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Exploring Consumers' Perceptions of Eco-Conscious Apparel Acquisition Behaviors¹

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EXPLORING CONSUMERS' PERCEPTIONS OF ECO-CONSCIOUS APPAREL ACQUISITION BEHAVIORS

Abstract

Purpose – The purpose of this research is to advance understanding of the socially responsible apparel consumer by exploring apparel consumption behaviors perceived by consumers to be eco-conscious.

Design – This study used a qualitative approach to collect and analyze data from 26 American apparel consumers. Data collection for the study occurred through semi-structured interviews.

Findings – Results indicate that the participants engaged in a number of perceived eco-conscious apparel acquisition behaviors. First, they adhered to acquisition limits by acquiring apparel based on need and extending the lifetime of their apparel. Second, they acquired apparel made from fibers or having other attributes perceived as environmentally preferable. Finally, they acquired apparel through sources believed to be environmentally preferable, including second-hand sources, eco-conscious companies, independently-owned companies, and home sewing.

Research limitations/implications – The sample of 26 American consumers means that the results cannot be widely generalized. Future research should examine the apparel acquisition behaviors of a larger sample and include consumers from outside the United States.

Practical Implications – This study provides evidence that consumers engage in a range of eco-conscious apparel acquisition behaviors and a market segment of eco-conscious apparel consumers exists. Apparel industry professionals can use this baseline information to aid in the development of eco-conscious apparel consumption strategies.

Originality/value – This study contributes to increased understanding of eco-conscious apparel consumption, an area with limited previous research, by identifying apparel acquisition behaviors that consumers perceive to be eco-conscious. The findings are valuable in the promotion of eco-conscious apparel consumption.

Keywords Apparel Acquisition Behaviors, Eco-conscious, Consumer Behavior

Paper type Research paper

Introduction

Within the apparel industry, social responsibility is a philosophy that aims to balance ethics with profitability by producing apparel products that positively affect, or minimally harm, humans and their environments. It encompasses a broad range of issues, including those related to environmental protection, labor practices in and trade with developing countries, consumerism, and body image (Dickson and Eckman, 2006). This study focuses on one aspect of socially responsibility in the apparel industry – environmental protection through eco-conscious apparel consumption.

In recent years, issues of environmental protection in the apparel industry have received increased attention, with apparel firms implementing a variety of eco-conscious initiatives throughout their supply chains (Dickson *et al.*, 2009). However, as the industry works towards being more environmentally conscious, it is equally important to involve consumers in the process and encourage eco-conscious consumption of apparel products. Furthermore, to facilitate the promotion of eco-conscious apparel consumption, it is important for professionals in the industry to gain perspective on behaviors perceived by apparel consumers to be eco-conscious. This baseline information will provide insight regarding the degree to which consumers are engaged in eco-conscious apparel consumption and will aid the industry in developing strategies to promote these behaviors.

The consumption of consumer products, including apparel, transforms matter and energy and, therefore, is environmentally consequential. As stated in Stern *et al.*, (1997),

Consumption is environmentally important to the extent that it makes materials or energy less available for future use, moves a biological system toward a different state, or through its effects on those systems, threatens human health, welfare, or other things people value (p. 20).

Prior to consumers acquiring and using apparel, manufacturing occurs. Associated with manufacturing processes are arrays of negative environmental consequences, including decreased air, water, and soil quality, decreased biodiversity; increased emissions of greenhouse gases, depleted water sources and other renewable resources; and reduced nonrenewable resources (Allwood *et al.*, 2006). Therefore, the negative environmental effects of apparel and textile manufacturing are also indirect environmental effects of apparel consumption.

The direct environmental effects of apparel consumption are the result of two primary factors. The first factor is the pollution and solid waste generated as consumers use, care for, and discard apparel. In fact, research suggests that for some apparel products, dry cleaning and home laundry may result in more environmental harm than any other life cycle stage (Allwood *et al.*, 2006; Chouinard and Brown, 1997; Franklin-Associates, 1993). Many of the chemicals used in dry cleaning processes, such as perchlorethylene, are environmentally hazardous (Environmental Protection Agency, 1994). Furthermore, because detergents contain a variety of potentially toxic chemicals, home laundry of apparel can also be environmentally harmful (Environmental Protection Agency, 2006).

Apparel consumption also generates solid waste. Although American consumers prevent approximately 1.25 million tons of textiles from entering the solid waste stream on an annual basis (primarily through charity programs), approximately 68 pounds of textile products per person per year are still discarded (Council for Textile Recycling, 2003). The environmental concerns related to solid waste are multifaceted and include issues such as the release of toxins into water and soil and degradation of land (Chiras, 1998). Additionally, both home and professional cleaning processes, through product packaging and wastewater treatment sludge, create further solid waste.

Apparel consumption behaviors such as garment care and disposal require raw material inputs such as fossil fuels, water, and chemicals. Therefore, the second major way that the consumption of apparel directly contributes to environmental change is through the depletion of natural resources. For example, a 100% cotton t-shirt, throughout its lifecycle, consumes 109 mega joules of energy. This includes the energy required to grow and process the cotton fibers, manufacture the yarns, knit the textile and construct the t-shirt, launder it 25 times, and incinerate the shirt after consumer disposal (Allwood *et al.*, 2006).

Therefore, apparel consumption, in the aggregate, is an environmentally significant behavior and a contributing cause of environmental change. Furthermore, the development of a socially responsible apparel industry requires the encouragement of eco-conscious consumption behaviors among consumers.

The purpose of this study is to advance understanding of the socially responsible apparel consumer by exploring apparel consumption behaviors perceived by consumers to be eco-conscious. Achieving this is necessary to both strengthen the knowledge base of socially responsible apparel consumption and understand the degree to which consumers are engaged in eco-conscious apparel consumption. Furthermore, the findings can provide apparel industry professionals with insights into any gaps that may exist between perceptions of eco-conscious consumption and empirically proven eco-conscious behaviors, as well as possible strategies to encourage consumer engagement in eco-conscious apparel consumption.

According to Winakor (1969), apparel consumption encompasses acquiring, storing, using, maintaining, and discarding apparel products. However, in identifying eco-conscious consumer behaviors, this study concentrated on those related to apparel acquisition. Because previous research indentifying eco-conscious apparel acquisition behaviors is limited, this focus

on acquisition behaviors is a necessary first step in the process of clarifying eco-conscious apparel consumption. Additionally, due to the purpose of this study, in identifying consumers' eco-conscious apparel acquisition behaviors, this study used an intent-oriented, rather than impact-oriented, definition of eco-conscious apparel acquisition. As proposed by Stern (2000), when defining eco-conscious behaviors with an impact-oriented definition, behaviors are assessed based on the actual impact they have on the environment and how the behaviors alter ecosystem dynamics. On the other hand, eco-conscious behaviors defined as intent-oriented are ones that the actor perceives as eco-conscious and therefore undertakes with the intention of benefiting the environment. Therefore, this study considers apparel acquisition behaviors to be eco-conscious when the participants indicated that they engaged in behaviors they believed to be environmentally beneficial, regardless of the actual impact of the behavior on the environment.

The Apparel Consumer and Eco-Conscious Apparel Consumption

Scholars have investigated environment-related aspects of apparel consumption from several different perspectives. Research on the topic includes examinations of apparel discard behaviors (Daneshvary *et al.*, 1998; Domina and Koch, 1999, 2001, 2002; Francis *et al.*, 1995; Koch and Domina, 1997, 1999; Shim, 1995) and the influence of store atmospherics on purchasing behaviors (Paff Ogle *et al.*, 2004). Other studies have explored consumer response to eco-conscious fashion advertisements (Kim *et al.*, 1997), willingness to purchase apparel made from recycled fibers (Hines and Swinker, 1996), and consumer knowledge of the environmental effects of apparel production (Kim and Damhorst, 1998; Stephens, 1995). Finally, studies by Rucker *et al.* (1995) and Steinbring and Rucker (2003) identified barriers to the consumption of post-consumer textiles and clothing.

Despite the positive contributions of the above studies, scholarly research focused on identifying eco-conscious apparel acquisition behaviors remains scarce. From the limited existing research, conclusions are that when acquiring apparel, most consumers only minimally participate in eco-conscious apparel consumption. For instance, Butler and Francis (1997) and Kim and Damhorst (1998) determined that although consumers may hold proenvironmental attitudes, it is rare for consumers to engage in apparel consumption behaviors in an eco-conscious manner. Butler and Francis concluded that the existing discrepancy between attitudes and purchasing behaviors may be due to apparel consumers making purchasing decisions based on factors (such as price, style, and fit) that outweigh environmental attitudes. Similarly, Kim and Damhorst attribute the gap between consumers' attitudes and behaviors to intervening factors such as product availability and consumers' involvement in fashion as a means of self-expression, aesthetic satisfaction, and group conformity.

Research indicates that engagement in eco-conscious apparel acquisition increases among consumers who understand how apparel products affect the environment (Hustvedt and Dickson, 2009; Stephens, 1985). For example, Stephens concludes that environmentally aware apparel consumers try to decrease clothing waste through behaviors such as purchasing second-hand clothing, recycling clothing, and purchasing classically styled garments. More recently, Hustvedt and Dickson found that there are consumers who consider the organic content in their apparel acquisition decisions and that, compared with indifferent consumers, these consumers are more aware of the environmental effects of clothing, support organic agriculture, and are more positive in their attitudes about purchasing organic cotton clothing.

Among the literature investigating eco-conscious apparel consumption a lack of in depth understanding of the apparel acquisition behaviors consumers perceive to be eco-conscious

remains. Therefore, given this gap in knowledge, the purpose of this study is to explore what apparel acquisition behaviors consumers engage in because they believe the behaviors are eco-conscious. The information gleaned from this study will be useful to apparel industry professionals. As the industry moves towards the encouragement of eco-conscious apparel consumption, it is important to gain insight into the current state of consumers' understanding of the concept and their level of engagement.

Method

In order to increase comprehension of apparel consumers' perceptions of eco-conscious consumption, this study utilized qualitative research methods. Because qualitative methods capture complex realities and aid in understanding motivations behind behaviors (Patton, 2001), it is a particularly appropriate research approach for this study.

Sampling

To achieve the objective of identifying apparel acquisition behaviors perceived by consumers to be eco-conscious, only individuals who believed they engaged in eco-conscious apparel acquisition behaviors could participate in the study. Therefore, the basis of participant recruitment was a purposive, criterion-based sampling procedure (Ritchie *et al.*, 2003).

Identification of appropriate participants for the study occurred through the administration of a questionnaire that assessed respondents' engagement with different types of apparel acquisition behaviors. The questionnaire asked if, for environmental reasons, respondents had participated in behaviors such as purchasing clothing made from environmentally preferable fibers or acquiring clothing from second-hand stores. The response categories for the questions were *yes* or *no*. Questionnaires were distributed at a membership

meeting for a mid-Michigan environment-related organization, a mid-Michigan retail outlet that sold environmentally preferable apparel products, and through two Michigan-based environment focused e-mail listservs. Over a three-week period, 206 questionnaires were returned – with 133 of the respondents being female and 73 male.

An analysis of the questionnaire data led to the formation of the study's sample frame. From the 206 completed questionnaires, 109 respondents indicated that they were available for further participation in the study. However, ten of those individuals had never engaged in any of the apparel acquisition behaviors included in the questionnaire. Therefore, removal of these individuals from the sample occurred, leaving a frame of 99 people – all of whom had, for environmental reasons, engaged in at least one of the questionnaire's apparel acquisition behaviors.

To select the study's final participants, the principal investigator began by randomly selecting and contacting five males and five females from the sample frame. Making the decision to contact participants in groups of ten was a pragmatic decision based on the realization that the principal investigator could coordinate the scheduling of approximately ten interviews at a time. Then, as the initial ten interviews were nearing completion, random selection of an additional ten respondents occurred – a process that continued until the conclusion of data collection. As data collection proceeded, contact occurred with all of the men in the sample frame, many of whom were no longer available for participation. Eventually, the principal investigator ran out of male participants to recruit and proceeded to select female participants only.

Altogether, 26 individuals (nine males and 17 females) participated in the study. To make the decision about sample size and when to end data collection, the researcher relied on Strauss and Corbin's (1998) concept of data saturation, the point at which no new themes or information

surfaces. Participants ranged in age 18 to 75, and all had at least a high school diploma, with a majority also having earned postsecondary degrees. Participants also represented different income levels. Refer to Table 1 for a complete summary of the demographics of the study's participants.

*** Insert Table 1 about here ***

Because this study was limited to 26 participants, a limitation of this study is that conclusions are not generalizable to a wider population. However, because this was the first study to identify perceived eco-conscious apparel acquisition behaviors explicitly, the intent of this study was more exploratory in nature. Therefore, the number of individuals participating in the study does not jeopardize the integrity of the findings.

Data Collection

The primary data collection method employed in this study was semi-structured interviews. The interviews, typically occurring in coffee shops and lasting up to 90 minutes, focused on asking the participants open-ended questions designed to elicit their feelings about the state of our natural environment and identify perceived eco-conscious apparel acquisition behaviors. In order for valid assignment of the identified apparel acquisition behaviors to the participants' desire to be eco-conscious, the interviews asked participants to describe apparel acquisition behaviors they engaged in *for environmental reasons*. Additionally, if the participants discussed behaviors that might be attributable to other motivations (such as economic factors), the researcher explored motivations further by asking participants to clarify why they engaged in the behavior. Interviews were tape-recorded and transcribed verbatim.

Data Analysis

Following guidelines by Miles and Huberman (1994), the three primary steps for data analysis in this study included data reduction, data display, and conclusion drawing. First, the research developed and applied codes to each interview. These codes reflected perceived eco-conscious apparel acquisition behaviors emerging from the data and included codes such as “*environmentally preferable fibers*” and “*second hand sources*”. Second, the principal investigator compiled 26 summary statements summarizing the behaviors identified by each participant. Using the codes to aid in identification, the principal investigator added verbatim passages to the summary statements that illustrated the eco-conscious apparel acquisition behaviors. Finally, further condensing and analyzing of data occurred by developing a summary table which compiled what the participants as a whole revealed about eco-conscious apparel acquisition. Through this data analysis process, the perceived eco-conscious apparel acquisition behaviors emerged, allowing conclusions to be drawn.

Threats against the credibility of the conclusions of qualitative research include both researcher bias and reactivity (Lincoln and Guba, 1999). Throughout data analysis, in order to reduce researcher bias, the principal investigator met with an experienced qualitative research consultant who provided oversight and acted as an independent judge of the analysis process and findings. For example, prior to coding the interviews, the consultant reviewed the coding guide for completeness and clarity. The principal investigator and consultant also conferred during data interpretation, with the consultant examining the principal investigator’s analysis for agreement. Through this exchange, discussion, negotiation, and refinement of themes and conclusions occurred.

In this study, prior to data analysis, the principal investigator recognized a possible bias in identifying what qualified as an eco-conscious apparel acquisition behavior. Furthermore,

throughout data analysis the principal investigator remained attentive to and reported all behaviors discussed by the participants, even if she did not perceive the behavior as eco-conscious. The principal investigator controlled for the threat of reactivity by designing neutral, non-leading interview questions that would not influence the types of answers provided throughout the interviews. Additionally, four experts in the fields of apparel and textiles, environmental science, and qualitative research methods reviewed the methods and confirmed the neutrality of the interview questions.

Testing the validity of the study's findings involved a number of strategies (Maxwell, 2005). First, the principal investigator collected rich data by making verbatim transcripts of the interviews. This provided detailed data capable of representing the full picture. The second validity testing strategy involved respondent validation through asking participants for feedback on interpretations related to their interview. Five participants responded to this opportunity by affirming the pertinent findings. No participants provided feedback challenging the findings. As a third strategy, the principal investigator continually looked for discrepant evidence, all of which, when present, was included in the study's findings. Finally, to assess the amount of evidence existing to support study findings, the principal investigator reported the percentage of participants engaging in different eco-conscious behaviors.

Findings and Discussion

To explore apparel acquisition behaviors that the participants perceived to be eco-conscious, the interviews asked participants to describe apparel acquisition behaviors they engaged in for environmental reasons. As a result, this study identified a number of perceived eco-conscious apparel acquisition behaviors present among the participants including (a)

establishing acquisition limits, (b) acquiring apparel with perceived environmentally preferable attributes, and (c) acquiring apparel through environmentally preferable sources. This section outlines and discusses these behaviors and substantiates conclusions with illustrative quotations from the participants.

Establishing Acquisition Limits

The most consistent perceived eco-conscious apparel acquisition behavior engaged in by the participants was limiting the amount of apparel they acquired. In fact, every participant stated that because of their desire to be eco-conscious, they controlled the quantity of their apparel acquisitions. For example, according to F6, “I would definitely buy more clothing if I wasn’t environmentally conscious.” Similarly, F1 said, “I would say my belief in environmental responsibility has actually made me acquire less clothing.... I don’t think I buy as much as I used to.” To establish their acquisition limits, participants used two primary strategies: acquiring apparel on a needs basis and extending apparel lifetime.

Needs-Based Acquisition

The most commonly discussed strategy for limiting apparel acquisition was to question personal needs and acquire apparel on a needs basis. As F14 explained, “Every time that I see something I want, whether it’s in a thrift store or a department store, I ask, ‘What do I already have and do I really need this?’” Participants, including M4, also indicated that they generally only acquire apparel in order to replace worn out items or if they need to acquire apparel to attend a special event or meeting for which they lack appropriate apparel, “Usually when I finally do get to the store to buy clothing it is because I desperately need to replace an article of clothing that I already have.”

Some participants also set restrictions to direct their decision making. For example, M9 said, “I limit myself on how much of each thing I have – like I have 14 pairs of underwear. I have seven white t-shirts – enough for one week;” and F9 stated, “When I shop for clothes I usually have a list.” In both instances, participants controlled the quantity of apparel acquired by settling limits prior to engaging in the acquisition behaviors.

Extension of Apparel Lifetime

This study conceptualizes apparel products as having two distinct lifetimes – technical (the length of time the product functions as intended) and aesthetic (the length of time the user finds the product attractive). To extend the technical and aesthetic lifetimes of their apparel products, participants engaged in a number of related behaviors including taking good care of clothes, repairing and altering clothing, and refashioning clothing.

A number of participants spoke about how they take care of their clothes to make them last longer. F13 articulated, “I have things, like some suit jackets and things, that I take care of, that I may have had eight to ten years.” A related behavior also common among participants was wearing clothes for their complete technical lifetimes and not discarding garments that were still functional.

Two other behaviors discussed by participants as ways of extending their garment lifetimes were to make repairs and alterations and to refashion garments. Common repairs made by participants to garments were relining, re-dyeing, and patching. For instance F6 described some of the repairs she has made to garments, “I had a shirt that I bought second hand that I wore for about seven years that started to get tears in it and I actually embroidered flowers on top of the tears so I could continue to wear it.”

Similarly, many participants spoke about extending the aesthetic lifetime of garments by refashioning apparel they already owned into garments that better suited their needs and interests.

Sometimes I will sew something I have into something new so that I'm not just throwing away a bunch of clothes.... I've turned a lot of t-shirts into halter tops and one time...I combined a t-shirt and a dress to make it just a longer, flowy shirt. (F5)

Although all participants who engaged in intricate apparel reconstruction were women, a few male participants reconstructed some of their garments in simple ways, such as turning pants with frayed cuffs into shorts.

Attribute-Focused Acquisition

The second perceived eco-conscious apparel acquisition behavior mentioned by the participants was acquisition of apparel with attributes they deemed as environmentally preferable. More specifically, participants acquired some of their apparel because of perceptions that the fiber content was environmentally preferable or because the apparel had other attributes considered environmentally preferable.

Environmentally Preferable Fibers

This study defines environmentally preferable fibers as any fibers that the participants believed as more environmentally sustainable compared to conventional fibers. A majority of participants (92%) had acquired clothing made from environmentally preferable fibers, with the most common fibers being organically-grown cotton (54% of the participants), hemp (31%), and recycled-content fibers (27%).

Seventy-eight percent of the participants also indicated that, for environmental reasons, they preferred to acquire apparel made from natural fibers and avoided manufactured fibers.

I only wear natural fibers.... Plastic is not kind to the environment so why would you want to buy anything that has plastics in it? I don't buy anything made from synthetics.... I don't like the idea of wearing something that is petroleum based. (F9)

This behavior of favoring apparel made from natural fibers over manufactured fibers is a good example of the disparity that can exist between consumers' perceptions of the environmental impact of a behavior and the actual environmental impact. Empirical evidence indicates that most conventional natural fibers have as much, if not more, of an environmental effect as manufactured fibers (Chouinard and Brown, 1997; Franklin-Associates, 1993; Walsh and Brown, 1995). However, in the mind of many of the study's participants, natural fibers are environmentally preferable to manufactured fibers.

Even though a large majority of participants had acquired apparel made from environmentally preferable fibers, a majority of those participants engaged in this behavior inconsistently. To illustrate, when probed for details about the quantity of apparel made from environmentally preferable fibers that she had acquired, F12 responded, "I don't have a lot of it. I think I literally have one or two t-shirts." Only 31% of participants stated that when they needed to acquire new apparel they consistently attempted to meet the need by finding an environmentally preferable fiber alternative. Common reasons given by the participants for not purchasing apparel made from environmentally preferable fibers on a more consistent basis were financial cost and limited availability.

Environmentally Preferable Apparel

Beyond acquiring apparel made from environmentally preferable fibers, 77% of the participants, including F13, also stated that, for environmental reasons, they acquired apparel that was classic in style, "I look for nice stuff that I could wear multiple years because it is, for me, an investment. So I want classic lines. I don't want real trendy stuff." Participants indicated a

couple of different reasons why they perceived acquiring classic apparel as an eco-conscious behavior. First, as F16 explained, it reduces the quantity of clothing needed, “I think that if you buy good, basic garments you can interchange them and then you don’t need a lot of clothing.” Second, with classically-styled apparel, garments do not pass in and out of fashion; therefore, it is not necessary to be continually acquiring new apparel to feel stylish.

It is fun to buy things which are pretty fashionable at the moment, but if you wear that two years from now you’re going to look like an idiot. For example, I’ll try to find something timeless rather than like a ballet flat with a giant bow on it which is popular right now, but they will look stupid in a couple years. (F2)

In addition to acquiring apparel that is classically styled, many participants also stated that they tried to acquire apparel produced in an environmentally preferable manner. In this regard, the factor of most concern for the participants was the garment’s country of origin, with many participants desiring to acquire apparel made in the United States. Participants viewed this as an eco-conscious attribute because of the reduction in transportation-related environmental effects.

If I have a choice between buying something from China and buying something made in the States, I’ll go for something made in the States because at least I know it hasn’t traveled half way around the world and had that increased carbon footprint. (F16)

A few other participants stated they had more confidence that, as compared to less developed countries, stricter environmental regulations govern apparel manufacturing in the United States.

Where [the garment] was made would be a consideration for me because there are certain [environmental] standards that we have here versus, like Malaysia or Indonesia...like rules for what they can and cannot do to the environment. (F10)

When trying to acquire apparel produced in an environmentally preferable manner, participants focused on country of origin as opposed to other indicators. However, this may be because country of origin is the only production information, other than fiber content, readily available to participants and not because they are not concerned with other production-related

environmental issues. Therefore, if participants had other easily accessible production information (e.g., carbon outputs or energy requirements), these indicators may have been of concern to them as well.

Source of Apparel Acquisition

The third apparel acquisition behavior the participants believed to be eco-conscious was the acquisition of apparel through sources perceived to be environmentally preferable, including second-hand sources, eco-conscious companies, independently-owned companies, and home sewing.

Second-Hand Sources

The majority (85%) of participants acquired apparel from second-hand sources; and although there was an economic factor partially motivating this behavior, participants definitely engaged in this behavior for environmental reasons.

I made the decision [to shop second-hand] because I wanted to reuse clothing that someone else didn't want anymore. There are a lot of really good clothes in second-hand clothing stores and so it seemed like a good way to lower my own environmental footprint – by purchasing clothing that someone else had worn – that had already gone through one life and now I could use it for a second life and keep it from a landfill. (M4)

In addition to acquiring apparel from the traditional second-hand sources of consignment, vintage, and charity thrift stores, many participants, like M1, also discussed receiving second-hand apparel from family and friends, “It has been probably six years since I have bought any new clothing. I have people that pass clothes on to me.” Of the nearly 85% of participants who use second-hand sources for apparel, 77% rely on these sources for a large portion of their apparel needs. In this regard, F6 stated, “I go to great lengths to try and buy second-hand.... The majority I purchase is from a second-hand clothing store.... I buy 40 if not 60% of my clothing there.”

Eco-Conscious Companies

For 73% of participants, another source for apparel acquisitions perceived as environmentally preferable was eco-conscious companies—companies that have a reputation for selling environmentally preferable apparel and conducting business in an environmentally responsible manner. Participants patronized these companies not only because they sell environmentally preferable apparel but also because the companies represent a greater eco-consciousness.

I came across a website that ranked corporations based on environmental and social criteria; and I've used that for a while now.... If I see that a company invests in a pulp and paper facility that is clear-cutting the heck out of southeastern forests, I will rule them out – external of the products that they are selling but based on corporate practices. (F7)

Furthermore, several participants, like M1, stated that acquiring apparel from eco-conscious companies was their primary source for apparel, “If I absolutely had to buy [a shirt] I would want to choose somewhere that has organic clothing.”

Because it is difficult to find traditional brick-and-mortar stores that are eco-conscious, as M8 explained, often the easiest method for the participants to acquire eco-conscious apparel was through the mail, “Since I have been trying to purchase more sustainable clothing I have been doing more mail order – catalogs and the Internet.” Most participants who acquired apparel through mail order also continued to acquire through traditional stores. But because of a commitment to purchasing apparel with environmentally preferable attributes and the realization that this apparel was not readily available in traditional stores M5 said, “I do all of my clothes shopping either online or through mail-order catalog.”

Despite many participants' reliance on mail order for the acquisition of environmentally preferable apparel, a small portion (15%) of the participants, for environmental reasons, avoided

ordering through the mail. These participants perceived this an eco-conscious behavior because as F5 expressed, “There are a lot of options online to buy eco-conscious clothing but then you need to factor in where it is being shipped from. So it might be eco-conscious but does its mileage outweigh all that?” Similarly, F3 said, “I don’t purchase clothing online because, environmentally speaking, I know it’s going to be shipped from farther and there’s all that packaging.”

Independently-Owned Companies

In addition to acquiring apparel through second-hand sources and eco-conscious companies, 58% of participants also attempted to acquire apparel at local, independently-owned companies.

Pretty much I am shopping local if I am store shopping at all.... I am not likely to purchase something just because it is made from bamboo but I am more likely to purchase something that is made by a local artist. Like one of my good friends is a textile artist and she makes skirts and stuff and so I am quite likely to support her. (F8)

A number of participants, such as F9, also spoke about acquiring apparel from independently-owned vendors while attending conferences and trade shows focused on environmental issues, “I am willing to purchase stuff from vendors at festivals and supporting those economies, assuming the clothing is consistent with what I want.”

Choosing to acquire apparel from independently-owned companies is an instance of when intent-oriented and impact-oriented definitions of eco-conscious apparel consumption may not coincide. This is because, as far as is known, no empirical studies have demonstrated that whether acquiring apparel from local, independently-owned companies is environmentally preferable to acquiring from national chains.

Home Sewing

The final source that a small number (23%) of the participants relied on to acquire apparel in a manner they perceived as eco-conscious was home sewing.

I also make a lot of my clothes. The pair of pants that I am wearing were made from probably about six yards of corduroy.... I am an expert sewer and I love to sew.... I think the idea of making clothes is really important for the environment. (F17)

A couple of other participants also expressed their belief in home sewing as being an eco-conscious behavior.

I just bought myself a sewing machine and I'm learning how to sew my own clothes.... It is something I've always kind of wanted to do and at the same time it is environmentally motivated. I felt like if I can sew my own clothing, at least in some ways, it's cutting down on how far my clothes have to travel. (F1)

I would like to start producing my own clothing. I know the cotton I will be buying will be unsustainable but at least the production and labor will all be internalized. (F2)

Once again, the participants' perceptions that home sewing is an eco-conscious source for acquiring apparel is empirically unsubstantiated, with no research providing evidence that home sewing is, or is not, environmentally preferable to purchasing mass-manufactured apparel.

Implications of the Study and Recommendations for Future Research

This study affirms that not only are consumers making deliberate efforts to engage in eco-conscious apparel acquisition behaviors but also that consumers perceive a range of apparel acquisition behaviors to be eco-conscious. First, the participants in this study established limits in terms of the quantity of apparel they acquired by focusing on apparel needs and extending the technical and aesthetic lifetime of their apparel products. Second, the participants acquired apparel with perceived environmentally preferable attributes. More specifically, the participants acquired some of their apparel because it was made from environmentally preferable fibers such as organic cotton, hemp, and recycled fibers. They also selected apparel with other

environmentally preferable attributes including apparel that was classically styled and made in the United States. The third behavior discussed by the participants as engaging in for environmental reasons was acquiring apparel through sources perceived to be environmentally preferable. These sources included second-hand sources, eco-conscious companies, independently-owned companies, and home sewing.

Conclusions drawn from this study successfully contribute to the knowledge base of eco-conscious apparel consumption, and the findings have a couple of important implications. First, consumers are engaging in apparel acquisition behaviors perceived to be eco-conscious in a variety of ways and a market segment of eco-conscious apparel consumers exists. Furthermore, these consumers are not just buying apparel made from organically grown cotton or other environmentally preferable fibers. Therefore, the encouragement of eco-conscious apparel consumption should focus on all possibilities. Among this study's participants, two of the most common behaviors were limiting consumption of apparel and acquiring apparel through second-hand sources. Because neither of these two behaviors requires increased financial resources and because second-hand sources for apparel are typically readily available, these may be the most practical ways for apparel consumers to be eco-conscious. Therefore, these behaviors may also be logical ones to encourage. Based on behaviors emerging from this study, additional eco-conscious apparel acquisition behaviors to focus on include educating consumers on how to identify classically-styled apparel products and teaching ways to refashion and update currently owned garments.

Because the study was limited to 26 American participants, a limitation of this study is that conclusions are not generalizable to a larger population of cross-cultural consumers. Therefore, in order for apparel industry professionals to have a more complete understanding of

consumers' perceptions regarding eco-conscious apparel acquisition, a recommendation is to develop and administer an instrument, based on the findings of this study, to a wider population and include consumers from outside the United States. This type of research would potentially allow drawing of generalizations about apparel acquisition behaviors perceived by consumer to be eco-conscious and the degree to which consumers are engaging in these behaviors and would facilitate making cross-cultural comparisons of eco-conscious apparel acquisition behaviors. It could also assess personal variables such as value orientations and environmental knowledge and barriers constraining consumers' eco-conscious behaviors. This additional information would further inform consumer education programs and policy initiatives aiming to modify apparel acquisition behaviors and promote greater sustainability.

A conclusion of this study is that consumers' perceptions of what qualifies as an eco-conscious apparel acquisition behavior are not always consistent with empirical evidence (e.g., in perceiving natural fibers as environmentally preferable to manufactured fibers). Therefore, a second implication of this study is that there is a need for improved consumer education related to eco-conscious apparel acquisition behaviors.

However, before apparel industry professionals can effectively design and implement effective campaigns educating consumers about eco-conscious apparel acquisition behaviors, there is a need to define eco-conscious apparel acquisition behaviors from an impact-oriented perspective and gain a better understanding of which apparel acquisition behaviors are environmentally preferable. Although a small number of life cycle studies have assessed the environmental effect of fibers (Chouinard and Brown, 1997; Franklin-Associates, 1993; Walsh and Brown, 1995) and there is general acceptance that, for example, clothes made from organically-grown cotton or hemp are environmentally preferable (Baugh, 2008; Myers and

Stolton, 1999), currently there is no definitive research outlining what qualifies as an eco-conscious apparel acquisition behavior. Research, whether life cycle assessment studies, expert elicitation, or some other form, would greatly benefit professionals who design consumer education tools and consumers who are trying to engage in eco-conscious apparel acquisition behaviors. Defining eco-conscious apparel acquisition from an impact-orientation would also more explicitly reveal acquisition behaviors consumers engage in with the intent of being eco-conscious that are actually not environmentally preferable.

Because this study focused on eco-conscious apparel acquisition, the final recommendation for expanding this research is to apply a similar research design to other stages of apparel consumption. Expanding research into aspects of consumption such as garment use and care would contribute towards increased knowledge of socially responsible apparel consumption.

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Table 1. *Demographics of Research Participants*

ID#	Sex	Age	Marital status	Education	Income
M1	Male	< 25	Single	High school	\$10,000-\$14,999
M2	Male	25-34	Single	Graduate	\$5000 or less
M3	Male	25-34	Married	Graduate	\$30,000-\$39,999
M4	Male	25-34	Single	Graduate	\$30,000-\$39,999
M5	Male	35-44	Divorced	Bachelor's	\$50,000-\$69,999
M6	Male	35-44	Married	Graduate	\$70,000 and over
M7	Male	55-64	Divorced	Bachelor's	\$15,000-\$19,999
M8	Male	55-64	Married	Graduate	\$70,000 and over
M9	Male	65-74	Married	Graduate	\$70,000 and over
F1	Female	< 25	Single	Bachelor's	\$5000 or less
F2	Female	< 25	Single	Bachelor's	\$5000 or less
F3	Female	< 25	Single	High school	\$5000 or less
F4	Female	< 25	Single	High school	\$5000 or less
F5	Female	< 25	Single	Bachelor's	Declined answer
F6	Female	25-34	Divorced	Graduate	\$50,000-\$69,999
F7	Female	25-34	Single	Bachelor's	\$10,000-\$14,999
F8	Female	25-34	Single	Graduate	\$5000 or less
F9	Female	25-34	Single	Bachelor's	\$50,000-\$69,999
F10	Female	25-34	Single	Bachelor's	\$20,000-\$29,999
F11	Female	35-44	Single	Graduate	\$40,000-\$49,999
F12	Female	35-44	Single	Bachelor's	\$40,000-\$49,999
F13	Female	45-54	Married	Graduate	Declined answer
F14	Female	45-54	Married	Bachelor's	\$70,000 and over
F15	Female	45-54	Divorced	Bachelor's	Declined answer
F16	Female	55-64	Married	Graduate	\$70,000 and over
F17	Female	55-64	Widowed	Graduate	\$10,000-\$14,999