



Acceptance of a Socially Responsible Label Model for Apparel Products: Application of the Technology Acceptance Model

Yoon Jin Ma, Ph.D., Hae Jin Gam, Ph.D., Jennifer Banning, Ph.D.
Illinois State University, Normal IL, USA

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With a growing group of environmentally and socially conscious consumers, the range of socially responsible (SR) products available in the market has likewise expanded (Marquardt, 2010); currently over 300 different SR labels are being used (Case, 2009). Because such diverse labels exist, consumers have been struggling with identifying information on the label to make an informed, SR purchase decision (D'Souza, 2004; Horne, 2009). In particular, due to the complicated nature of SR practices in apparel products, consumers feel difficulties in identifying SR apparel products and practices in the marketplace (Chen & Burns, 2006; Goswami, 2008).

Since SR labels can assist consumers to make more SR purchasing decisions by providing information (Hyllegard, Yan, Ogle, & Lee, 2012), it is critical to explore how consumers perceive current SR labels on apparel products and the influence of their perception on SR label usage for their purchase decisions. Thus far, there has been limited research on the acceptability of SR labels in the context of apparel shopping. In this study, the technology acceptance model (TAM) (Davis, Bagozzi, & Warshaw, 1989) was employed as the theoretical framework to understand consumers' SR label usage behavior for apparel products. TAM posits that both perceived ease of use (PE) and usefulness (PU) influence formation of favorable attitudes (Att) toward the use of technology, which in conjunction with PU, generates an individual's greater intention to use the technology. In addition, PE has a positive influence on individuals' PU of the technology (Davis et al., 1989).

Therefore, the purpose of this study is three-fold: 1) to examine the effects of PE, PU, and Att with regard to SR labels on consumers' intention to buy apparel products with SR labels (PI); 2) compare the levels of PE, PU, Att, and PI between two consumer groups depending on whether they have noticed SR label before (SR label users) or not (SR label non-users); and 3) to compare the relationships among the research variables by the two consumer groups.

Data were collected via self-administered web-based surveys from randomly selected nation-wide shoppers through an independent marketing research company. The instrument consisted of items adapted from previous studies or developed by the authors to measure PE and PU (Davis et al., 1989; Vijayasathy, 2004), Att (Beltramini, 1988; Vijayasathy, 2004), and PI. Five SR labels that are currently available on apparel products in the U.S. market were incorporated in the PI items (Targosz-Wrona, 2009). PE, PU, and PI were measured on 7-point Likert-scales, while Att items were measured on 5-point differential semantic scales. Cronbach's *alphas* for four variables were highly acceptable (.90-.96).

A total of 1657 responses were collected (response rate = 16.6%), of which 903 complete responses were deemed usable for data analysis. The mean age of respondents was 44.6 years and the majority of them were white or European American (79.7%), married (50.5%), employed

(54.8%), female (53.9%) and had noticed SR labels when they shop (71.8%). The results from path model analysis revealed that the model fit the data well with acceptable overall fit indices ($\chi^2_{(1)} = 24.60$, $p < .001$; GFI of .99, NFI of .99, CFI of .99, RFI of .98, RMSR of .037). All the paths in the model were significant, with the standardized path coefficients ranging from .21 to .76 ($p < .001$). There were significant effects of PE to PU and Att, respectively. PU had a significant positive influence on Att and PI. Furthermore, the positive effect of Att on PI was also observed. Next, a series of independent samples t -tests demonstrated that there were statistically significant differences in all the level of PE ($t = 8.13$, $p < .001$), PU ($t = 7.13$, $p < .001$), Att ($t = 6.44$, $p < .001$), and PI ($t = 6.36$, $p < .001$) between SR label users and SR label non-users. Furthermore, findings from multi-group path model comparison analysis revealed that the roles of PE and PU in determining Att and PI were not different whether they are SR label users or not ($\Delta\chi^2 = 6.96$, $\Delta df = 5$; $p = .224$).

The current study has unique contributions to the limited body of research on SR label usage behaviors of apparel product consumers. This study is one of the first to apply TAM to this specific research context by viewing label reading behavior as similar to the way consumers adopt new informational sources. Our findings confirm all the paths in TAM, implying that consumers' PE and PU of SR labels are primary factors when designing new SR labels for apparel products. Both SR label users and non-users demonstrate the same acceptability process from perceptions to purchase intention. To make SR label more appealing to non-users it is important to develop SR apparel labels that are meaningful to a wide range of general consumers by enhancing ease and usefulness characteristics of the labels.

- Beltramini, R. (1988). Perceived believability of warning label information presented in cigarette advertising. *Journal of Advertising*, 17(1), 26-32.
- Chen, H.L. & Burns, L.D., (2006). Environmental analysis of textile products. *The Clothing and Textile Research Journal*, 24(3), 248-261.
- D'Souza, C. (2004). Ecolabel programmes: A stakeholder (consumer) perspective. *Corporate Communications: An International Journal*, 9(3), 179-188.
- Davis, F.D., Bagozzi, R.P., & Warshaw, P.R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35, 982-1002.
- Goswami, P. (2008). Is the urban Indian consumer ready for clothing with eco-labels? *International Journal of Consumer Studies*, 32, 438-446.
- Horne, R. (2009). Limits to labels. *International Journal of Consumer Studies*, 33, 175-182.
- Hyllegard, K., Yan, R., Ogle, J., & Lee, K. (2012). Socially responsible labeling. *Clothing and Textiles Research Journal*, 30(1), 51-66.
- Marquardt, S. (2010). *Sustainability is not an option*. 28-29. Retrieved from <http://apparel.edgl.com/old-magazine%5CSustainability-Is-Not--an-Option65618>
- Targosz-Wrona, E. (2009). Ecolabelling as a confirmation of the application of sustainable materials in textiles. *Fibres & Textiles in Eastern Europe*, 17(4), 21-25.
- Vijayasathy, L.R. (2004). Predicting consumer intentions to use on-line shopping. *Information and Management*, 41, 747-762.