further researched to better understand consumers' motivations. Mathwick, Malhotra, and Rigdon (2001) expand upon the basic shopping values of hedonic and utilitarian proposed by Babin et al. and examined how the experiential value of the shopping experience affects the consumer. Arnold and Reynolds (2003) categorized six different types of hedonic shopping in their study: adventure shopping which refers to the consumer feeling as if he or she has entered another world, social shopping which refers to shopping with others, gratification shopping which refers to shopping to treat oneself, idea shopping which refers to innovative or new products, role shopping which refers to the joy of shopping for others, and value shopping which refers to looking for sales or discounts. Some of these hedonic values are more applicable to slow fashion than others, such as adventure shopping because the consumer may feel as though he or she has stepped back in time to when you knew who made your clothing and idea shopping because slow fashion is very much a different lifestyle.

Depending on the type(s) of shopping values, young adult consumers might have a positive or negative attitude towards shopping for slow fashion. If the consumer is dependent on others' opinions, subjective norms will strongly relate to shopping values. Knowing where and how the consumer typically shops will affect their perceived behavioral control.

Knowledge of slow fashion and fast fashion. Knowledge can be divided into subjective and objective knowledge. Subjective knowledge refers to how confident an individual is in his or her knowledge. Objective knowledge is only what the individual actually knows (Brucks, 1985). Brucks (1985) states that both types of knowledge likely play a role in consumers' decision-making behavior. These two types of knowledge play into an individual's level of confidence when making purchasing decisions. If an individual has a lack of confidence, he or she might have an increased motivation to search for more information.

Knowledge can have a role in sustainable consumer behavior, specifically apparel. If consumers are more aware about the impact of their clothing, then they could be more likely to make sustainable purchases. Kang, Liu, and Kim (2013) found that there is a positive correlation between the consumer's knowledge and perceived personal relevance of sustainable clothing, in particular organic cotton, and the purchase intention. They found that if consumers knew more about sustainability, then they were more likely to purchase organic cotton. This study was done just with the consumer's base level of knowledge; the difference before and after education was not measured. Because slow fashion is a new term, it is very likely that consumers do not have enough knowledge about it to understand the environmental benefits of purchasing slow fashion clothing. More knowledge on slow fashion and its environmental benefits could lead to consumers having a more positive attitude towards slow fashion products and thus allowing consumers to shop more easily with the concept in mind.

CHAPTER III

METHODOLOGY

The goal of this study was to better understand the purchasing intentions toward fast fashion and slow fashion among young adult consumers and to test the effect of education on the potential change in purchase intention away from fast fashion and toward slow fashion. Five research questions were asked: 1) Can an educational module help increase young adult consumers' knowledge of slow fashion? 2) Can an educational module help change young adult consumers' attitude toward slow fashion? 3) Can an educational module help change young adult consumers' purchase intentions toward slow fashion? 4) Whether and how do young adult consumers' environmental values, shopping values, and knowledge of slow fashion impact their a) attitudes, b) subjective norm, and c) perceived behavioral control toward slow fashion? 5) Whether and how do young adult consumers' attitudes, subjective norm, and perceived behavioral control impact their purchase intentions toward slow fashion? The Theory of Planned Behavior served as a base model for this study. Three additional factors (i.e., environmental values, shopping values, and knowledge) were added to better understand the purchase intention of young adult consumers. The methodology took place in three phases that are described below. Phase I was a focus group, Phase II was the pre-educational survey and educational module, and Phase III was the post-educational survey.

Phase I: Focus Group

Sampling. A focus group was held using 3-6 college students with a question-led discussion on their knowledge of fast fashion and slow fashion and their apparel related purchasing behavior. Because slow fashion is a newer term and there are few studies on the

subject, data collected from the focus group helped inform the development of the survey and educational program. Participants were college students, age 18 or older, and were interested in sustainable clothing. Participants were given the incentive of a free pizza dinner to participate in this focus group.

Data collection procedures. Participants were recruited via flyers posted around the Colorado State University campus. The focus group began with a consent form and questionnaire (Appendix B: Part I) to collect demographic information. The discussion was led by the researcher using questions developed from the literature review (Appendix B: Part II). This discussion was led by open-ended questions and lasted about one hour. The focus group was recorded and then transcribed.

Data analysis. The recorded discussion was transcribed and then coded. Key words and concepts were used to help shape the surveys and educational module that were used in phases II and III.

Phase II: Pre-Educational Survey and Educational Module

Sampling. Approximately three hundred college students (male and female) were recruited as participants. According to a study by Morgan and Birtwistle (2009), this age range is the target market for fast fashion retailers. The students were recruited from classes in the apparel and merchandising department at Colorado State University in the Fall 2015 semester. Young adult college students were chosen for this study because young adult consumers are the primary target market for fast fashion retailers such as Forever 21 (Joy et al., 2012).

Data collection procedures. A pre-educational (Appendix D) survey was given to the participants. The survey was distributed during class and took approximately 20 minutes. The survey inquired about demographics, environmental values, shopping values, and knowledge

related to fast fashion and slow fashion (knowledge of the characteristics, brands, and environmental impact), attitude, subjective norm, perceived behavioral control, and purchase intentions. The survey had multiple choice questions, true/false questions, and 7-point Likert scale questions with answers ranging from strongly disagree (1) to strongly agree (7).

Participants were asked to include the last four digits of their student ID number to allow matching of responses so that a comparison can be made between the pre-educational and post-educational survey. Email addresses were collected so that students could be invited to participate in the post-educational survey (Appendix H). Student identities were kept anonymous. To encourage participation in the study, extra credit points were given to students who completed the survey, with instructor's consent.

Educational module. After the pre-educational surveys were completed, there was an educational module (Appendix E). The module, in a PowerPoint presentation format, lasted approximately 20 minutes. Questions were asked during the presentation to check for understanding and small prizes were handed out. The module was posted to the professors' course pages to serve as a reinforcement tool to help the young adult consumers learn more about slow fashion and to shop more sustainably. The information in this module was developed from information from the existing literature and was refined by themes and concepts that emerge from the focus group.

Data analysis. The data from this survey were analyzed with the data from the post-educational survey in phase III. Student ID numbers were used to match the pre-educational and post-educational survey data.

Phase III: Post-Educational Survey

Sampling. All of the participants from phase II were invited via email and cover letter (Appendix F) to complete the post survey by an email link to an online format survey (Appendix G) two weeks after the pre-educational survey and educational module. Pre-educational surveys and post-educational surveys were matched using the last four digits of the students ID numbers to compare the effect of increased knowledge of slow fashion and fast fashion on attitudes and purchase intention. Participants who completed both pre- and post- surveys were eligible to win one of two \$20 Visa gift cards in a raffle after the surveys have been collected. Because student ID numbers were collected for survey pairing, professors were able to offer extra credit for study participation.

Data collection procedures. A post-educational survey, in an online format (Appendix G), was emailed two weeks after the educational module to all participants from phase II and participants were given one week to complete the survey. The two to three week timeline was chosen because, according to a study by Morgan and Birtwistle (2009), the majority of fast fashion consumers typically go to fast fashion retailers every two to four weeks. The post-educational survey asked the same questions as the pre-educational survey and additionally asked questions about the effectiveness of the educational module using a 7-point Likert scale ranging from strongly disagree (1) to strongly agree (7). The initial email was sent two weeks after the educational module, with a follow up reminder email four days later. Extra credit was offered to students who participated in the post-educational survey, with the instructor's consent.

Data analysis. The data were organized by the last four digits of the participants' student ID number to match the pre-educational and post-educational survey data so that they could be

compared. Duplicate surveys and surveys with missing information were removed and the final sample size was 163 participants. A paired sample t-test was conducted to examine whether there are differences regarding attitudes, purchase intention, and knowledge between the pre-educational survey and post-educational surveys. Regression analysis was conducted to examine the relationships among variables in the theoretical framework.

Instrument Development

Focus group. The focus group helped to better understand young adult consumers' perspectives on fast fashion and slow fashion. This focus group served as a guide to the development of the surveys and educational module because there has been little academic research in the area of slow fashion. First of all, demographic information and a short personal survey on apparel behavior related questions (Appendix B: Part I) were given to participants. Examples of questions are "How much do you spend a month on apparel?" and "Are you replacing items that are worn out?" The group discussion focused on knowledge of fast fashion, knowledge of slow fashion, and apparel related behaviors (Appendix B: Part II). Example questions include "Do you know what fast fashion means", "Why do you choose to shop at fast fashion retailers?" and "Do you know what slow fashion means?"

Pre-educational survey. The pre-educational survey (Appendix D) included sections on demographics, apparel shopping behaviors, environmental values, shopping values, knowledge of fast fashion and slow fashion, attitudes, subjective norms, perceived behavior control, and purchase intention. Specifically the survey used multiple choice, true/false, and 7-point Likert scale questions. A pre-test was given to further refine the questions and ensure that the questions were appropriate and clear. Examples of multiple choice questions were "How often do you go shopping for clothing?" and "How many clothing items do you buy each month?" Examples of

true/false questions were “Fast fashion refers to a business model that is defined by high production, high consumption, and high disposal” and “It is sustainable to purchase clothing frequently.” Examples of Likert scale questions are “I purchase clothing frequently” and “I try to shop locally.” Existing literature has been incorporated to develop measures for the major variables in the theoretical framework. The existing scales from the literature provide acceptable reliability to be used in this study, ranging from 0.76 to 0.96.

Environmental values. Modified based upon Dunlap, Van Liere, Mertig, and Jones (2000) and Banerjee and McKeage (1994), environmental values were measured in the survey using 7-point Likert scale questions ranging from strongly disagree (1) to strongly agree (7). There were 10 items measuring environmental values and examples of questions were “I believe my behavior can impact the environment” and “The future well-being of the planet is important to me.”

Shopping values. Modified based upon Babin et al. (1994), shopping values were measured using 7-point Likert scale questions ranging from strongly disagree (1) to strongly agree (7). There were 10 items measuring shopping values, five measuring hedonic values and five measuring utilitarian values. Examples of questions were “I feel a sense of adventure when I shop” and “I like to feel successful after a shopping trip.”

Knowledge of slow fashion and fast fashion. The knowledge section was developed from the literature and Kang et al. (2013) and measured young adult consumer’s subjective knowledge using 7-point Likert scale questions ranging from strongly disagree (1) to strongly agree (7). There were seven items measuring subjective knowledge; examples of these questions were “I know what slow fashion is” and “I know about the environmental impacts of my clothing.” Objective knowledge was measured in the survey using true/false questions. There were seven

items measuring objective knowledge. Examples of these questions were “Fast fashion refers to a business model that is defined by high production, high consumption, and high disposal” and “I can purchase slow fashion in Colorado.” When participants answered each of the true/false questions correctly, one point was assigned to that item when entering data, otherwise zero.

Attitudes. Modified from Pavlou and Fygenon (2006) and Sparks and Shepherd (1992), the young adult consumer’s attitudes towards slow fashion were measured with six items using 7-point semantic differential scales. Questions began with “My attitude towards slow fashion is” and the responses range from extremely negative (1) to extremely positive (7), extremely foolish (1) to extremely wise (7), extremely bad (1) to extremely good (7), extremely harmful to extremely beneficial (7), extremely unpleasant (1) to extremely pleasant (7), and extremely unfavorable (1) to extremely favorable (7).

Subjective norm. Modified from Hyllegard, Yan, Ogle, and Lee (2012), Pavlou and Fygenon (2006), and Sparks and Shepherd (1992), the subjective norm variable was measured with four items, including an item measuring participants’ motivation to comply, using 7-point semantic differential scales asking what the consumer’s loved ones think of slow fashion. An example of a question measuring social norms was “Most people who are important to me are not/are concerned about whether apparel products are slow fashion.”

Perceived behavioral control. Modified from Pavlou and Fygenon (2006) and Sparks and Shepherd (1992), perceived behavioral control was measured with three items using 7-point semantic differential scales. An example of a question was “For me, to buy Slow Fashion apparel product are extremely difficult/extremely easy.”

Purchase intention. The measure for purchase intention was modified from Pavlou and Fygenon (2006) and Sparks and Shepherd (1992), and was measured with two items using 7-

point Likert scales from strongly disagree (1) to strongly agree (7). An example of a question was “In the future, I intend to purchase slow fashion apparel products.”

Post-educational survey. The post-educational survey included the same questions as the pre-educational survey and had additional questions asking about the effectiveness of the module. These questions were measured on a Likert type scale answer from strongly disagree (1) to strongly agree (7). Examples of questions were “The module increased my understanding of slow fashion” and “I learned about the environmental impacts of my clothing from the module.”

Educational module. The educational module was created based on the literature review and was refined based upon data from the focus group. The module focused on the environmental benefits of slow fashion business model more than the environmental impacts of the fast fashion business module because this approach has been shown to be more effective in influencing consumer behavior (Hustvedt & Dickson, 2009). The module was in PowerPoint presentation format with questions throughout to check for understanding. The presentation included information on the characteristics and environmental impacts of fast fashion, defining slow fashion and how it was a sustainable alternative. There was also some information tailored to the location to show participants where slow fashion could be purchased locally.

CHAPTER IV

RESULTS

The data were collected in three phases during a period of about two months (between August and October, 2015). The phases included a focus group, a pre-educational survey and an educational module, and a post-educational survey. The results from each phase are included in the following sections.

Focus Group and Its Participants

Respondents for the focus group were recruited via flyers posted around Colorado State University's campus. A total of four participants were present for the focus group, two males and two females. Their ages ranged from 19-27 with a mean age of 24.5 years and the participants were juniors through graduate students at Colorado State University. Three participants were Caucasian and one was Asian-American. The focus group lasted for 45 minutes and allowed for the refinement of the surveys and educational module.

Participants' answers aligned with the expectations from the literature review and confirmed that young adult consumers do not feel that they have enough knowledge and familiarity about slow fashion to make an informed purchasing decision. One participant stated, "I think that most of us can probably agree that sustainability is a good goal to strive for, so it's a positive in of itself. But it's hard to know about it unless you look for it. Unless you are familiar with a brand that has that as a core value." Wording was changed on a couple of survey items for better understanding of the question. "I become emotionally attached to my clothing" changed to "I become attached to some of my clothing." because the participants did not respond well to the word emotional. An addition to the educational module was a cost and footprint comparison

between a fast fashion shirt (a basic t-Shirt from H&M) to a slow fashion shirt (a basic T-Shirt from Zady) to better illustrate the durability of slow fashion garments. One participant said,

“It could be really cool to break down, like take something from H&M and something from a more sustainable company and say ok this is the price, but this is how many times you can wash it or wear it to show why it is worth paying more money. So many people think they cannot spend this much money on one thing, but in reality you are buying multiple things. Like you think you can’t spend \$200 on boots, but you are spending \$50 at DSW every season and these other boots might last 10 years. They are just thinking of right now. So breaking that down would be kind of cool.”

Pre-Educational Surveys

Profile of Participants. The data for this phase were collected from students enrolled in one of two classes in the Apparel and Merchandising Program at Colorado State University. A total of 256 surveys were collected for this phase of the study. After removing duplicates from both classes and cases with excessive missing data, there were 231 usable surveys. Participants were ages 18-34 with a mean age of 19.73 years. Almost 87% of the participants were female (n=218) and about 13% were males (n=34). The participants were 72.3% Caucasian (n=183), 10.7% Hispanic (n=27), 9.5% Mixed Race (n=24), 7% listed “Other” (n=2.8), 3.2% African American (n=8), and 0.8% were Asian American (n=2). Participants were 37.2% sophomore (n=94), 29.2% freshman (n=74), 26.5% junior (n=67), and 6.7% senior (n=7). Refer to Table 1 for full demographic information.

Table 1		
<i>Demographics of Pre-Educational Survey Participants (n=231)</i>		
Characteristics	(n)	%
<u>Age</u>		
Mean	19.73	
Range	18-34	
<u>Gender</u>		
Female	218	86.7
Male	34	13.3
<u>Ethnicity</u>		
African American	8	3.2
Asian American	2	0.8
Caucasian	183	72.3
Hispanic	27	10.7
Mixed Race	24	9.5
Other	7	2.8
<u>Year in School</u>		
Freshman	74	29.2
Sophomore	94	37.2
Junior	67	26.5
Senior	17	6.7

Shopping Behaviors. The apparel shopping behaviors of the participants were recorded in the initial survey through multiple-choice questions (Table 2). When asked how frequently they purchased new apparel items, 32.5% purchased new apparel items each month, 31.3% purchased new apparel items every two weeks, 20.2% purchase new apparel items once every couple of months, 14.7% purchased new apparel items each week, and 1.2% purchase new apparel items once every year. When asked how many new apparel items they purchase each month, 40.5% purchased one to two items, 36.1% purchased three to four items each month, 14.3% purchased five to six items each month, 7.5% purchased more than six items each month, and 1.2% purchase zero items each month. Among the participants, 27.5% purchase second-hand clothing items once every couple of months, 24.6% purchase second-hand clothing items once a year, 23.8% had never purchased second-hand clothing items, 12.7% (n=32) purchase second-hand clothing items once a month, 9.1% purchase second-hand clothing items every two weeks, and

2% purchase second-hand clothing items every week. When asked how often they purchase at fast fashion retailers such as H&M, Zara, and Forever 21, participants responded once a month (32.5%), once every couple of months (27.5%), once every two weeks (14.3%), never (10%), once every year (8.3%), and every week (2%). On average, participants spent \$111.08 each month on clothing with the range being \$0-2,500. When asked how long apparel items were kept before disposal, 61.1% of participants reported that their apparel items were kept for several years, 32.5% items were kept for about a year, 3.2% items were kept for less than a year, 2.8% items were kept for a couple of months, and 0.4% responded that items were kept a couple of weeks before disposing. When asked if they had ever had apparel items repaired, 60.3% responded occasionally, 31.3% responded never, and 8.3% responded always. When asked about their organic or local food purchasing behavior 74.9% of participants responded occasionally, 13.8% responded always, and 11.2% responded that they never purchase organic or local food. Results are shown in table 2.

Table 2		
<i>Shopping Behaviors of Pre-Educational Survey Participants (n=231)</i>		
Shopping Behaviors	(n)	%
<u>How often they purchase new clothing items</u>		
Every week	37	14.7
Once every two weeks	79	31.3
Once a month	82	32.5
Once every couple of months	51	20.2
Once every year	3	1.2
<u>How often they purchase second-hand clothing items</u>		
Never	60	23.8
Every week	5	2.0
Once every two weeks	23	9.1
Once a month	32	12.7
Once every couple of months	69	27.5
Once every year	62	24.6
<u>How often they purchase at fast fashion retailers</u>		
Never	26	10.3
Every week	5	2.0
Once every two weeks	36	14.3
Once a month	82	32.5
Once every couple of months	82	32.5
Once every year	21	8.3
<u>Amount spent on apparel each month</u>		
Mean	\$111.08	
Range	\$0-\$2,500	
<u>How many items purchased each month</u>		
0	3	1.2
1-2	102	40.5
3-4	91	36.1
5-6	36	14.3
6+	19	7.5
<u>How long items are kept before disposal</u>		
A few weeks	1	.4
A couple of months	7	2.8
Less than a year	8	3.2
A year	82	32.5
Several years	154	61.1
<u>Have clothing items been repaired in the past 2 years</u>		
Never	79	31.3
Occasionally	152	60.3
Always	21	8.3
<u>How often organic or local food is purchased</u>		
Never	28	11.2
Occasionally	188	74.9
Always	35	13.8

Participants were further questioned about their shopping behaviors in the pre-educational survey with 12 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). The means are reported in Table 3 below.

Table 3	
<i>Shopping Behaviors of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	M
I consider the environmental impacts of my purchases.	3.99
I try to dispose of less clothing.	5.15
I try to shop at locally owned stores for clothing.	4.15
I research how my clothing was made (e.g. materials, components, manufacture) before purchasing.	2.46
I become attached to some of my clothing.	6.07
I try to purchase sustainably made apparel.	4.20
Price is the most important factor to me when shopping for apparel.	5.07
Fit is the most important factor to me when shopping for apparel.	5.85
Quality is the most important factor to me when shopping for apparel.	5.38
Style is the most important factor to me when shopping for apparel.	5.98
I am willing to spend more money on an apparel item that I think will last longer.	5.96
I am more likely to repair clothing that I am attached to.	5.59

Environmental Values. Participants were surveyed about their environmental values in the pre-educational survey with 10 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). One question was reverse coded (“Humans have the right to change the environment as they see fit.”) in order for all the variables to be compared on the same scale, with a response of seven being the highest environmental value. The means are reported in Table 4 below.

Table 4	
<i>Environmental Values of Pre-Educational Survey Participants (n=231)</i>	
Survey Questions	<u>M</u>
I think about the environmental impacts of my clothing when I am shopping.	3.34
I am actively trying to reduce my environmental footprint.	4.11
The future well being of the planet is important to me.	5.52
I think that my actions can make a difference in the health of the planet.	5.17
I am a person who cares about the environment.	5.48
The whole environmental issue is very important to me.	5.05
I believe that my behavior can impact the environment.	5.18
The earth has limited resources.	6.11
Humans are subject to the laws of nature.	5.64
Humans have the right to change the environment as they see fit.	3.88

Shopping Values. Participants were surveyed on their shopping values in the pre-educational survey with 10 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). These questions tapped into hedonic and utilitarian shopping values. The means are reported below in Table 5.

Table 5	
<i>Shopping Values of Pre-Educational Survey Participants (n=231)</i>	
Survey Questions	<u>M</u>
I enjoy being immersed in exciting new products.	5.84
I feel a sense of adventure when I shop.	6.11
I shop to get away.	5.19
I shop because I want to not because I have to.	5.73
Compared to other things I could do, I find shopping trips very enjoyable.	5.63
Shopping truly feels like an escape.	4.88
I like shopping trips to be over quickly.	3.57
I shop for what I need.	4.87
I am disappointed when I have to go to multiple stores to complete a shopping trip.	3.36
I like to feel successful after shopping.	6.10

Knowledge of Slow Fashion.

Subjective knowledge. Participants were surveyed on their subjective knowledge of slow fashion with nine 7-point Likert type questions ranging from Strongly Disagree (1) to Strongly Agree (7). Means are reported below in Table 6.

Table 6	
<i>Subjective Knowledge of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>M</u>
I am familiar with the term “fast fashion.”	5.15
I know where to purchase fast fashion apparel.	5.24
I am familiar with the term “slow fashion.”	4.32
I know where to purchase slow fashion apparel.	4.13
I know about the environmental impacts of fast fashion apparel.	4.48
I know about the environmental impacts of slow fashion apparel.	3.74
I have often read articles or news about fast fashion apparel.	3.72
I have often read articles or news about slow fashion apparel.	3.14
I understand the difference in quality between fast fashion and slow fashion apparel.	4.28

Objective Knowledge. Participants were tested on their objective knowledge of slow fashion through eight true/false questions. Answers were coded with a “1” being correct and a “0” being incorrect. The results are reported in Table 7 below.

Table 7	
<i>Objective Knowledge of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>% Correct</u>
Slow fashion refers to a business model that is defined by high production, high consumption, and high disposal.	80.1
The slow fashion business model is a more sustainable business model.	85.9
Slow fashion is about reconnecting to a time when people knew where their clothing came from.	88.7
Slow fashion is based upon valuing local resources, transparent production systems, and sustainable and sensorial products.	91.0
It is sustainable to frequently purchase clothing.	89.1
Slow fashion promotes sustainability via less frequent consumption of apparel.	96.5
I can purchase slow fashion clothing in Colorado.	96.1
Fast fashion apparel is of higher quality than slow fashion apparel.	88.7

Views About Slow Fashion Products.

Attitude. Consumer’s attitude towards slow fashion was measured with six items using a 7-point semantic differential scale with “1” being the lowest and “7” being the highest. The results are reported below in Table 8.

Table 8	
<i>Attitude Towards Slow Fashion of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>M</u>
Extremely Negative (1); Extremely Positive (7)	4.91
Extremely Foolish (1); Extremely Wise (7)	4.85
Extremely Bad (1); Extremely Good (7)	4.77
Extremely Harmful (1); Extremely Beneficial (7)	4.85
Extremely Unpleasant (1); Extremely Pleasant (7)	4.59
Extremely Unfavorable (1); Extremely Favorable (7)	4.61

Subjective norm. Subjective norm was measured with four items using a semantic differential scale, including one question on consumer’s motivation to comply. Two of the questions were reverse coded (i.e. “Most people who are important to me think I should/should not purchase slow fashion apparel.” and “The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products.”) so that the results would be on the same scale as the other questions. The results are reported below in Table 9.

Table 9	
<i>Subjective Norm of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>M</u>
Most people who are important to me think I should/should not purchase slow fashion apparel. Should (1); Should Not (7)	3.45
The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products. Approve (1); Disapprove (7)	3.91
Most people who are important to me are not concerned/ are concerned about whether apparel products are slow fashion. Are not concerned (1); Are concerned (7)*	2.82
Generally speaking, how much do you want to do what other people who are important to you think? Not at all (1); Very much (7)	4.33
*Note. The mean numbers are based on the scales after reverse coding.	

Perceived behavioral control. Participants’ perceived behavioral control was measured with three items using a 7-point semantic differential scale. The results are reported below in Table 10.

Table 10	
<i>Perceived Behavioral Control of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>M</u>
How much control do you think you have over whether you buy slow fashion apparel products? Very little control (1); Complete control (7)	4.90
For me, to buy slow fashion apparel products is extremely difficult (1); Extremely easy (7)	3.97
If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel. Extremely unlikely (1); Extremely likely (7)	3.91

Purchase intention towards slow fashion. Participants’ purchase intention was measured with two items using a 7-point Likert scale with 1 being “Definitely Not” and 7 being “Definitely.” The results are reported in Table 11.

Table 11	
<i>Purchase Intention Towards Slow Fashion of Pre-Educational Survey Participants (n=231)</i>	
<u>Survey Questions</u>	<u>M</u>
In the future, I intend to purchase slow fashion apparel products. Definitely not (1); Definitely (7)	4.67
In the future, I will tell my friends about slow fashion apparel products. Definitely not (1), Definitely (7)	4.82

Post-Educational Surveys

Profile of Participants. The data for this phase were collected from an online survey. Emails were sent to all participants from Phase II that provided their email addresses. The emails were sent two weeks after the educational module and participants were given one week to complete the survey. A total of 234 surveys were collected for this phase of the study. After duplicates, incomplete cases, and cases where the respondent did not participate in the pre-

educational survey were removed, there were 163 usable surveys. Participants' age ranged from 18-34 with a mean age of 19.76 years. The participants were 89% female (n=146) and 11% male (n=11). The participants were 72% Caucasian (n=118), 11% Mixed Race (n=18), 9.1% Hispanic (n=15), 4.3% African American (n=7), 3% listed "Other" (n=5), and 0.6% Asian American (n=1). For "Year in School," the participants were 37.2% sophomore (n=61), 31.7% freshman (n=52), 25% junior (n=41), and 6.1% senior (n=10). Refer to Table 12 for full demographic information.

Table 12		
<i>Demographics of Post-Educational Survey Participants (n=163)</i>		
<u>Characteristics</u>	<u>(n)</u>	<u>%</u>
<u>Age</u>		
Mean	19.76	
Range	19-34	
<u>Gender</u>		
Female	146	89
Male	18	11
<u>Ethnicity</u>		
African American	7	4.3
Asian American	1	0.6
Caucasian	118	72
Hispanic	15	9.1
Mixed Race	18	11
Other	5	3
<u>Year in School</u>		
Freshman	52	31.7
Sophomore	61	37.2
Junior	41	25.0
Senior	10	6.1

Shopping Behaviors. The apparel shopping behaviors of the participants were also recorded in the post survey through multiple-choice questions (Table 13). When asked how frequently they purchased new apparel items, 34.8% (n=57) purchased new apparel items every two weeks, 34.8% (n=57) purchased new apparel items each month, 17.7% (n=29) purchased new apparel items once ever couple of months, 12.2% (n=20) purchased new apparel items each

week, and 0.6% (n=1) purchase new apparel items once every year. About 26% (n=43) purchase second-hand clothing items once every couple of months, about 25% (n=42) had never purchased second-hand clothing items, almost 24% (n=39) purchase second-hand clothing items once a year, and 13% (n=31) purchase second-hand clothing items once a month, 9% (n=15) purchase second-hand clothing items every two weeks, and 2% (n=4) purchase second-hand clothing items every week. When asked how often they purchase at fast fashion retailers such as H&M, Zara, and Forever 21, participants responded once every two weeks (13.4%), once every year (10.4%), never (7.9%), and every week (1.8%). Approximately 39% of the participants purchased three to four apparel items each month, 38.4% purchased one to two items each month, 13.4% purchased five to six items each month, 7.9% purchased more than six items each month, and 1.2% purchased zero items each months. Post-educational survey respondents reported that they spent \$0-500 a month on apparel with a mean of \$101.63. Over 62% reported that they kept items for several years before disposing, 32% keep items for about a year, 3% keep items for a couple of months, about 2% keep items for less than a year, and about 1% responded that items were kept a couple of weeks before disposal. When asked if they had ever had apparel items repaired, 60.4% responded occasionally, 31.7% responded never, and 7.9% responded always. When asked about their organic or local food purchasing behavior 73.8% responded occasionally, 13.4% responded always, and 12.8% responded that they never purchase organic or local food.

Table 13

Shopping Behaviors of Post-Educational Survey Participants (n=163)

<u>Shopping Behaviors</u>	<u>(n)</u>	<u>%</u>
<u>How often they purchase new clothing items</u>		
Every week	20	12.2
Once every two weeks	57	34.8
Once a month	57	34.8
Once every couple of months	29	17.7
Once every year	1	0.6
<u>How often they purchase second-hand clothing items</u>		
Never	42	25.6
Every week	4	2.4
Once every two weeks	15	9.1
Once a month	21	12.8
Once every couple of months	43	26.2
Once every year	39	23.8
<u>How often they purchase at fast fashion retailers</u>		
Never	13	7.9
Every week	3	1.8
Once every two weeks	22	13.4
Once a month	55	33.5
Once every couple of months	54	32.9
Once every year	17	10.4
<u>How many items purchased each month</u>		
0	2	1.2
1-2	63	38.4
3-4	64	39
5-6	22	13.4
6+	13	7.9
<u>Spend</u>		
Range	\$0-500	
Mean	\$101.63	
<u>How long items are kept before disposal</u>		
A few weeks	1	0.6
A couple of months	5	3.0
Less than a year	3	1.8
A year	52	31.7
Several years	103	62.8
<u>Have clothing items been repaired in the past 2 years</u>		
Never	52	31.7
Occasionally	99	60.4
Always	13	7.9

<u>How often organic or local food is purchased</u>		
Never	21	12.8
Occasionally	121	73.8
Always	22	13.4

Participants were further questioned about their shopping behaviors in the post-educational survey with 12 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). The means are reported in Table 14 below.

Table 14	
<i>Shopping Behaviors of Post-Educational Survey Participants (n=163)</i>	
<u>Survey Questions</u>	<u>M</u>
I consider the environmental impacts of my purchases.	3.88
I try to dispose of less clothing.	5.12
I try to shop at locally owned stores for clothing.	4.10
I research how my clothing was made (e.g. materials, components, manufacture) before purchasing.	2.35
I become attached to some of my clothing.	6.15
I try to purchase sustainably made apparel.	4.16
Price is the most important factor to me when shopping for apparel.	5.07
Fit is the most important factor to me when shopping for apparel.	5.95
Quality is the most important factor to me when shopping for apparel.	5.43
Style is the most important factor to me when shopping for apparel.	6.04
I am willing to spend more money on an apparel item that I think will last	5.99
I am more likely to repair clothing that I am attached to.	5.59

Effectiveness of educational module. Participants were surveyed about effectiveness of the educational module with five items using a 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). The means are reported in Table 15 below.

Table 15	
<i>Effectiveness of the Educational Module (n=163)</i>	
<u>Survey Questions</u>	<u>M</u>
I thought the educational module was effective.	5.69
I thought the educational module was informative.	6.01
I paid attention to the content of the educational module.	5.96
The module increased my understanding of the environmental impacts of fast fashion clothing.	5.93

Environmental Values. Participants were surveyed about their environmental values in the post-educational survey with 10 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). One question was reverse coded (i.e. “Humans have the right to change the environment at they see fit.”) in order for all the variables to be compared on the same scale, with a response of seven being the highest environmental value. The means are reported in Table 16 below.

Table 16	
<i>Environmental Values of Post-Educational Survey Participants (n=163)</i>	
<u>Survey Questions</u>	<u>M</u>
I think about the environmental impacts of my clothing when I am shopping.	3.28
I am actively trying to reduce my environmental footprint.	4.05
The future well being of the planet is important to me.	5.59
I think that my actions can make a difference in the health of the planet.	5.20
I am a person who cares about the environment.	5.54
The whole environmental issue is very important to me.	5.05
I believe that my behavior can impact the environment.	5.21
The earth has limited resources.	6.21
Humans are subject to the laws of nature.	5.65
Humans have the right to change the environment as they see fit.	4.15

Shopping Values. Participants were surveyed on their shopping values in the post-educational survey with 10 7-point Likert scale questions ranging from Strongly Disagree (1) to Strongly Agree (7). Questions included items measuring hedonic and utilitarian shopping values. The means are reported below in Table 17.

Table 17	
<i>Shopping Values of Post-Educational Survey Participants (n=163)</i>	
Survey Questions	<u>M</u>
I enjoy being immersed in exciting new products.	5.85
I feel a sense of adventure when I shop.	5.94
I shop to get away.	5.29
I shop because I want to not because I have to.	5.88
Compared to other things I could do, I find shopping trips very enjoyable.	5.68
Shopping truly feels like an escape.	4.85
I like shopping trips to be over quickly.	3.55
I shop for what I need.	4.91
I am disappointed when I have to go to multiple stores to complete a shopping trip.	3.34
I like to feel successful after shopping.	6.12

Knowledge of Slow Fashion.

Subjective knowledge. Participants were surveyed on their subjective knowledge of slow fashion after the educational module with nine 7-point Likert questions ranging from Strongly Disagree (1) to Strongly Agree (7). Means are reported below in Table 18.

Table 18	
<i>Subjective Knowledge of Post-Educational Survey Participants (n=163)</i>	
Survey Questions	<u>M</u>
I am familiar with the term “fast fashion.”	5.17
I know where to purchase fast fashion apparel.	5.29
I am familiar with the term “slow fashion.”	4.17
I know where to purchase slow fashion apparel.	4.02
I know about the environmental impacts of fast fashion apparel.	4.30
I know about the environmental impacts of slow fashion apparel.	3.67
I have often read articles or news about fast fashion apparel.	3.73
I have often read articles or news about slow fashion apparel.	3.04
I understand the difference in quality between fast fashion and slow fashion apparel.	4.16

Objective Knowledge. Participants were surveyed on their objective knowledge of slow fashion after the educational module through eight true/false questions. Answers were coded with a “1” being correct and a “0” being incorrect. The results are reported in Table 19 below.

Table 19	
<i>Objective Knowledge of Post-Educational Survey Participants (n=163)</i>	
<u>Survey Questions</u>	<u>% Correct</u>
Slow fashion refers to a business model that is defined by high production, high consumption, and high disposal.	85.4
The slow fashion business model is a more sustainable business model.	98.8
Slow fashion is about reconnecting to a time when people knew where their clothing came from.	95.1
Slow fashion is based upon valuing local resources, transparent production systems, and sustainable and sensorial products.	97.6
It is sustainable to frequently purchase clothing.	91.5
Slow fashion promotes sustainability via less frequent consumption of apparel.	97.6
I can purchase slow fashion clothing in Colorado.	99.4
Fast fashion apparel is of higher quality than slow fashion apparel.	93.9

Views About Slow Fashion Products.

Attitude. Consumer’s attitude towards slow fashion was measured with six items using a 7-point semantic differential scale with “1” being the lowest and “7” being the highest. The results are reported below in Table 20.

Table 20	
<i>Attitude Towards Slow Fashion of Post-Educational Survey Participants (n=163)</i>	
<u>Survey Questions</u>	<u>M</u>
Extremely Negative (1); Extremely Positive (7)	5.42
Extremely Foolish (1); Extremely Wise (7)	5.39
Extremely Bad (1); Extremely Good (7)	5.40
Extremely Harmful (1); Extremely Beneficial (7)	5.45
Extremely Unpleasant (1); Extremely Pleasant (7)	5.21
Extremely Unfavorable (1); Extremely Favorable (7)	5.23

Subjective norm. Subjective norm was measured with four items using semantic differential scale, including one question on consumer’s motivation to comply. Two of the questions were reverse coded so that the results would be on the same scale as the other questions (i.e. “Most people who are important to me think I should/should not purchase slow fashion apparel.” and

“The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products.”). The results are reported below in Table 21.

Table 21	
<i>Subjective Norm of Post-Educational Survey Participants (n=163)</i>	
Survey Questions	M
Most people who are important to me think I should/should not purchase slow fashion apparel. Should (1); Should Not (7)	3.59
The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products. Approve (1); Disapprove (7)	3.79
Most people who are important to me are not concerned/ are concerned about whether apparel products are slow fashion. Are not concerned (1); Are concerned (7)	3.94
Generally speaking, how much do you want to do what other people who are important to you think? Not at all (1); Very much (7)	4.12

Perceived behavioral control. Participants’ perceived behavioral control was measured with three items using a 7-point semantic differential scale. The results are reported below in Table 22.

Table 22	
<i>Perceived Behavioral Control of Post-Educational Survey Participants (n=163)</i>	
Survey Questions	M
How much control do you think you have over whether you buy slow fashion apparel products? Very little control (1); Complete control (7)	4.95
For me, to buy slow fashion apparel products is extremely difficult (1); Extremely easy (7)	3.80
If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel. Extremely unlikely (1); Extremely likely (7)	3.79

Purchase intention towards slow fashion. Participants’ purchase intention was measured with two items using a 7-point Likert scale with (1) being definitely not and (7) being definitely. The results are reported in Table 23.

Table 23	
Purchase Intention Towards Slow Fashion of Post-Educational Survey Participants (n=231)	
Survey Questions	M
In the future, I intend to purchase slow fashion apparel products.	4.62
In the future, I will tell my friends about slow fashion apparel products.	4.96

Factor Analyses

Exploratory factor analyses with varimax rotation were conducted for the multi-item scale variables including environmental values, shopping values, knowledge of slow fashion, attitude, subjective norm, perceived behavioral control, and purchase intention towards slow fashion. These analyses were conducted separately the pre-educational and post educational surveys, which included 163 usable surveys after duplicates from both classes and cases with missing information were removed.

Environmental values.

Pre-educational environmental values. A factor analysis test was run on the items in the environmental values. The result revealed one with six items showing acceptable factor loadings. Three items were removed because of cross loading issues (“The earth has limited resources.”, “Humans are subject to the laws of nature.”, and “Humans have the right to change the environment as they see fit”) . The Cronbach’s Alpha was 0.86 with 63.28% variance extracted. The results are shown in Table 24.

Table 24			
<i>Factor Analysis for Pre-Educational Environmental Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.90	62.28
I think about the environmental impacts of my clothing when I am shopping.	.84		
I am actively trying to reduce my environmental footprint.	.86		
The future well being of the planet is important to me.	.91		
I think that my actions can make a difference in the health of the planet.	.88		
I am a person who cares about the environment.	.87		
The whole environmental issue is very important to me.	.85		
I believe that my behavior can impact the environment.	.76		

Post-educational environmental values. A factor analysis test was run on the items in the environmental values. After removing three items because of cross loading issues (“The earth has limited resources.”, “Humans are subject to the laws of nature.”, and “Humans have the right to change the environment as they see fit”), one factor was revealed within the 7 remaining items. The Cronbach’s Alpha was 0.90 with 64.31% variance extracted. The results are shown below in Table 25.

Table 25			
<i>Factor Analysis for Post-Educational Environmental Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.90	64.31
I am familiar with the term “fast fashion.”	.62		
I know where to purchase fast fashion apparel.	.82		
I am familiar with the term “slow fashion.”	.84		
I know where to purchase slow fashion apparel.	.82		
I know about the environmental impacts of fast fashion apparel.	.83		
I know about the environmental impacts of slow fashion apparel.	.84		
I understand the difference in quality between fast fashion and slow fashion apparel.	.82		

Knowledge.

Pre-educational subjective knowledge. A factor analysis test was run on the items in the subjective knowledge. The result revealed one factor with all nine items showing acceptable factor loadings. The Cronbach’s Alpha was 0.94 with 71.35% variance extracted. The results are shown below in Table 26.

Table 26			
<i>Factor Analysis for Pre-Educational Subjective Knowledge</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.94	71.35
I am familiar with the term “fast fashion.”	.84		
I know where to purchase fast fashion apparel.	.86		
I am familiar with the term “slow fashion.”	.91		
I know where to purchase slow fashion apparel.	.88		
I know about the environmental impacts of fast fashion apparel.	.87		
I know about the environmental impacts of slow fashion apparel.	.85		
I have often read articles or news about fast fashion apparel.	.76		
I have often read articles or news about slow fashion apparel.	.82		
I understand the difference in quality between fast fashion and slow fashion apparel.	.82		

Post-educational subjective knowledge. A factor analysis test was run on the items in the subjective knowledge. After removing two items because of cross loading issues (“I have often read articles or news about fast fashion apparel” and “I have often read articles or news about slow fashion apparel”), one factor was revealed within the 7 remaining items. The results are shown below in Table 23. The Cronbach’s Alpha was 0.90 with 69% variance extracted. For comparison purposes, the subjective knowledge variable for the pre- and post- educational subjective knowledge was the average of seven items based on the factor structure of the post survey. The results are shown in Table 27.

Table 27			
<i>Factor Analysis for Post-Educational Subjective Knowledge</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.90	69.00
I am familiar with the term “fast fashion.”	.87		
I know where to purchase fast fashion apparel.	.78		
I am familiar with the term “slow fashion.”	.90		
I know where to purchase slow fashion apparel.	.79		
I know about the environmental impacts of fast fashion apparel.	.88		
I know about the environmental impacts of slow fashion apparel.	.89		
I understand the difference in quality between fast fashion and slow fashion apparel.	.70		

Shopping values.

Pre-educational hedonic shopping values. A factor analysis test was run on the items related to hedonic shopping values in the pre-educational survey. The result revealed one factor with all six items showing acceptable factor loadings. The Cronbach’s Alpha was 0.88 with 62.46% variance extracted. The results are shown below in Table 28.

Table 28			
<i>Factor Analysis for Pre-Educational Hedonic Shopping Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.86	60.87
I enjoy being immersed in exciting new products.	.46		
I feel a sense of adventure when I shop.	.73		
I shop to get away.	.64		
I shop because I want to not because I have to.	.51		
Compared to other things I could do, I find shopping trips very enjoyable.	.70		
Shopping truly feels like an escape.	.61		

Post-educational hedonic shopping values. A factor analysis test was run on the items in the post-educational survey hedonic shopping values. The result revealed one factor with all six

items showing acceptable factor loadings. The Cronbach's Alpha was 0.875 with 62.46% variance extracted. The results are shown below in Table 29.

Table 29			
<i>Factor Analysis for Post-Educational Hedonic Shopping Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.90	62.46
I enjoy being immersed in exciting new products.	.53		
I feel a sense of adventure when I shop.	.87		
I shop to get away.	.84		
I shop because I want to not because I have to	.68		
Compared to other things I could do, I find shopping trips very enjoyable.	.88		
Shopping truly feels like an escape.	.88		

Pre-educational utilitarian shopping values. A factor analysis test was run on the items in the pre-educational utilitarian shopping values. After removing one item because of cross loading issues (“I like to feel successful after shopping.”) one factor emerged within the three remaining items. The results are shown below in Table 28. The Cronbach's Alpha was 0.61 with 57.62% variance extracted. The results are shown below in Table 30.

Table 30			
<i>Factor Analysis for Pre-Educational Utilitarian Shopping Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.61	57.62
I like shopping trips to be over quickly	.86		
I shop for what I need.	.54		
I am disappointed when I have to go to multiple stores to complete a shopping trip.	.84		

Post-educational utilitarian shopping values. A factor analysis test was run on the items in the post-educational utilitarian shopping values. After removing one items because of cross loading issues (“I like to feel successful after shopping.”) one factor was revealed within the 3

remaining items. The Cronbach's Alpha was 0.630 with 55.96% variance extracted. The results are shown below in Table 31.

Table 31			
<i>Factor Analysis for Post-Educational Utilitarian Shopping Values</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.63	55.96
I like shopping trips to be over quickly.	.82		
I shop for what I need.	.62		
I am disappointed when I have to go to multiple stores to complete a shopping trip.	.80		

Attitude.

Pre-educational attitude. A factor analysis test was run on the items in the pre-educational survey attitude. The result revealed one factor with all six items showing acceptable factor loadings. The Cronbach's Alpha was 0.92 with 72.06% variance extracted. The results are shown below in Table 32.

Table 32			
<i>Factor Analysis for Pre-Educational Attitude</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.92	72.06
Extremely Negative (1); Extremely Positive (7)	.65		
Extremely Foolish (1); Extremely Wise (7)	.82		
Extremely Bad (1); Extremely Good (7)	.90		
Extremely Harmful (1); Extremely Beneficial (7)	.92		
Extremely Unpleasant (1); Extremely Pleasant (7)	.90		
Extremely Unfavorable (1); Extremely Favorable	.88		

Post-educational attitude. A factor analysis test was run on the items in the pre-educational survey attitude. The result revealed one factor with all six items showing acceptable factor loadings. The Cronbach's Alpha was 0.97 with 85.25% variance extracted. The results are shown below in Table 33.

Table 33			
<i>Factor Analysis for Post-Educational Attitude</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.97	85.25
Extremely Negative (1); Extremely Positive (7)	.83		
Extremely Foolish (1); Extremely Wise (7)	.95		
Extremely Bad (1); Extremely Good (7)	.96		
Extremely Harmful (1); Extremely Beneficial (7)	.94		
Extremely Unpleasant (1); Extremely Pleasant (7)	.93		
Extremely Unfavorable (1); Extremely Favorable (7)	.92		

Subjective norm.

Pre-educational subjective norm. A factor analysis test was run on the items in the pre-educational survey subjective norm. After removing one item because of cross loading issues (i.e. Most of the people who are important to me are not concerned/are concerned about whether apparel products are slow fashion”). The result revealed one factor with the two items showing acceptable factor loadings. The Cronbach’s Alpha was 0.59 with 70.98% variance extracted.

The results are shown below in Table 34.

Table 34			
<i>Factor Analysis for Pre-Educational Subjective Norm</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.58	70.98
Most people who are important to me think I should/should not purchase slow fashion apparel. Should (1); Should Not (7)	.84		
The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products. Approve (1); Disapprove (7)	.84		

Post-educational subjective norm. A factor analysis test was run on the items in the post-educational survey subjective norm. The result revealed one factor with all items showing

acceptable factor loadings. The Cronbach's Alpha was 0.81 with 84.32% variance extracted.

The results are shown below in Table 35.

Table 35			
<i>Factor Analysis for Post-Educational Subjective Norm</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.81	84.32
Most people who are important to me think I should/should not purchase slow fashion apparel. Should (1); Should Not (7)	.92		
The people in my life whose opinions I value would approve/disapprove of my purchase of slow fashion apparel products. Approve (1); Disapprove (7)	.92		

Perceived behavioral control.

Pre-educational perceived behavioral control. A factor analysis test was run on the items in the pre-educational perceived behavioral control. The result revealed one factor with all three items showing acceptable factor loadings. The Cronbach's Alpha was 0.702 with 63.92% variance extracted. The results are shown below in Table 36.

Table 36			
<i>Factor Analysis for Pre-Educational Perceived Behavioral Control</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.70	63.92
How much control do you think you have over whether you buy slow fashion apparel products? Very little control (1); Complete	.69		
For me, to buy slow fashion apparel products is extremely difficult (1); Extremely easy (7)	.86		
If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel. Extremely unlikely (1); Extremely likely (7)	.84		

Post-educational perceived behavioral control. A factor analysis test was run on the items in the post-educational perceived behavioral control. The result revealed one factor with all three items showing acceptable factor loadings. The Cronbach's Alpha was 0.707 with 64.97% variance extracted. The results are shown in Table 37.

Table 37			
<i>Factor Analysis for Post-Educational Perceived Behavioral Control</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.71	64.97
How much control do you think you have over whether you buy slow fashion apparel products? Very little control (1); Complete control (7)	.57		
For me, to buy slow fashion apparel products is extremely difficult (1); Extremely easy (7)	.93		
If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel. Extremely unlikely (1); Extremely likely (7)	.87		

Purchase intention towards slow fashion.

Pre-educational purchase intention. A factor analysis test was run on the items in the post-educational purchase intention towards slow fashion. The result revealed one factor with all items showing acceptable factor loadings. The Cronbach's Alpha was 0.85 with 87.50% variance extracted. The results are shown below in Table 38.

Table 38			
<i>Factor Analysis for Pre-Educational Purchase Intention</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.85	87.50
In the future, I intend to purchase slow fashion apparel products. Definitely not (1); Definitely (7)	.94		
In the future, I will tell my friends about slow fashion apparel products. Definitely not (1), Definitely (7)	.94		

Post-educational purchase intention. A factor analysis test was run on the items in the post-educational purchase intention towards slow fashion. The result revealed one factor with all items showing acceptable factor loadings. The Cronbach's Alpha was 0.76 with 80.61% variance extracted. The results are shown below in Table 39.

Table 39			
<i>Factor Analysis for Post-Educational Purchase Intention</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.76	80.61
In the future, I intend to purchase slow fashion apparel products. Definitely not (1); Definitely (7)	.90		
In the future, I will tell my friends about slow fashion apparel products. Definitely not (1), Definitely (7)	.90		

Effectiveness of the slow fashion educational module. A factor analysis test was run on the effectiveness of the educational module. The result revealed one factor with all items showing acceptable factor loadings. The Cronbach's Alpha was 0.82 with 66.10% variance extracted. The results are shown below in Table 40.

Table 40			
<i>Factor Analysis for Effectiveness of Educational Module</i>			
	Factor Loading	Reliability	Variance Extracted (%)
Items		.82	66.10
I thought the educational module was effective.	.82		
I thought the educational module was informative.	.86		
I paid attention to the content of the educational module.	.71		
The module increased my understanding of the environmental impacts of fast fashion clothing.	.86		

Research Question One

The first research question is “Can an educational module help increase young adult consumers’ knowledge of slow fashion?” The variable “objective knowledge” was the result of adding a value of 1 for each objective knowledge question (true/false) answered correctly. Subjective knowledge was the average of seven items from the subjective knowledge portion of both surveys. A paired-samples t test was conducted to measure whether there was any knowledge change due to the educational module. The results showed that participants’ objective knowledge increased after the educational module ($M_{pre} = 7.21$ and $M_{post} = 7.60$, $t = -4.144$, $p < 0.001$). The results also showed that participants’ subjective knowledge increased after the educational module ($M_{pre} = 4.39$ and $M_{post} = 5.96$, $t = -11.20$, $p < 0.001$). Results are shown below in Table 41.

Table 41			
<i>Knowledge (Pre-Educational versus Post-Educational Survey)</i>			
Items	M_{pre}	M_{post}	t
Objective Knowledge	7.21	7.60	-4.14***
Subjective Knowledge	4.39	5.96	-11.27***
<p><i>Note.</i> Objective knowledge is the sum of the true/false items with the highest being 8 and the lowest being 0. Subjective knowledge recorded were tested on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. *$p < 0.05$, **$p < 0.01$, ***$p < 0.001$</p>			

Research Question Two

The second research question is “Can an educational module help change young adult consumers’ attitude toward slow fashion?” The variable for attitude was determined by the average of the six items for attitude from both surveys and a paired-samples t test was conducted to measure change due to the educational module. The results showed that participants’ attitude

towards slow fashion improved after the educational module ($M_{pre} = 4.71$ and $M_{post} = 5.40$, $t = -5.40$, $p < 0.001$). Results are shown below in Table 42.

Table 42			
<i>Attitude (Pre-Educational versus Post-Educational Survey)</i>			
Items	M_{pre}	M_{post}	t
Attitude	4.71	5.40	-5.40***
<i>Note:</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$			

Research Question Three

The third research question is “Can an educational module help change young adult consumers’ purchase intentions toward slow fashion?” The variable for purchase intention was determined by averaging the two survey items for purchase intention. A paired-samples t test was done to measure change due to the educational module. The results showed that participants’ purchase intentions towards slow fashion improved after the educational module, however it was not significant ($M_{pre} = 4.74$ and $M_{post} = 4.79$, $t = -.40$). Results are shown below in Table 43.

Table 43			
<i>Attitude (Pre-Educational versus Post-Educational Survey)</i>			
Items	M_{pre}	M_{post}	t
Purchase Intention	4.74	4.78	-.40
<i>Note:</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$			

Research Question Four

Do young adult consumers’ environmental values, shopping values, and knowledge of slow fashion impact their a) attitudes, b) subjective norm, and c) perceived behavioral control toward

slow fashion? This research question was measured by examining the data from the post-educational survey. Attitude was measured by the average of the six survey items related to attitude. Subjective norm was measured by two survey items (one item was dropped due to cross loading issues) that were multiplied by the item for motivation to comply. Perceived behavioral control was the average of the three survey items on perceived behavioral control. The variable for environmental values was the average of the seven survey items. The variable for hedonic shopping values was the average of six survey items. The variable for utilitarian shopping values was the average of three survey items. Subjective knowledge was the average of seven items from the subjective knowledge portion of the survey. The variable “objective knowledge” was the result of adding a value of 1 for each objective knowledge question (true/false) answered correctly. Results showed that participants’ attitude toward slow fashion was positively predicted by environmental values ($\beta = 0.374, t = 4.618, p < 0.001$). Other variables were not significant. Results showed that participants’ subjective norm toward slow fashion was positively predicted by environmental values ($\beta = 0.203, t = 2.322, p < 0.05$). Other variables were not significant. Results showed that participants’ perceived behavioral control toward slow fashion was positively predicted by subjective knowledge ($\beta = 0.197, t = 2.339, p < 0.05$). Other variables were not significant. Results are reported in Table 43 below.

Table 44					
<i>Regression Analysis: Influence of Additional Variables</i>					
	<i>df</i>	R^2	F	β	t
Dependent Variable: Attitude toward slow fashion	162	0.19	7.52		
Environmental values				0.37	4.62***
Hedonic shopping values				0.03	0.31
Utilitarian shopping values				-0.05	-0.60
Objective knowledge				-0.02	-0.21
Subjective knowledge				0.15	1.89
Dependent Variable: Subjective norm	162	0.61	2.03		
Environmental values				0.20	2.32*
Hedonic shopping values				0.01	0.09
Utilitarian shopping values				0.12	1.35
Objective knowledge				-0.11	-1.34
Subjective knowledge				-0.06	-0.67
Dependent Variable: Perceived behavioral control	162	0.08	2.64		
Environmental values				0.09	1.07
Hedonic shopping values				-0.01	-0.13
Utilitarian shopping values				0.14	1.60
Objective knowledge				-0.09	-1.04
Subjective knowledge				0.20	2.34*
<i>Note.</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$					

Research Question Five

The fifth research question was “Do young adult consumers’ attitudes, subjective norm, and perceived behavioral control impact their purchase intentions toward slow fashion?” The variable for purchase intention was the average of two survey items. Results showed that participants’ purchase intention toward slow fashion positively predicted by attitude ($\beta = 0.23$, $t = 3.36$, $p < 0.01$) and perceived behavioral control were ($\beta = 0.46$, $t = 6.93$, $p < 0.001$). Subjective norm was not significant. Results are shown below in Table 45.

Table 45					
<i>Regression Analysis: Theory of Planned Behavior</i>					
	<i>df</i>	R^2	F	β	t
Dependent Variable: Purchase intention toward slow fashion	162	0.31	23.98		
Attitude				0.23	3.36**
Subjective norm				0.10	1.41
Perceived behavioral control				0.46	6.93***
<i>Note.</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$					

Additional Findings

Environmental values. A paired-samples t test was conducted for pre-educational and post-educational environmental values. The variable for environmental values was determined by the average of the five items and a paired-samples t test was conducted to measure change due to the educational module. The results showed that participants had stronger environmental values after the educational module ($M_{pre} = 4.84$ and $M_{post} = 5.08$, $t = -3.26$, $p = 0.001$). Results are shown in Table 46.

Table 46			
<i>Environmental Values (Pre-Educational versus Post-Educational Survey)</i>			
Items	M_{pre}	M_{post}	t
Environmental Values	4.84	5.08	-3.26***
<i>Note.</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree.			

Shopping values. A paired-samples t test was conducted for pre-educational and post-educational shopping values. The variable for hedonic shopping values was determined by the average of the six items and a paired-samples t test was done to measure change due to the educational module. The results showed that participants' hedonic shopping values decreased after the educational module ($M_{pre} = 5.51$ and $M_{post} = 5.29$, $t = 3.59$, $p < 0.001$). The variable for

utilitarian shopping values was determined by the average of the three items and a paired-samples t test was conducted to measure change due to the educational module. The results showed that participants' utilitarian shopping values improved after the educational module, however, the results were not significant ($M_{pre} = 3.45$ and $M_{post}=3.57$, $t=-1.168$). Results are shown below in Table 47.

Table 47			
<i>Shopping Values (Pre-Educational versus Post-Educational Survey)</i>			
Items	M_{pre}	M_{post}	t
Hedonic Shopping Values	5.51	5.29	3.59***
Utilitarian Shopping Values	3.45	3.57	-1.17
<i>Note.</i> Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree.			

Shopping behavior. A paired-samples t test was conducted for pre-educational and post-educational shopping behavior. Significant items included purchasing new items less often, considering environmental impacts before purchasing clothing, shopping more often at locally owned stores for clothing, researching how clothing is made, becoming attached to clothing, trying to purchase sustainably made apparel, fit being an important factor, style being an important factor, and consumers being willing to spend more money on an item that will last longer. Results are shown in Table 48.

Table 48			
<i>Shopping Behavior (Pre-Educational versus Post-Educational Survey)</i>			
Items	M _{pre}	M _{post}	t
Multiple choice items			
How often they purchase new clothing items ^a	3.59	3.77	-3.24**
How often they purchase second-hand clothing items ^a	3.85	3.98	-.943
How often they purchase at fast fashion retailers ^a	4.12	4.17	-.571
How many items purchased each month ^b	2.89	2.71	2.95**
How long items are kept before disposal ^b	4.52	4.63	-1.93
Have clothing items been repaired in the past 2 years ^b	1.76	1.76	.00
How often organic or local food is purchased ^b	2.00	2.00	.00
7-point Likert scale items^c			
I consider the environmental impacts of my purchases.	3.87	4.50	-5.08***
I try to dispose of less clothing.	5.12	5.31	-1.41
I try to shop at locally owned stores for clothing.	4.10	4.45	-2.90**
I research how my clothing was made (e.g. materials, components, manufacture) before purchasing.	2.36	3.11	-5.78***
I become attached to some of my clothing.	6.15	5.98	2.29*
I try to purchase sustainably made apparel.	4.16	4.44	-2.35*
Price is the most important factor to me when shopping for apparel.	5.04	4.97	.62
Fit is the most important factor to me when shopping for apparel.	5.94	5.71	2.45*
Quality is the most important factor to me when shopping for apparel.	5.42	5.32	1.06
Style is the most important factor to me when shopping for apparel.	6.04	5.66	4.24***
I am willing to spend more money on an apparel item that I think will last longer.	5.98	5.75	2.26*
I am more likely to repair clothing that I am attached to.	5.58	5.70	-1.11
^a Items were measured with the larger number indicating the less frequency			
^b Items were measured with the larger number indicating the more frequency or larger amount.			
^c Items were recorded on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree.			
*p<0.05, **p<0.01, ***p<0.001			

Educational Module and Food Purchase. Besides testing the variables included in the Theory of Planned Behavior to understand purchase intention toward slow fashion, an additional regression analysis was conducted by adding past organic/local food purchase behavior and perception of module effectiveness. Results are shown in Table 49.

Table 49					
<i>Regression Analysis: Educational Module and Food Purchase</i>					
	<i>df</i>	R^2	F	β	t
Dependent Variable: Purchase intention toward slow fashion	162	0.335	17.303		
Food Purchase				0.15	2.25*
Module				0.14	2.14*
Attitude				0.16	3.36*
Subjective norm				0.13	1.97
Perceived behavioral control				0.46	7.10***
<i>Note:</i> Items were tested on a scale from 1-7 where 1=Strongly Disagree and 7=Strongly Agree. * $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$					

Comparison of Models. In a regression analysis, comparing the original Theory of Planned Behavior model with an extended version presents insight into the additional factors that may improve the descriptive power of the model (Tsai, 2006). A F-Ratio test revealed that the regression model with the additional variables of food purchase and the effectiveness of the module are a better model to predict young adult consumer's purchase intention towards slow fashion, with a significance of $p < 0.01$.

CHAPTER V

DISCUSSION AND CONCLUSIONS

Previous studies have shown that young adult consumers do not feel that they have enough knowledge about slow fashion and sustainable apparel to make an informed purchase decision (Pookulangara & Shephard, 2012). The overall goal of this study was to educate young adults on the environmental impact of their purchasing behaviors of fast fashion products, to enrich the knowledge about slow fashion, and to see if new knowledge encouraged more sustainable purchasing practices.

In this discussion and conclusions chapter, the findings of this research are discussed. Theoretical and practical implications, limitations of the study, and suggestions for future research are included in the Conclusions section.

Research Question One

Research question one asked, “Can an educational module help increase young adult consumers’ knowledge of slow fashion?” The educational module focused on defining fast fashion and its environmental impacts and defining slow fashion and presenting the benefits of purchasing these apparel products. Results showed that both objective and subjective knowledge increased after the educational module. Objective knowledge refers to what an individual actually knows (Brucks, 1985; Corbett, 2006). The objective knowledge measured in the pre-educational survey was higher than expected (7.21 with the highest score being 8), which perhaps showed that the overall principles of slow fashion are easy to understand for those with an apparel background. The questions in the objective knowledge section were in true/false format and asked about the business model, values, environmental impacts, and quality related to

slow fashion. The results of the paired-samples t test for objective knowledge were significant, showing that exposure to education about slow fashion can increase the young adult consumer's objective knowledge. These results aligned with Hiller Connell and Kozar (2012), who found that undergraduates' knowledge of the social issues surrounding the textile and apparel industry increased after a course on the specific subject. Subjective knowledge also increased after the educational module. Subjective knowledge refers to an individual's confidence in what they know (Brucks, 1985; Corbett, 2006). The questions in the subjective knowledge section of the survey asked about their familiarity with the terms "fast fashion" and "slow fashion," if they knew where to purchase these products, and if they understood the impacts of these purchases. The change in subjective knowledge was very significant; this proves that exposure to education can have a substantial influence on young adult consumer's subjective knowledge. It is interesting to note that subjective knowledge was lower than objective knowledge, meaning that participants felt they knew less than they actually knew about slow fashion. This result was somewhat expected because "slow fashion" is a relatively new term and previous research has shown that the young adult consumer does not feel that they have enough knowledge about slow fashion to make an informed purchase decision (Pookulangara & Shephard, 2012).

Research Question Two

The second research question was "Can an educational module help change young adult consumers' attitude toward slow fashion?" The results showed that the module improved participants' attitudes. This result aligns with the results of a study done by Ritter, Borchardt, Vaccaro, Pereira, and Almeida (2014) who found that information and knowledge had a positive impact on Brazilian consumer's attitudes towards green products. The clothing manufacturer Patagonia found that attitudes towards organic cotton were improved after employees learned

more about the processes for conventional cotton and organic cotton (Chouinard & Brown, 1997). The module focused on the environmental impacts of fast fashion, then the benefits of purchasing slow fashion products were highlighted, and the module ended with a side-by-side comparison of a fast fashion T-Shirt and a slow fashion T-shirt. This approach was used after a suggestion from the focus group where participants said that knowing the impacts of fast fashion would help to highlight the benefits of slow fashion and that a comparison between specific products would be helpful. Previous research states that consumers respond more on the benefits of the environmentally friendly option (Chouinard & Brown, 1997).

Research Question Three

The third research question is “Can an educational module help change young adult consumers’ purchase intentions toward slow fashion?” The results showed improved purchase intentions among the participants, however, the result was not significant, which was not unexpected. A study by Hiller Connell & Kozar (2012) revealed that undergraduates reported purchasing behaviors towards sustainable products remained unchanged after a course on global production and distribution of apparel and textile goods. One possible explanation is that slow fashion is more expensive than other clothing, such as fast fashion. Pookulagara and Shepherd (2012) found that younger consumers were more focused on trends and not as interested in investing in the longevity of their clothing. Though the importance of price when shopping for clothing and the amount spent on clothing each month were asked in the survey, there was not a question about the financial means of the participants (e.g. their annual or monthly income) in the survey. Findings also reveal that there are factors, other than increased knowledge, that might influence a consumer’s purchase intention towards slow fashion.

Research Question Four

The fourth research question asked, “Do young adult consumers’ environmental values, shopping values, and knowledge of slow fashion impact their a) attitudes, b) subjective norm, and c) perceived behavioral control toward slow fashion?”

Results showed that participants’ attitudes toward slow fashion were significantly predicted only by environmental values, meaning that stronger environmental values are a predictor of a positive attitude towards slow fashion. This result mirrors the finding of Homer and Kahle (1988) when they proved that personal values have a positive influence on attitudes, as environmental values are considered personal values. This finding is also consistent the study by Kang et al. (2013) who also found that consumer knowledge did not have a significant impact on consumer attitude and found that positive attitudes toward sustainable apparel purchases were more likely to be formed if the consumer felt that they had an impact on the environment. In a study conducted by Hustvedt and Dickson (2009), it was shown that consumers who had positive attitudes towards organic cotton had a strong identity as environmental and socially responsible consumers, which could be translated into having strong environmental values. Cowan & Kinley (2014) found that perceived environmental knowledge and environmental concerns predicted a consumer’s attitude towards purchasing environmentally friendly apparel. Shopping values and knowledge were not significant in predicting young adult consumer’s attitudes towards slow fashion. In general, the R^2 value was very low (0.19) showing that other factors may have influence on attitude toward slow fashion. More information will be discussed in the future research section.

The findings indicated that environmental values were the only significant predictor of the participants’ subjective norm toward slow fashion. Questions on subjective norm asked

participants about the approval of others towards buying slow fashion, whether or not others thought they should buy slow fashion apparel items, and their motivation to comply with others, or how important is for them to do what others close to them want them to do. Kang et al. (2013) found that when a consumer felt that consumption enhanced their “social presentation of self-image (i.e. a higher perceived personal relevance), he/she is likely to form a positive attitude and feel stronger social pressure” to purchase sustainable clothing (p. 450). That is, once an individual has created a certain identity, he or she may feel more pressure to behave in a way that aligns with that identity. Participants with greater environmental values may feel that it is more important to their identity to wear clothing that supports their environmental values. Loureiro & Araujo (2013) also found that personal values have a significant influence on subjective norm when it came to purchasing luxury goods. Objective and subjective knowledge were not significant in predicting consumer’s subjective norm, which mirrors the findings from Kang et al. (2013) when they found that knowledge of green products did not influence the participants subjective norm. Hedonic and utilitarian shopping values were also found to be insignificant in predicting the participants’ subjective norm which is similar to Pookunlangara, Hawley, and Xiao’s (2011) study, who also found that hedonic and utilitarian shopping values did not influence subjective norm when studying multi-channel shopping.

The results also revealed that participants’ perceived behavioral control toward slow fashion was positively predicted only by subjective knowledge, meaning that the more a participant felt they knew about slow fashion. Kang et al. (2013) also found that knowledge had a significant impact on perceived behavioral control when it came to the purchase of green products. This result was expected because as consumers gain more knowledge about a situation, they may feel as though they have greater control over what they can do. Although the relationship between

consumer values and attitudes has been confirmed in previous literature (e.g., Kim & Chung, 2011; Vermeir & Verbeke, 2006), there is little research examining the direct association between values and perceived behavioral control and between objective knowledge and perceived behavioral control. The low R^2 value (0.08) from the regression analysis indicated that other factors may have influence on perceived behavioral control. More information will be discussed in the future research section.

Research Question Five

The fifth research question was “do young adult consumers’ attitudes, subjective norm, and perceived behavioral control impact their purchase intentions toward slow fashion?” Attitude and perceived behavioral control were found to be significant in predicting an individual’s purchase intention toward slow fashion, while subjective norm was not found to be significant. Perceived behavioral control had the highest beta weight ($\beta = 0.46$), meaning that it had the most predictive power among the three variables in the theory of planned behavior in the context of slow fashion. This result was somewhat expected because consumers may feel that slow fashion or sustainable apparel has a price barrier and their perceived behavioral control would be the biggest influence on their intention to purchase slow fashion apparel products. Subjective norm was not significant in predicting purchase intention of slow fashion products, which is similar to current literature. In their study on Chinese consumers purchase intention toward US apparel brands, Ji and Kang (2011) found that attitude and perceived behavioral control had bigger impacts on purchase intention than subjective norm. The most important barrier to the Chinese consumer in this study was price, but once they perceived that they have control over the purchase, intent was developed. This could also translate to young adult consumers’ purchase intentions towards slow fashion. If the consumers feel that they will not be able to afford it, then

they are not likely to develop the intention to purchase it. Similarly in their study on the organic food consumer in Australia, Dowd and Burke (2013) found that attitude and perceived behavioral control were significant in predicting purchase intention towards organic fruits and vegetables. Son, Jin, and George (2013) found that attitude and perceived behavioral control had a greater impact on the Indian consumer's purchase intention towards foreign brand jeans than their subjective norm. Bianchi and Mortimer (2015) also demonstrated that subjective norm did not have a large influence on consumers' purchase intentions towards local foods.

Additional Findings

Environmental Values. The results of this study showed that environmental values increased significantly after the educational module. This result was unexpected because an individual's values are thought to be stable. One possible explanation for the change is how the variable was measured. There were questions in the environmental values section of the survey that were specific to an individual's behavior (e.g. "I think about the environmental impacts of my clothing when I am shopping." and "I am actively trying to reduce my environmental footprint.") and an individual's impact on the environment. The educational module specifically covered the environmental impacts of clothing and related the impacts to individual behavior, which could have resulted in the increase in environmental values.

Shopping values. The findings showed that there was a significant decrease in hedonic shopping values, but not utilitarian shopping values. Hedonic shopping values are related to an individual's sense of adventure and joy when shopping (Babin et al., 1994). Fast fashion appeals to a more hedonic shopper as it is fast paced with new, trendy styles every couple of weeks (Joy et al., 2012). This result was expected because after learning about the environmental impacts of clothing, participants may not have gotten as much joy out of their shopping experiences.

Shopping behavior. The participants' shopping behavior from the pre-educational survey and the post-educational survey were compared. The initial results aligned well with Morgan and Birtwistle's (2009) study as far as shopping frequency with the majority of participants shopping every two to four weeks. Results showed that participants purchased clothing less often, the number of apparel items purchased each month decreased, participants considered the environmental impacts of their clothing more, and participants tried to purchase more sustainable clothing. Some results were unexpected, as participants reported decreased attachment to some of their clothing and decreased willingness to spend more on clothing that would last longer. The reason for these results is unclear and could be further investigated in future research. Though it is likely that the responses to these items could change as the consumers age and have a larger income to spend on clothing. In an exploratory study by Pookulangara and Shephard (2012), young adult consumers study placed a higher priority on trend and thought slow fashion would be more appealing as they grew older.

Impact of module and food purchases on purchase intention. The perceived effectiveness of the educational module was shown to have a significant relationship with purchase intention. This proves that education in regards to slow fashion has a positive impact on purchase intention towards slow fashion, meaning that the participants that paid attention to the module and felt that it was effective had a stronger intention to purchase slow fashion products. The study also found that there was a relationship between organic and/or local food purchasing behavior and the participants purchase intention towards slow fashion. Food supply chains are often compared to apparel in sustainable apparel media (Oliver, 2015) however, these two types of purchases are rarely compared in academic research.

Conclusions

This study intended to further the understanding of young adult consumers' knowledge, attitudes, and purchase intentions in regards to slow fashion. The Theory of Planned Behavior was used as a base model for this study and environmental values, shopping values, and knowledge of slow fashion were added to better understand their influence on attitudes, subjective norm, and perceived behavioral control in the context of slow fashion. Additionally, an educational module was developed to help young adult consumers gain more knowledge and a better understanding of the environmental impacts of clothing and the benefits of purchasing slow fashion apparel products. Previous studies have shown that educational programs have been effective in improving attitudes and behaviors related to sustainable behavior (Coats, 2014).

The research questions were answered through a comparison of pre-educational and post-educational surveys and the testing of the relationships between variables of environmental values, shopping values, and knowledge of slow fashion with attitude, subjective norm, and perceived behavioral control, and the relationship between attitude, subjective norm, and perceived behavioral control with purchase intention towards slow fashion.

Theoretical Implications

The Theory of Planned Behavior is used to examine how attitude, subjective norm, and perceived behavioral control influence behavior in the context of slow fashion. The first theoretical contribution of this study is that it expanded upon the theory to understand slow fashion and confirmed the theory. The Theory of Planned Behavior has been used in apparel research (Kang et al., 2013; Salazar et al., 2013) but not in the context of slow fashion. This study expanded upon the body of literature related to slow fashion using a sample of young adult consumers (i.e. undergraduate students).

Of the variables in the original Theory of Planned Behavior framework, only subjective norm was found to be not significant in prediction of young adult consumer's purchase intention towards slow fashion. This finding aligns with some of the previous studies such as Belleau, Summers, Xu, and Pinel (2007) and Tarkiainen and Sundqvist (2005), as doing what is expected is becoming less common. What an individual feels is expected of them does not influence their intention to purchase slow fashion products. There has been some current literature that also shows the decrease in the strength of the subjective norm. Belleau et al. (2007) found that subjective norm was a weak predictor for current young adult consumers purchase intentions towards emu leather products. Tarkiainen and Sundqvist (2005) discovered that subjective norms are more of an influencer of attitudes, rather than being independent from each other in regards to organic food purchases.

The second contribution of this study is the use of the Theory with the addition of three variables. Environmental values, shopping values, and knowledge of slow fashion were included in the content of the module to examine their influence on attitude, subjective norm, and perceived behavioral control. Specifically this study shows that environmental values have a significant relationship to attitude and subjective norm. This suggests that consumers with stronger environmental values are more likely to have a more positive attitude towards slow fashion and sustainable apparel. Findings also suggest that individuals with strong environmental values might act in a way so that others perceive them as an environmentalist. This study also found that subjective knowledge has a significant influence on perceived behavioral control. Past slow fashion studies have shown that participants felt that they did not have enough knowledge about slow fashion to make an informed purchase intention

(Pookulangara & Shephard, 2012). These findings indicated that the more consumers think they know about slow fashion, the more control they feel they have over their purchase of it.

Practical Implications

The results of this study also provide practical implications for the apparel industry. Previous research has indicated that consumers do not feel that they have enough knowledge about slow fashion to make an informed purchase (Pookulangara & Shephard, 2012). The findings from pre-educational survey indicate that the young adult consumer has a high objective knowledge of slow fashion, but their subjective knowledge was lower, indicating that the participants did not feel that they knew that much about slow fashion. However, when a comparison was drawn between the knowledge in the pre-educational survey and the post-educational survey, results showed that a 20-minute educational module could have a significant impact on young adult consumers' level of knowledge. The module also had a positive impact on consumers' attitudes towards slow fashion, showing that education influences attitude. Slow fashion companies should consider marketing campaigns to educate target consumers about the environmental benefits of purchasing slow fashion and help develop more positive attitude towards their products. Companies could apply content of the module to educate consumers of the benefit of their products in comparison to the negative environmental impacts of fast fashion. The comparison between fast fashion and slow fashion help to bring out the environmental benefits of purchasing slow fashion.

The study also has implications from the education perspective. The module was organized to first show the negative environmental impacts of fast fashion and then presented slow fashion as a sustainable anecdote. Educators could use the module in a classroom setting when talking about sustainable apparel or the environmental impacts of the textile and apparel industry.

Limitations

This study faced several limitations that must be considered when examining the results. The first being that only students enrolled in classes in the area of apparel design and merchandising were tested. These students, mostly freshman and sophomore levels, may have had more knowledge about the environmental impacts of clothing and could have had a higher interest in learning about slow fashion than students outside the department. Also, a comparison between genders could not be observed because of the small proportion of male participants.

This study was conducted with two classes in the Department of Design & Merchandising department and it found that the undergraduate students did have a high level of objective knowledge of slow fashion. Students may have already heard of slow fashion and may have been more interested in the subject because it was in their field of study. Because there is not a great deal of literature on slow fashion, it was unknown how much young adult consumers would understand about the subject, therefore questions testing the objective knowledge about slow fashion were worded in an obvious way. Future studies could take note of this study and create more difficult questions relating to objective knowledge, or measure objective knowledge in a different way, such as using multiple choice questions.

The time span for data collection was two to three weeks due to time constraints. With a larger time span, such as four to six weeks, different results could have been seen. Participants may have had more time to think about their purchasing behavior and attempt to change it.

The surveys did not ask participants of their financial means, or how much they feel they can spend on apparel. It asked how much participants spend each month. Asking how much they can spend each month would provide better understanding in regards to purchase intention

toward slow fashion. Participants may not feel as though that can afford to purchase slow fashion apparel at this point, but may see it as a future goal.

Future Research

There are many opportunities for future research from this study. In some cases, the variance numbers of certain regression analyses were very small, indicating that other variables might be better predictors of that dependent variable. Other factors could be added as antecedents to the Theory of Planned Behavior to examine their impact on attitude, subjective norm, and perceived behavioral control such as the consumers' past socially responsible related behavior, moral values, fashion involvement, attitude towards fast fashion, and perceived quality of fast fashion. The measurement for objective knowledge could also be improved upon as mentioned in the previous limitation section.

The educational module focused on the impacts of fast fashion and the benefits of purchasing slow fashion. The content of the module could be improved or changed to produce different results. The module lasted about 20 minutes. The time could be extended so that participants would have a greater understanding of slow fashion and perhaps their subjective knowledge would be higher in the post-educational survey.

This study did not see a significant increase in purchase intention after the educational module. Future studies could examine different ways to change purchase intention towards slow fashion. Other methods could be visiting a slow fashion store or seeing the clothing being manufactured first hand. Videos such as *The True Cost* (2015) or *Last Week Tonight with John Oliver* (2015) or field trips with more interactive experiences could be added to the educational module to hopefully produce different results. The results of this study contrast the findings of a study by Cowan and Kinley (2014) who found that social pressure or subjective norm had the

strongest relationship with purchase intention of environmentally friendly apparel. Kang et al. (2013) found that attitude and subjective norm were key elements that determine purchase intention as it related to sustainable apparel and perceived behavioral control did not significantly increase purchase intention. Dowd & Burke (2013) found that all three variables in the Theory of Planned Behavior were significant in predicting and individual's intention to purchase sustainably sourced food. Fernandes (2012) found that subjective norms have a significant influence on purchase intention for the group that is likely to purchase counterfeit fashion.

Lastly, future research could be conducted to examine whether attitudes and purchase intentions towards slow fashion change as consumers age. Young adult consumers are more likely to be more interested in dressing on trend and are more likely to enjoy the fast paced nature of fast fashion, but see slow fashion as something more suited for older generations (Pookulangara & Shephard, 2012).

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APPENDIX A:

RECRUITMENT POSTER FOR FOCUS GROUP DISCUSSION



WHO: Any student, male or female, interested in sustainability, working conditions, or clothing.

WHAT: A discussion focused on slow fashion: what it is, what it means, implications, etc.

WHERE: Aylesworth Hall, room tbd

WHEN: August 18, 6:00pm

WHY: Come for free pizza, and stay to share thoughts and learn more about the slow fashion movement in today's society.

INTERESTED? Please contact Rachel Preuit, rachel.preuit@colostate.edu

Slow Fashion Focus Group Rachel Preuit rachel.preuit@colostate.edu
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APPENDIX B

INSTRUMENT FOR FOCUS GROUP

Part I: Demographic Information

Participant # _____

Your age: _____

Your gender: _____

Your ethnicity: _____

Your school year: _____

Your major: _____

How often do you go shopping for apparel? Weekly____ **Monthly**____ **A few times a year**

How much time do you usually spend shopping for apparel on each shopping trip?

Do you usually have a budget in mind when going shopping for apparel? Yes ____ **No**

How much do you spend a month on apparel? \$ _____

Do you usually have specific items in mind that you are looking for when shopping for apparel? Yes____ **No** _____

Are you replacing items that are worn out? Yes ____ **No** _____

When shopping, which is most important to you?

Saving time ____ **saving money** ____ **finding quality items** ____ **Other** _____

What challenges or problems do you usually face when shopping (e.g., sizing, inconsistent assortments, brands, quality etc.)

Where do you usually shop to buy your apparel items? Please list the stores.

Part II: Interview Schedule

1. Do you know what fast fashion means?
 - a. If yes, can you explain?
2. How often do you shop at fast fashion stores, including, but not limited to, Forever 21, H&M and Zara?
3. Why do you choose to shop at fast fashion retailers?
4. In general, how satisfied are you with your fast fashion purchases and shopping experience?
5. Do you know of any negative impacts in relation to the fast fashion industry? (human rights, environment, waste, overconsumption...) ? Please explain.
6. Have you tried to choose sustainable products when shopping for apparel?
 - a. Why or why not?
 - b. How important is sustainability to you when shopping for apparel?
 - c. Would you try to if you had more money?
7. What makes you want to choose or not choose sustainably conscious products?
8. Do you think about how long a garment will last when you shop for apparel?
9. Do you feel an attachment to any particular clothing items?
10. Do you feel like anything is hindering you from making sustainable purchasing choices?
11. Have you heard of slow fashion?
 - a. How is it different from fast fashion?
 - b. What do you know about it?
12. How do you feel about spending the same amount of money on fewer products?
13. After learning about the true impacts of fast and slow fashion, would you be willing to pass up buying two Forever 21 t-shirts for \$14.50 each for one sustainable t-shirt for \$30.00?
14. After this introduction to slow fashion, would it change your decision as to what type of products to buy?
15. What would companies have to do to encourage you to consume/buy sustainable apparel?
 - a. What challenges do you face when if/when buying slow fashion products?
16. Are there other things you wish to know that would better inform your purchase decisions for slow fashion apparel?

APPENDIX C

COVER LETTER FOR PRE-EDUCATIONAL SURVEY

Fall 2015

Dear Student:

We are currently conducting a research study entitled “Fashion and Sustainability: Increasing Knowledge About Slow Fashion Through an Educational Module.” The purpose of this research is to understand whether exposure to education on slow fashion regarding its environmental benefits and the negative environmental impacts of fast fashion will influence consumers’ attitude and purchase intentions toward slow fashion products.

We would like to invite you to participate in this research. Your participation is completely voluntary. If you decide to participate in this research, you will be asked to respond to a survey that includes questions on demographics, shopping behavior, knowledge and attitudes towards slow fashion, environmental and shopping values. The survey will take approximately 20 minutes. Directly following the survey will be an educational module, which will take approximately 20 minutes. An additional survey will be emailed out approximately 3 weeks after the initial survey and will take 20 minutes to complete.

For your participation in this study, you will be eligible to receive prizes throughout the educational module. And, if you choose to provide your email address at the end of the survey, you will be eligible to enter a drawing to earn a \$20 Visa gift card, with a 2 in 300 odds of winning, and will be invited to participate in the follow-up survey. You will also receive 5 points of extra credit for participating in the first survey and a total of # points for participating in both surveys in DM 270 course.

Please be assured that any information and responses you provide in this study will remain confidential and anonymous. Your name will not be attached to your questionnaire; rather a numeric code will be assigned to your survey. Your email address will only be used to send you the second survey. Also, you may choose to stop participating at any time.

There are no known risks to participating in this survey. Similarly, there are no known benefits to participating in this study, but we expect that participants will have an improved knowledge of the environmental impacts of fast fashion and a better understanding of slow fashion and its environmental benefits. If you have any questions about the study, please phone Dr. Yan at (970) 491-5331 or email her at ruoh-nan.yan@colostate.edu. If you have any questions about human research participants’ rights, please contact Evelyn Swiss at 970-491-1381 or evelyn.swiss@colostate.edu.

Thank you for considering our request to participate in this study.
Sincerely,

Ruoh-Nan Yan, Ph.D
Associate Professor,
Department of Design & Merchandising

Rachel Preuit
Graduate Student
Department of Design & Merchandising

APPENDIX D

PRE-EDUCATIONAL SURVEY

Please note the instructions for each section.

Section I: About Yourself

Please answer the following questions.

Last 4 digits of CSU Student ID number: _____

(Your ID number will only be used to match your pre- and post- survey. Your identity will be kept anonymous)

Gender: ___ Female ___ Male

Age: _____

Ethnicity:

___ African American

___ Asian American

___ Caucasian

___ Hispanic

___ Mixed Race

___ Other

Year in School:

___ Freshman

___ Sophomore

___ Junior

___ Senior

___ Graduate Student

Your major: _____

Section II: Shopping Behaviors

A. Please answer by circling the answer that best describes you as a consumer.

1. On average, how often do you purchase new clothing items?
 - a. Never
 - b. Every week
 - c. Once every two weeks
 - d. Once a month
 - e. Once every couple of months
 - f. Once every year

2. On average, how often do you purchase second-hand clothing items?
 - a. Never
 - b. Every week
 - c. Once every two weeks
 - d. Once a month
 - e. Once every couple of months
 - f. Once every year

3. On average, how often do you purchase at fast fashion retailers (e.g., Forever 21, H&M)?
 - a. Never
 - b. Every week
 - c. Once every two weeks
 - d. Once a month
 - e. Once every couple of months
 - f. Once every year

4. On average, how many items of clothing do you purchase each month?
 - a. 0
 - b. 1-2
 - c. 3-4
 - d. 5-6
 - e. 6+

5. On average, how much money do you spend on clothing each month? \$ _____

6. On average, how long do you keep clothing before you dispose of it (e.g. donating, recycling, throwing away)?
 - a. A few weeks
 - b. A couple of months
 - c. Less than a year
 - d. A year
 - e. Several years

7. Have you had your clothing repaired or have you repaired your clothing in the past 2 years?
 - a. Never
 - b. Occasionally
 - c. Always

If you answered b or c to the above question, what were the items you tried to repair?

8. Typically, how often do you purchase organic or locally sourced food?
 - a. Never
 - b. Occasionally
 - c. Always

B. Please circle the number that best indicates your level of agreement with the following statements (1=strongly disagree, 7=strongly agree).

Questions	Strongly Disagree				Neutral	Strongly Agree	
1. I consider the environmental impacts of my purchases.	1	2	3	4	5	6	7
2. I try to dispose of less clothing.	1	2	3	4	5	6	7
3. I try to shop at locally owned stores for clothing.	1	2	3	4	5	6	7
4. I research how my clothing was made (e.g. materials, components, manufacture) before purchasing.	1	2	3	4	5	6	7
5. I become attached to some of my clothing.	1	2	3	4	5	6	7
6. I try to purchase sustainably made apparel.	1	2	3	4	5	6	7
7. Price is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
8. Fit is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
9. Quality is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
10. Style is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
11. I am willing to spend more money on an apparel item that I think will last longer.	1	2	3	4	5	6	7
12. I am more likely to repair clothing that I am attached to.	1	2	3	4	5	6	7

Section III: Your Environmental Values and Beliefs

Please rate the following statements from strongly disagree (1) to strongly agree (7).

Questions	Strongly Disagree			Neutral		Strongly Agree	
1. I think about the environmental impacts of my clothing when I am shopping.	1	2	3	4	5	6	7
2. I am actively trying to reduce my environmental footprint.	1	2	3	4	5	6	7
3. The future well-being of the planet is important to me.	1	2	3	4	5	6	7
4. I think that my actions can make a difference in the health of the planet.	1	2	3	4	5	6	7
5. I am a person who cares about the environment.	1	2	3	4	5	6	7
6. The whole environmental issue is very important to me.	1	2	3	4	5	6	7
7. I believe that my behavior can impact the environment.	1	2	3	4	5	6	7
8. The earth has limited resources.	1	2	3	4	5	6	7
9. Humans are subject to the laws of nature.	1	2	3	4	5	6	7
10. Humans have the right to change the environment as they see fit.	1	2	3	4	5	6	7

Section IV: Your Shopping Values

Please rate the following statements from strongly disagree (1) to strongly agree (7).

Questions	Strongly Disagree			Neutral		Strongly Agree	
1. I enjoy being immersed in exciting new products.	1	2	3	4	5	6	7
2. I feel a sense of adventure when I shop.	1	2	3	4	5	6	7
3. I shop to get away.	1	2	3	4	5	6	7
4. I shop because I want to, not because I have to.	1	2	3	4	5	6	7
5. Compared to other things I could do, I find shopping trips very enjoyable.	1	2	3	4	5	6	7
6. Shopping truly feels like an escape.	1	2	3	4	5	6	7
7. I like shopping trips to be over quickly.	1	2	3	4	5	6	7
8. I shop for what I need.	1	2	3	4	5	6	7

9. I am disappointed when I have to go to multiple stores to complete a shopping trip.	1	2	3	4	5	6	7
10. I like to feel successful after shopping.	1	2	3	4	5	6	7

Section V: What You Know About Fashion

A. Please circle the number that best indicates your level of agreement with the following statements (1 = strongly disagree, 7 = strongly agree).

Questions	Strongly Disagree		Neutral			Strongly Agree	
1. I am familiar with the term “fast fashion.”	1	2	3	4	5	6	7
2. I know where to purchase fast fashion apparel.	1	2	3	4	5	6	7
3. I am familiar with the term “slow fashion.”	1	2	3	4	5	6	7
4. I know where to purchase slow fashion apparel.	1	2	3	4	5	6	7
5. I know about the environmental impacts of fast fashion apparel.	1	2	3	4	5	6	7
6. I know about the environmental impacts of slow fashion apparel.	1	2	3	4	5	6	7
7. I have often read articles or news about fast fashion apparel.	1	2	3	4	5	6	7
8. I have often read articles or news about slow fashion apparel.	1	2	3	4	5	6	7
9. I understand the difference in quality between fast fashion and slow fashion apparel.	1	2	3	4	5	6	7

B. True/False: Please indicate whether the following statement is true (T) or false (F).

1. ___ Slow fashion refers to a business model that is defined by high production, high consumption, and high disposal.
2. ___ The slow fashion business model is a more sustainable business model.
3. ___ Slow fashion is about reconnecting to a time when people knew where their clothing came from.
4. ___ Slow fashion is based upon valuing local resources, transparent production systems, and sustainable and sensorial products.
5. ___ It is sustainable to frequently purchase clothing.
6. ___ Slow fashion promotes sustainability via less frequent consumption of apparel.
7. ___ I can purchase slow fashion clothing in Colorado.
8. ___ Fast fashion apparel is of higher quality than slow fashion apparel.

Section VI: Your Views About Slow Fashion Products

Please indicate your degree of agreement with the following statements by checking the appropriate space.

In general, my attitude towards buying slow fashion apparel is ...

- 1. Extremely negative (1) ___ ___ ___ ___ ___ ___ ___ Extremely positive (7)
- 2. Extremely foolish (1) ___ ___ ___ ___ ___ ___ ___ Extremely wise (7)
- 3. Extremely bad (1) ___ ___ ___ ___ ___ ___ ___ Extremely good (7)
- 4. Extremely harmful (1) ___ ___ ___ ___ ___ ___ ___ Extremely beneficial (7)
- 5. Extremely unpleasant (1) ___ ___ ___ ___ ___ ___ ___ Extremely pleasant (7)
- 6. Extremely unfavorable (1) ___ ___ ___ ___ ___ ___ ___ Extremely favorable (7)

- 7. Most people who are important to me think I **should/should** not purchase slow fashion apparel products.
Should (1) ___ ___ ___ ___ ___ ___ ___ Should Not (7)

- 8. The people in my life whose opinions I value would **approve/disapprove** of my purchase of slow fashion apparel products.
Approve (1) ___ ___ ___ ___ ___ ___ ___ Not approve (7)

- 9. Most people who are important to me **are not concerned/are concerned** about whether apparel products are slow fashion.
Are not concerned (1) ___ ___ ___ ___ ___ ___ ___ Are concerned (7)

- 10. How much control do you think you have over whether you buy slow fashion apparel products?
Very little control (1) ___ ___ ___ ___ ___ ___ ___ Complete control (7)

- 11. Generally speaking, how much do you want to do what other people who are important to you think?
Not at all (1) ___ ___ ___ ___ ___ ___ ___ Very much (7)

- 12. For me, to buy slow fashion apparel products is...
Extremely difficult (1) ___ ___ ___ ___ ___ ___ ___ Extremely easy (7)

- 13. If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel.

Extremely unlikely (1) ___ ___ ___ ___ ___ ___ ___ Extremely likely (7)

14. In the future, I intend to purchase slow fashion apparel products.

Definitely not (1) ___ ___ ___ ___ ___ ___ ___ Definitely (7)

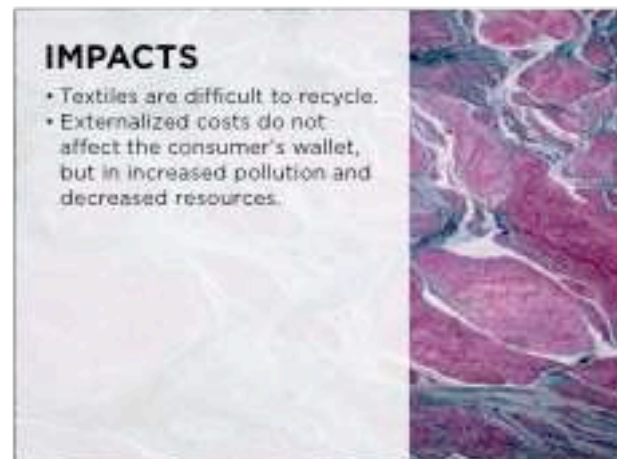
15. In the future, I will tell my friends about slow fashion apparel products.

Definitely not (1) ___ ___ ___ ___ ___ ___ ___ Definitely (7)

~ Thank you very much for your participation! ~

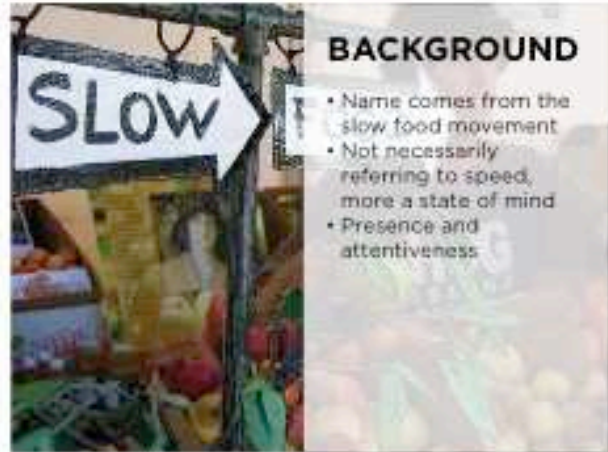
APPENDIX E

EDUCATIONAL MODULE





What do you think the term **SLOW FASHION** means?



BACKGROUND

- Name comes from the slow food movement
- Not necessarily referring to speed, more a state of mind
- Presence and attentiveness



PRINCIPLES

- **Revealing** materials or processes that have been forgotten.
- **Expanding** beyond perceived functionalities
- **Reflective** consumption
- **Engaging** across the supply chain
- **Encouraging** participation from users
- **Evolving** to environments and systems over time



SLOW FASHION

- Returning to a time when you knew who made your clothes.
- Emphasis on quality of production, materials, and fit
- Developing an emotional connection to your clothing.
- Price points are higher, but the consumer invests in their clothing and expects to have it for years



KEY COMPONENTS

- Connection with your clothing and its maker
- Transparency and traceability in the supply chain
- Localism-creates a less cloned society
- Creating a sustainable and sensorial product



ALABAMA CHANIN

- Based in Florence, AL
- Bringing textiles industry back to a place that was affected by outsourcing
- Garments sewn by hand
- Seamstresses are given lessons in mindfulness and told to "love their thread"
- \$410 for a hand-sewn top
- \$55 for a machine-sewn top

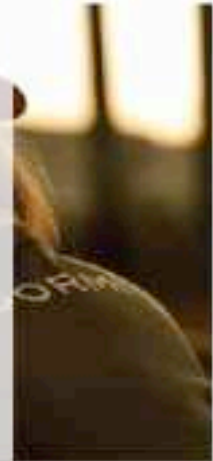
ALABAMA CHANIN: Recent Projects

- Patagonia's Truth to Materials- creating a new life for puffy jackets by turning them into scarfs
- Alabama Cotton with Billy Reid
- A.Chanin-machine sewn clothing
- Factory workshops



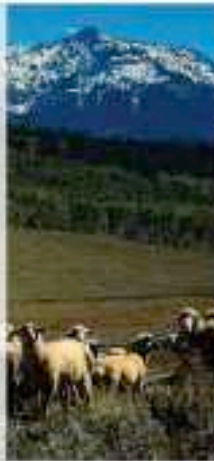
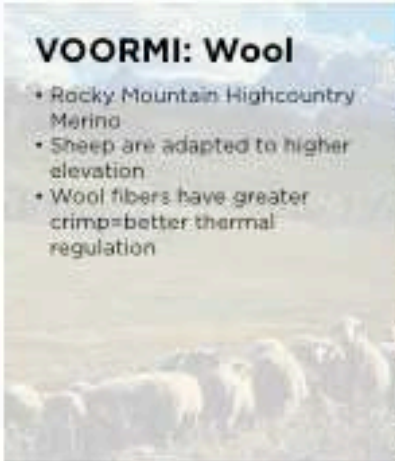
VOORMI

- Based in Pagosa Springs, CO
- Describes themselves as the "craft brew" of outdoor apparel
- Focused on local materials and manufacturing
- Known for innovative technologies with wool
- \$250 for a wool jacket



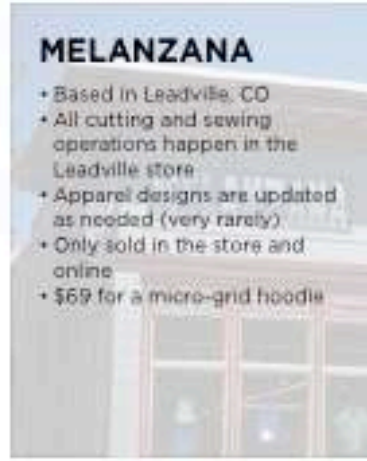
VOORMI: Wool

- Rocky Mountain Highcountry Merino
- Sheep are adapted to higher elevation
- Wool fibers have greater crimp=better thermal regulation



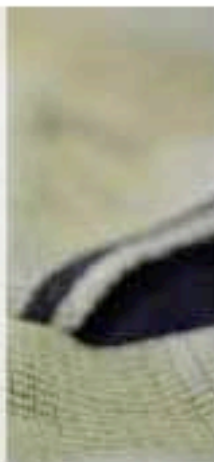
MELANZANA

- Based in Leadville, CO
- All cutting and sewing operations happen in the Leadville store
- Apparel designs are updated as needed (very rarely)
- Only sold in the store and online
- \$69 for a micro-grid hoodie



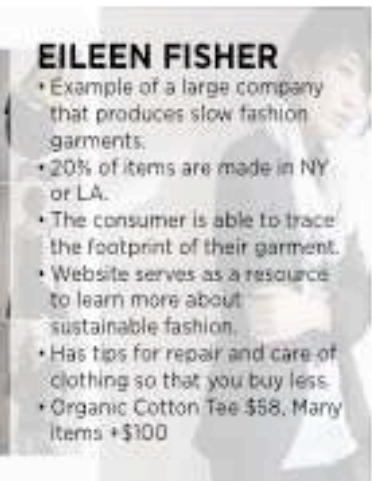
MELANZANA: Materials

- Uses Polartec from Maiden Mills-same as the big outdoor brands
- Maiden Mills- rebuilt after fire, while keeping all employees on payroll
- Designs are described as "functional simplicity"



EILEEN FISHER

- Example of a large company that produces slow fashion garments.
- 20% of items are made in NY or LA.
- The consumer is able to trace the footprint of their garment.
- Website serves as a resource to learn more about sustainable fashion.
- Has tips for repair and care of clothing so that you buy less.
- Organic Cotton Tee \$58, Mary Items +\$100



EILEEN FISHER: Vision 2020

- The first five years of their plan to reach 100% sustainability.
- Collaboration with other brands for responsible dyeing.
- Ethical manufacturing
- Mapping every part of the supply chain.
- Responsibility for disposal

NO EXCUSES

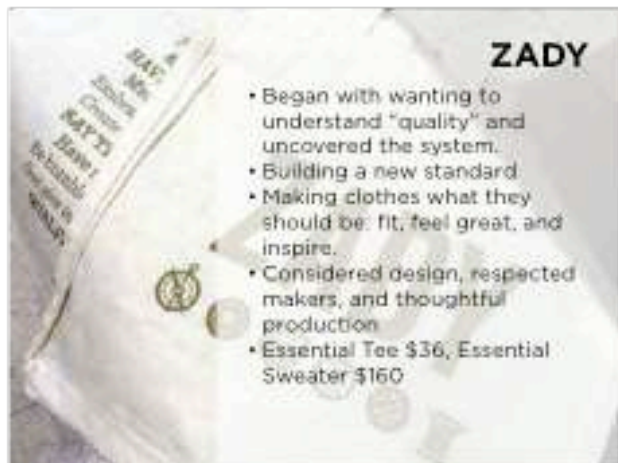
THESE PEOPLE WOULD NEVER HAVE TO LEAVE THE DIRT OF A FARM OR AN OCEAN OF A FISHING BOAT. THEY WOULD FEEL AND HEARD AND SEE AND TASTE AND TOUCH THE DIRECT CONSEQUENCES OF THEIR CHOICES. THEY WOULD KNOW THE DIFFERENCE BETWEEN A GOOD AND A BAD CHOICE.

THEY WOULD KNOW THE DIFFERENCE BETWEEN A GOOD AND A BAD CHOICE.



ZADY: Essentials Collection

- .01 The Sweater and .02 The T-Shirt
- The consumer is able to trace their garment from fiber through production and retail.
- Completely made in the U.S. (fibers too)
- Consumer is able to understand the process better.



ZADY

- Began with wanting to understand "quality" and uncovered the system.
- Building a new standard
- Making clothes what they should be: fit, feel great, and inspire.
- Considered design, respected makers, and thoughtful production
- Essential Tee \$36, Essential Sweater \$160

ZADY: Manifest

Fast Fashion is Fast Food.

EMPTY CALORIES THAT MAKE US FEEL FULL.

FACTORIES FULL OF MISTREATED WORKERS

RIVERS FULL OF TOXIC CHEMICALS

CLOSETS FULL OF DISPOSABLE WEARS

LANDFILLS FULL OF YESTERDAY'S GARMENTS

Process matters. Quality matters. Honesty matters.

ZADY T-SHIRT

- \$36
- Completely made in U.S. (Fibers from TX, produced in NC)
- Designed with quality and durability in mind.



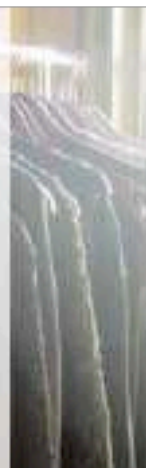
H&M T-SHIRT

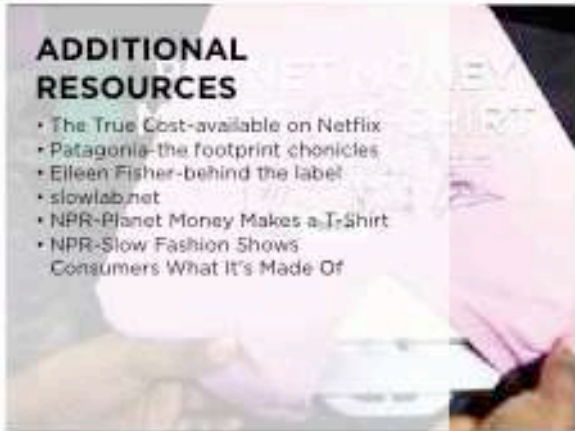
- \$9.99
- Imported (no readily available description of production)
- Designed to last 10 washes



TIPS FOR SUSTAINABLE APPAREL SHOPPING

- Be an active shopper
- Examine the quality of the garment
- Look into the materials and manufacturing of the garment
- Research the sustainability initiatives of the company
- Thoughtful disposal, looking for a way to reuse first.





APPENDIX F

POST-EDUCATIONAL SURVEY COVER LETTER

Fall 2015

Dear Student:

We are currently conducting a research study entitled “Fashion and Sustainability: Increasing Knowledge About Slow Fashion Through an Educational Module.” The purpose of this research is to understand whether exposure to education on slow fashion regarding its environmental benefits and the negative environmental impacts of fast fashion will influence consumers’ attitude and purchase intentions toward slow fashion products. You are invited to participate in this follow-up survey because you completed a pre-educational survey three weeks ago in DM 2727 or AM 101.

Your participation is completely voluntary. If you decide to participate in this research, you will be asked to respond to a survey that includes questions on demographics, shopping behavior, knowledge and attitudes towards slow fashion, environmental and shopping values. The survey will take approximately 20 minutes.

For your participation in this study, you will be eligible to receive an additional # points of extra credit in 5 course. And, if you choose to provide your email address at the end of the survey, you will be eligible to enter a drawing to earn a \$20 Visa gift card, with a 1 in 150 odds of winning.

Please be assured that any information and responses you provide in this study will remain confidential and anonymous. Your name will not be attached to your questionnaire; rather a numeric code will be assigned to your survey. Also, you may choose to stop participating at any time.

There are no known risks to participating in this survey. Similarly, there are no known benefits to participating in this study, but we expect that participants will have an improved knowledge of the environmental impacts of fast fashion and a better understand of slow fashion and its environmental benefits. If you have any questions about the study, please phone Dr. Yan at (970) 491-5331 or email her at ruoh-nan.yan@colostate.edu. If you have any questions about human research participants’ rights, please contact Evelyn Swiss at 970-491-1381 or evelyn.swiss@colostate.edu.

Thank you for considering our request to participate in this study. By selecting “next” you are agreeing to participate in this research

Sincerely,

Ruoh-Nan Yan, Ph.D
Associate Professor,
Department of Design & Merchandising

Rachel Preuit
Graduate Student
Department of Design & Merchandising

APPENDIX G

POST EDUCATIONAL SURVEY

Please note the instructions for each section.

Section I: About Yourself

Please answer the following questions.

Last 4 digits of CSU Student ID number: _____

(Your ID number will only be used to match your pre- and post- survey. Your identity will be kept anonymous)

Gender: ___ Female ___ Male

Age: _____

Ethnicity:

___ African American

___ Asian American

___ Caucasian

___ Hispanic

___ Mixed Race

___ Other

Year in School:

___ Freshman

___ Sophomore

___ Junior

___ Senior

___ Graduate Student

Your major: _____

Section II: Educational Module

I participated in the Slow Fashion Educational Module a few weeks ago. ___ Yes ___ No

(If you answer NO to the above question, please exit the survey now.)

Please circle the number that best indicates your level of agreement with the following statements (1=strongly disagree, 7=strongly agree).

Questions	Strongly Disagree		Neutral			Strongly Agree	
1. I thought the educational module was effective.	1	2	3	4	5	6	7
2. I thought the educational module	1	2	3	4	5	6	7

was informative.							
3. I paid attention to the content of the educational module.	1	2	3	4	5	6	7
4. The module increased my understanding of the environmental impacts of clothing.	1	2	3	4	5	6	7

Section III: Shopping Behaviors

A. Please answer by circling the answer that best describes you as a consumer.

1. On average, how often do you purchase new clothing items?
 - a. Never
 - b. Every week
 - c. Once every two weeks
 - d. Once a month
 - e. Once every couple of months
 - f. Once every year

2. On average, how often do you purchase second-hand clothing items?
 - g. Never
 - h. Every week
 - i. Once every two weeks
 - j. Once a month
 - k. Once every couple of months
 - l. Once every year

3. On average, how often do you purchase at fast fashion retailers (e.g., Forever 21, H&M)?
 - g. Never
 - h. Every week
 - i. Once every two weeks
 - j. Once a month
 - k. Once every couple of months
 - l. Once every year

4. On average, how many items of clothing do you purchase each month?
 - f. 0
 - g. 1-2
 - h. 3-4
 - i. 5-6
 - j. 6+

5. On average, how much money do you spend on clothing each month? \$ _____

6. On average, how long do you keep clothing before you dispose of it (e.g. donating, recycling, throwing away)?

- f. A few weeks
- g. A couple of months
- h. Less than a year
- i. A year
- j. Several years

7. Have you had your clothing repaired or have you repaired your clothing in the past 2 years?
- d. Never
 - e. Occasionally
 - f. Always

If you answered b or c to the above question, what were the items you tried to repair?

8. Typically, how often do you purchase organic or locally sourced food?
- d. Never
 - e. Occasionally
 - f. Always

B. Please circle the number that best indicates your level of agreement with the following statements (1=strongly disagree, 7=strongly agree).

Questions	Strongly Disagree			Neutral		Strongly Agree	
1. I consider the environmental impacts of my purchases.	1	2	3	4	5	6	7
2. I try to dispose of less clothing.	1	2	3	4	5	6	7
3. I try to shop at locally owned stores for clothing.	1	2	3	4	5	6	7
4. I research how my clothing was made (e.g. materials, components, manufacture) before purchasing.	1	2	3	4	5	6	7
5. I become attached to some of my clothing.	1	2	3	4	5	6	7
6. I try to purchase sustainably made apparel.	1	2	3	4	5	6	7
7. Price is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
8. Fit is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
9. Quality is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
10. Style is the most important factor to me when shopping for apparel.	1	2	3	4	5	6	7
11. I am willing to spend more money	1	2	3	4	5	6	7

on an apparel item that I think will last longer.							
12. I am more likely to repair clothing that I am attached to.	1	2	3	4	5	6	7

Section IV: Your Environmental Values and Beliefs

Please rate the following statements from strongly disagree (1) to strongly agree (7).

Questions	Strongly Disagree	Neutral	Strongly Agree				
11. I think about the environmental impacts of my clothing when I am shopping.	1	2	3	4	5	6	7
12. I am actively trying to reduce my environmental footprint.	1	2	3	4	5	6	7
13. The future well-being of the planet is important to me.	1	2	3	4	5	6	7
14. I think that my actions can make a difference in the health of the planet.	1	2	3	4	5	6	7
15. I am a person who cares about the environment.	1	2	3	4	5	6	7
16. The whole environmental issue is very important to me.	1	2	3	4	5	6	7
17. I believe that my behavior can impact the environment.	1	2	3	4	5	6	7
18. The earth has limited resources.	1	2	3	4	5	6	7
19. Humans are subject to the laws of nature.	1	2	3	4	5	6	7
20. Humans have the right to change the environment as they see fit.	1	2	3	4	5	6	7

Section V: Your Shopping Values

Please rate the following statements from strongly disagree (1) to strongly agree (7).

Questions	Strongly Disagree	Neutral	Strongly Agree				
11. I enjoy being immersed in exciting new products.	1	2	3	4	5	6	7
12. I feel a sense of adventure when I shop.	1	2	3	4	5	6	7
13. I shop to get away.	1	2	3	4	5	6	7
14. I shop because I want to, not because I have to.	1	2	3	4	5	6	7
15. Compared to other things I could	1	2	3	4	5	6	7

do, I find shopping trips very enjoyable.							
16. Shopping truly feels like an escape.	1	2	3	4	5	6	7
17. I like shopping trips to be over quickly.	1	2	3	4	5	6	7
18. I shop for what I need.	1	2	3	4	5	6	7
19. I am disappointed when I have to go to multiple stores to complete a shopping trip.	1	2	3	4	5	6	7
20. I like to feel successful after shopping.	1	2	3	4	5	6	7

Section VI: What You Know About Fashion

A. Please circle the number that best indicates your level of agreement with the following statements (1 = strongly disagree, 7 = strongly agree).

Questions	Strongly Disagree			Neutral		Strongly Agree	
10. I am familiar with the term “fast fashion.”	1	2	3	4	5	6	7
11. I know where to purchase fast fashion apparel.	1	2	3	4	5	6	7
12. I am familiar with the term “slow fashion.”	1	2	3	4	5	6	7
13. I know where to purchase slow fashion apparel.	1	2	3	4	5	6	7
14. I know about the environmental impacts of fast fashion apparel.	1	2	3	4	5	6	7
15. I know about the environmental impacts of slow fashion apparel.	1	2	3	4	5	6	7
16. I have often read articles or news about fast fashion apparel.	1	2	3	4	5	6	7
17. I have often read articles or news about slow fashion apparel.	1	2	3	4	5	6	7
18. I understand the difference in quality between fast fashion and slow fashion apparel.	1	2	3	4	5	6	7

B. True/False: Please indicate whether the following statement is true (T) or false (F).

9. ____ Slow fashion refers to a business model that is defined by high production, high consumption, and high disposal.
10. ____ The slow fashion business model is a more sustainable business model.
11. ____ Slow fashion is about reconnecting to a time when people knew where their clothing came from.

12. ____ Slow fashion is based upon valuing local resources, transparent production systems, and sustainable and sensorial products.
13. ____ It is sustainable to frequently purchase clothing.
14. ____ Slow fashion promotes sustainability via less frequent consumption of apparel.
15. ____ I can purchase slow fashion clothing in Colorado.
16. ____ Fast fashion apparel is of higher quality than slow fashion apparel.

Section VII: Your Views About Slow Fashion Products

Please indicate your degree of agreement with the following statements by checking the appropriate space.

In general, my attitude towards buying slow fashion apparel is ...

1. Extremely negative (1) ____ ____ ____ ____ ____ ____ ____ Extremely positive (7)
2. Extremely foolish (1) ____ ____ ____ ____ ____ ____ ____ Extremely wise (7)
3. Extremely bad (1) ____ ____ ____ ____ ____ ____ ____ Extremely good (7)
4. Extremely harmful (1) ____ ____ ____ ____ ____ ____ ____ Extremely beneficial (7)
5. Extremely unpleasant (1) ____ ____ ____ ____ ____ ____ ____ Extremely pleasant (7)
6. Extremely unfavorable (1) ____ ____ ____ ____ ____ ____ ____ Extremely favorable (7)

7. Most people who are important to me think I **should/should** not purchase slow fashion apparel products.

Should (1) ____ ____ ____ ____ ____ ____ ____ Should Not (7)

8. The people in my life whose opinions I value would **approve/disapprove** of my purchase of slow fashion apparel products.

Approve (1) ____ ____ ____ ____ ____ ____ ____ Not approve (7)

9. Most people who are important to me **are not concerned/are concerned** about whether apparel products are slow fashion.

Are not concerned (1) ____ ____ ____ ____ ____ ____ ____ Are concerned (7)

10. How much control do you think you have over whether you buy slow fashion apparel products?

Very little control (1) ____ ____ ____ ____ ____ ____ ____ Complete control (7)

11. Generally speaking, how much do you want to do what other people who are important to you think?

Not at all (1) ____ ____ ____ ____ ____ ____ ____ Very much (7)

12. For me, to buy slow fashion apparel products is...

Extremely difficult (1) ___ ___ ___ ___ ___ ___ ___ Extremely easy (7)

13. If I wanted to, I could easily buy slow fashion apparel products whenever I need/want apparel.

Extremely unlikely (1) ___ ___ ___ ___ ___ ___ ___ Extremely likely (7)

14. In the future, I intend to purchase slow fashion apparel products.

Definitely not (1) ___ ___ ___ ___ ___ ___ ___ Definitely (7)

15. In the future, I will tell my friends about slow fashion apparel products.

Definitely not (1) ___ ___ ___ ___ ___ ___ ___ Definitely (7)

~ Thank you very much for your participation! ~