



Sustainable Apparel Consumption Behavior among U.S. Students

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As a result of fast changing fashion trends and declining apparel prices, consumers tend to renew their wardrobe more frequently, buying more garments than ever before (Johansson, 2010). This trend leads to a continual growth in production of textiles, use of non-renewable resources, and increasing disposal rate (Shim, 1995). At the same time, people are becoming more environmentally conscious. In fact, a recent poll showed that 35% of the U.S. consumers were willing to buy and pay more for green products ("U.S. Consumers," 2010). Although there has been a surge in "green consumption" research, there is a limited understanding about factors influencing sustainable apparel consumption. Only few studies focused on apparel consumption among young consumers. For example, Kim & Damhorst's (1998) reported that environmental concern and knowledge did not clearly relate to environmentally responsible apparel consumption among university students. The current study explored several critical characteristics that might provide important insights about sustainable apparel consumption: environmentalism, materialism, and knowledge about environmental issues.

Environmental knowledge is defined as factual information possessed by individuals about environment, the ecology of the planet, and consequences of human actions on the environment (Arcury & Johnson, 1987). Environmentalism is a broad philosophy that involves the beliefs about importance of environment and the interdependence of humankind and nature (Banerjee & McKeage, 1994). Materialism represents a mind-set or constellation of attitudes regarding the relative importance of acquisition and possession of objects in one's life (Richins & Dawson, 1992). Banerjee and McKeage (1994) believed that since acquisition and consumption are central motives that drive materialists' behaviors, they would not hold environmental protection as a core value. Based on the Affect, Behavior, and Cognition model (Elli, 1962) and extant empirical research on consumers' knowledge, attitude, and consumption behavior, we proposed a model and hypotheses to examine relationship between (a) environmental knowledge specific to apparel production, consumption, and disposal; (b) environmentalism; (c) materialism; and (d) environmentally responsible apparel consumption:

- Environmental knowledge is positively related to the environmentalism (*H1*) and negatively related to the materialism (*H2*)
- Environmentalism is positively (*H3*) and materialism is negatively (*H4*) related to environmentally responsible apparel consumption

Survey method was used to collect data. The survey included 7-point Likert-type scales measuring: environmentalism (Banerjee & McKeage, 1994), materialism (Richins & Dawson, 1992), environmental knowledge specific to apparel (Kim & Damhorst, 1998), and environmentally responsible apparel consumption (Kim & Damhorst, 1998). Demographic questions were also included in the survey. A total of 331 usable surveys were gathered from

undergraduate students (mean age 20) enrolled in an apparel program at large Midwest University. This study specifically targeted students majoring in apparel because they are both consumers and future professionals who will lead the textile and apparel industry.

Confirmatory factor analysis was conducted using MPlus 6.0 that resulted in model fit ($\chi^2 = 274.51$, $df = 129$, $p < .000$, CFI = .947, RMSEA = .058, and SRMR = .051). A comparison of resulting fit indices with recommended values provided evidence of good measurement model fit. Next, structural equation model was tested ($\chi^2 = 286.678$, $df = 131$, $p < .000$, CFI = .943, RMSEA = .060, and SRMR = .062). Fit indices indicate a good fit of the structural model. Based on standardized path coefficients and significance levels, environmental knowledge was positively related to environmentalism ($\beta = .416$, $p < .000$) and negatively related to materialism ($\beta = -.121$, $p < .000$). Both materialism ($\beta = .119$, $p = .039$) and environmentalism ($\beta = .486$, $p < .000$) were positively related to environmentally responsible apparel consumption. With the exception of *H4*, the proposed hypotheses were supported. Environmentalism and materialism together explained 24.5 % of variance in environmentally responsible apparel consumption.

Our findings suggest that individuals with greater environmental knowledge specific to apparel tend to be less materialistic and have greater environmental concern resulting in environmentally responsible apparel consumption. At the same time, materialism is positively related to environmentally responsible apparel consumption, which indicates that environmental consumption behavior can be exhibited by materialistic individuals. The research findings can contribute to a better understanding of current apparel consumption practices among future apparel industry professionals. This study can be expanded to general US population as well as by testing the model across cultures as sustainability is a global issue.

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