Green Apparel Consumption: An Empirical Examination of Behavior versus Attitudes

Poorva B. Raut, M.S., Marguerite Moore, Ph.D., Lori Rothenberg, Ph.D., Genessa Devine, Ph.D.*, Karen Leonas, Ph.D. and Moon Suh, Ph.D.

NC State University, Raleigh, North Carolina USA,*Lenovo, Morristown, North Carolina USA

Keywords: Sustainability, Consumption, Apparel, Attitudes

Introduction: Environmental sustainability among diverse stakeholders in global textile and apparel supply chains is increasingly a focus of practitioners and academics who seek to define, understand and influence this phenomenon. The ubiquity of global apparel consumption provides an important context for companies and consumers to pursue environmentally ethical behavior. Academic literature that considers consumer behavior with regard to environmentally friendly products, commonly described as *green*, is growing in frequency and scope. This research stream provides cursory empirical insights into demographics, attitudes and intended behaviors influencing consumer purchase decisions for food (e.g., Shi-Jui Tung, Ching-Chun, Wei and Yu-Hua, 2012), and apparel (e.g., Hustvedt and Dickson, 2011, Shen, Richards and Liu, 2013).

Literature: Consumer behavior researchers identify a phenomenon termed the *attitude-behavior gap*, which refers to the propensity of consumers to behave in ways that belie their explicitly stated attitudes toward purchasing green products. A number of recent studies demonstrate that what consumers claim they will do and their subsequent behavior are in many cases two different things (e.g., Johnstone and Tan, 2015). Building on the theoretical work in this stream, with additional direction from extant research in the textile and apparel context, the current research expands understanding of purchase behaviors for green apparel by contrasting consumers who buy green with those who do not buy green. These two groups are contrasted in terms of demographics, apparel attribute preferences, attribution of blame for unethical products and behavioral intentions including intentions to purchase and willingness to pay for green apparel.

Methods: Cotton Incorporated in Cary, NC provides a nationwide sample of U.S. consumers for the study. The data (N=1,846) were collected over a three month period in 2013 by a market research firm using online consumer panels. Respondents are classified into two categories based on self-reported buying behavior. Those who indicate that they purchased apparel that was recycled, compostable or environmentally friendly in the past six months are considered *pro-green*, while those who indicated that they did not are considered *no-green*. Demographic measures are captured on ratio, ordinal and nominal scales while both attitudes including product attribute perceptions & attribution of blame and intentions are measured on eleven-point interval scales ranging from 0-10. Statistical tests used to contrast the groups are based on the measures: chi-squares with post hoc tests for nominal dependent variables and t-tests for continuously measured dependent variables.

Results: In terms of demographics statistics indicate that pro-green consumers are comparatively younger (t=-6.611, 1,844df, p<.001), male ($\chi^2$45.285, 1df, p.<.001) more educated (t=3.189, 1,844df, p.<.001) and report higher incomes (t=4.688, 1,844df, p.<.001). Pro-green respondents also indicate significantly higher monthly expenditures on apparel compared to the no-green group (t=13.583, 1,844df, p<.001). For product preferences, pro-greens indicate that they consider a number of apparel attributes as important compared to the no-green group including: price (t=-5.789, 1,844df, p<.001), brand (t=11.060, 1,844df, p<.001), style (t=5.550, 1,844df, p<.001), environmental friendliness (t=12.873, 1,844df, p<.001), made in the USA (t=7.318, 1,844df, p<.001), durability (t=5.276, 1,844df, p<.001) and quality (t=5.286, 1,844df, p<.001). Fit represents the sole attribute equally regarded by the two groups. For blame attribution, the pro-greens indicate a significantly higher likelihood of taking action ($\chi^2$172.239, 2df, p<001) and blaming the brand ($\chi^2$17.139, 1df, p<001), retailer, ($\chi^2$21.252, 1df, p<001), production country ($\chi^2$6.969, 1df, p<001), fiber producer ($\chi^2$6.708, 1df, p<001) or themselves (χ^2,5.616, 1df, p<01). The no-greens are significantly less likely to take action and indicate significantly higher likelihood *not to care* if any party were to blame for environmentally unfriendly products or practices ($\chi^2$87.984, 1df, p<001). In terms of behavioral intentions, pro-greens indicate significantly higher likelihood of paying more for apparel that is: environmentally friendly ($\chi^2$412.573, 2df, p<001), compostable ($\chi^2$365.432, 2df, p<001), made in the USA ($\chi^2$134.572, 2df, p<001), recycled ($\chi^2$370.606, 2df, p<001), and sustainable ($\chi^2$398.218, 2df, p<001). The no-green group are significantly more likely to indicate *don't know* in terms of their willingness to pay more across all of these contexts.

Conclusion: The results suggest that consumers in the sample exhibit consistency in their attitudes and behavior within the groups. The profile that emerges for the pro-green consumer largely agrees with previous research with the exception that males are more pro-green than females when purchasing apparel. The pro-green group also regard apparel product attributes more highly when making purchase decisions compared to the less engaged no-green group. Pro-green consumers are also more likely to attribute blame for unfriendly practices to a number of parties and suggest a willingness to spend more on green apparel in the future. The primary benefit of this study is that it is based on behavior. Future research that measures actual ethical behavior is needed to advance understanding and action in this area.

References

Hustvedt, G., & Dickson, M. A. (2009). Consumer likelihood of purchasing organic cotton apparel. *Journal of Fashion Marketing and Management, 13*(1), 49-65.

Johnstone, M., & Tan, L. P. (2015). An exploration of environmentally-conscious consumers and the reasons why they do not buy green products. *Marketing Intelligence & Planning, 33*(5), 804-825.

Shih-Jui Tung, Ching-Chun, S., Wei, S., & Yu-Hua, C. (2012). Attitudinal inconsistency toward organic food in relation to purchasing intention and behavior. *British Food Journal, 114(7*), 997-1015.