Predictors of Purchase Intention toward Green Apparel Products:
A Cross-Cultural Investigation in the U.S. and China

Seung Bong Ko, Texas A & M University-Kingsville, USA
Byoungho Jin, University of North Carolina at Greensboro, USA

Keywords: Green apparel products, Purchase intention, Cross-Culture

Purpose: Despite the increase in interest in green apparel products (Hamilton & Zilberman, 2006), limited studies regarding consumers' green behavior in apparel products have been conducted (Lee, 2011; Mahenc, 2008) and some focused only on green issues in the production stage without looking at consumer buying patterns. Another serious gap in green apparel consumption is limited understanding of green apparel consumption behaviors in other countries. The purpose of this study is to identify and compare U.S. and Chinese consumers' behaviors regarding green apparel products using the theory of planned behavior (TPB). This study proposed a conceptual model integrating the theory of planned behavior (TPB) with two antecedents, man-nature orientation and environmental knowledge, that might be related to green consumption, and empirically tested the model. In addition, to examine the different influence of two perceived behavioral control on purchase intention, this study uses decomposed perceived behavioral controls (PBC), external and internal PBC.

Proposed Model: The proposed model posits that man-nature orientation and environmental knowledge influence consumer attitude and internal PBC along with the four direct antecedents (attitude, subjective norm, internal PBC and external PBC) have an effect on purchase intention. Based on the proposed model, this study developed seven hypotheses (H1~H7) to be tested. In H8a~H8g, country moderating effects were proposed to compare two countries.

Method: To test the proposed model, a consumer survey was conducted in several cities of each country during winter 2009 and spring 2010 in the U.S. and spring and summer 2010 in China. With professors' permission, college respondents were asked to fill out questionnaires during class periods. Two hundred thirty four questionnaires from the U.S. and 194 questionnaires from China were entered into statistical analysis. Before testing the proposed hypotheses, a multi-group invariance test was conducted utilizing the most accepted procedures of measurement invariance testing. However, measurement invariance tests were not supported for the proposed model. Therefore, testing moderating effects could not be performed. The results of structural equation model tests were conducted separately by country using Lisrel 8.80.

Results and Discussion: The fit index for the structural model for U.S. data indicated an acceptable fit ($\chi2 = 1004.93$ (df = 421), p-value = .00; RMSEA = .078; NFI = .91; CFI = .95). Among the seven hypotheses proposed, all paths were supported except one path(external perceived behavioral control $\rightarrow$ purchase intention toward green apparel products). Regarding the China data, the fit index for the structural model showed an acceptable fit ($\chi2 = 942.08$ (df = 421), p-value = .00; RMSEA = .076; NFI = .83; CFI = .90). Similar to the U.S. data, the analysis of the Chinese data resulted in six supported hypotheses and one unsupported path (man-nature orientation $\rightarrow$ attitude toward green apparel products).
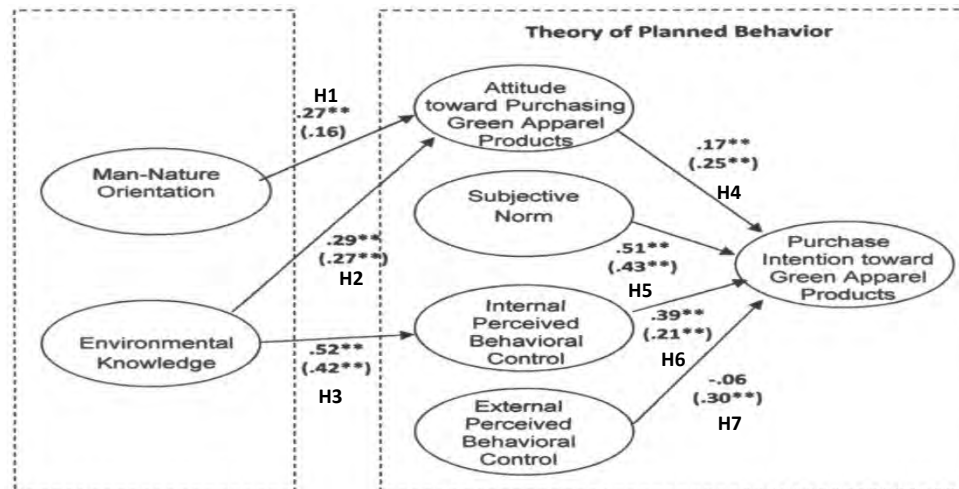
Note 1: The values outside the parentheses are the U.S. values and
those inside the parentheses are the values for China

Figure 1. The Results of the Structural Model Testing H1-H7

Findings indicated that the subjective norm was found to have the highest direct influence on purchase intention in both countries. Individuals may feel more pressure from their relevant groups when they conduct environmental behaviors, such as green consumption, recycling, and eco activities that may require ethical and socially responsible responses. Therefore, individuals tend to be more aware of salient referents' opinions in purchasing green apparel products than in purchasing conventional items. Regarding internal PBC and external PBC, internal PBC was important to the purchase intention of the U.S. consumers while external PBC significantly influenced purchase intention among Chinese consumers. Facilitating circumstances, such as money, time, and availability, turned out to be the most important barriers for purchasing green apparel products in China.

Implications: This study enriches the understanding of apparel consumer behaviors for green apparel products by providing empirical evidence. Also, it is one of the earliest endeavors to include man-nature orientation and environmental knowledge as antecedents of attitude and internal PBC toward green apparel products in a comprehensive model of purchase intention of green apparel products. Green apparel marketers are provided with more definitive information about U.S. and Chinese consumers' purchase intentions toward green apparel products. In particular, the findings of this study will help the U.S. green apparel companies planning to enter Chinese market understand Chinese consumers' needs and factors related to green apparel purchase.

Hamilton, S. F., & Zilberman, D. (2006). Green markets, eco-certification, and equilibrium fraud. *Journal of Environmental Economics and Management*, 52(3), 627-644.

Lee, S. (2011). Consumers' value, environmental consciousness, and willingness to pay more toward green-apparel products. *Journal of Global Fashion Marketing, 2*(3), 161-169.

Mahenc, P. (2008). Signaling the environmental performance of polluting products to green consumers. *International Journal of Industrial Organization, 26*(1), 59-68.