Conscious Consumption of Green Apparel Among College Students

Mercan Derafshi, University of Tennessee-Martin
Mahendran Balasubramanian, Texas Tech University

Introduction: The textile and apparel industry's environmental footprint negatively impacts water, air, and soil; by 2030 the industry is expected to release 2,791 million tons of CO_2 emissions, consume 118 billion cubic meters of water, and produce 148 million tons of textile waste (GFA & BCG, 2017). The apparel industry aims to implement sustainable practices to reduce the carbon footprint, and one aspect of that is green products. Research supports that high knowledge of the environmental issues and concerns are associated with positive consumer behaviors and actual purchase of green products (Chan & Lau, 2000; Eze & Ndubisi, 2013; Mostafa, 2006). Apparel companies are advertising green products with the promise that their customers are making the right choice by buying their products and taking the role of protecting the environment. However, the definition of a green product may vary in the mind of the consumers (Rausch & Kopplin, 2021). Furthermore, some companies adopt greenwashing strategies to project themselves as more environmentally friendly so that they can gain customer trust and increase profit (Laufer, 2003). Greenwashing is generally defined as the act of misleading consumers regarding the environmental practices of a company or the environmental benefits of a product or service by disseminating disinformation to present an environmentally responsible appearance (Chen & Chang, 2013; Parguel et al., 2011). Since consumers receive a majority of the product information from the company and through advertisements, it is imperative to assess the ability of consumers to identify green products and recognize greenwashing. The purpose of this exploratory study is to assess young adults' ability to identify green apparel products. The first objective is to assess college students' knowledge about environmental concerns and assess their green purchasing behaviors. The second objective is to explore students' knowledge in identifying green and non-green apparel products. The following research questions are addressed:

R1: What are college students' perceived environmental knowledge, environmental concern, and their purchasing green behaviors?

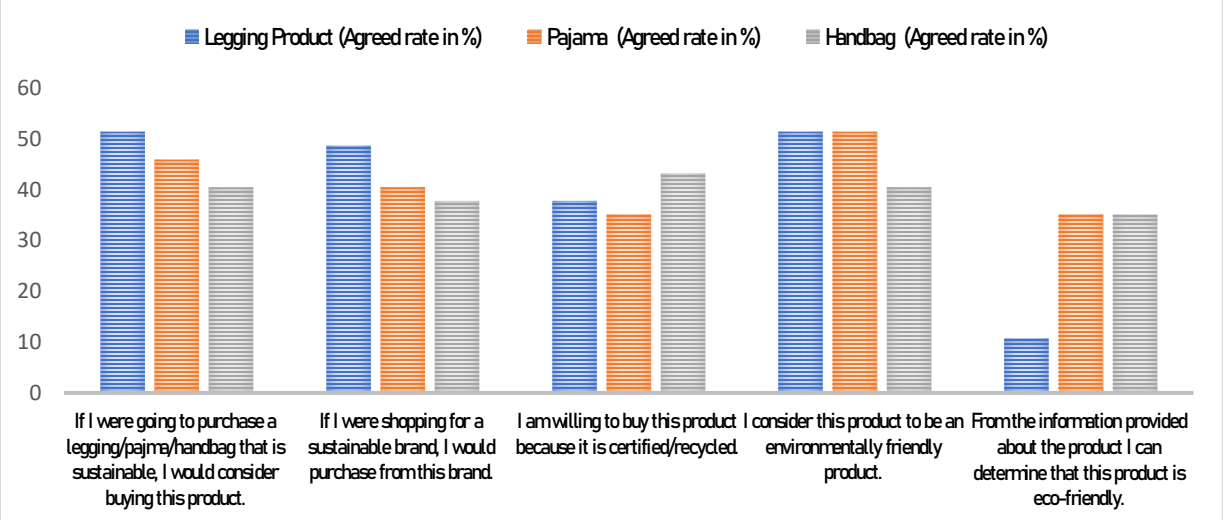
R2: What are college students' level of knowledge in identifying green apparel products from non-green apparel products?

Methods and Materials: Convenient sampling method was used to recruit participants who were college students enrolled in Family and Consumer Science classes. An anonymous Qualtrics link was sent to the class roster. Institutional Review Board approval was obtained prior to the data collection. The survey was comprised of three parts. The first part included questions about demographic information. The second part, included various items measured on 5-point Likert scales (1 = Completely disagree to 5 = Completely agree), adopted from previous studies. Perceived environmental knowledge was measured using the Perceived Knowledge of Environmental issues scale. The scale a was reported to be reliable with an α value of 0.86 (Mohr et al., 1998). Environmental concern was measured using the revised New Environmental

Paradigm (NEP) scale with a reported α value of 0.84 (Dunlap et al., 2000). Green purchase attitude was measured using a 3-item scale that was reported to be reliable with an α value of 0.92 (Taylor & Todd, 1995). The third and final part of the survey included three advertisements (two women's apparel and one handbag). Researchers designed and created these stimuli as advertisement images using fictitious brand names. The ads described point-of-sale information and other serviceability characteristics such as aesthetics, durability, comfort, and sustainability characteristics. Each ad was followed up with five greenwashing questions (1 = Completely disagree to 5 = Completely agree).

Results: A total of 37 valid surveys were used in this analysis. The age range of the participants was 18-21 and the ethnicity distribution was as follows, White (n=29), Black (n=3), Asian (n=1) and I do not wish to share (n=4). The scores for all three scales were calculated using descriptive statistics. The mean score of the Perceived knowledge scale was 15.78 ± 4.06 (SD). The minimum and maximum score were ranging from 7 to 25. For the NEP scale, the reported scores ranged from 37 to 71 with a mean score of 53.02 ± 7.4 (SD). It should be noted that the mean score above 45 indicates a pro-ecological attitude (Rideout et al., 2005). Thus, our sample population leaned more towards protecting the environment. The Green attitude scale scores showed a mean of 13.02 ± 1.5 (SD) with a range of 10 to 15. The attitude towards green purchase was high for these college students. High knowledge and attitude scores suggest that college students were knowledgeable about environmental issues and showed strong inclination towards purchasing green products. Details of greenwashing questions are depicted in figure 1.
Figure 1

Greenwashing Knowledge Based on the Stimuli



Discussion: This pilot study reveals that the college students enrolled in FCS classes showed high levels of attitude to protect the environment and were interested in purchasing green products. However, their knowledge in identifying green apparel products from non-green products was insufficient and survey responses suggested mixed messages. For example, out of the three products, the hand bag was the most green-product. Though, all the green information were provided in the stimuli, only 40.5% agreed that this product was eco-friendly. For the legging product, 10.8% were able to identify the legging as an eco-friendly product by reading the furnished information in the stimuli; nonetheless, 51.4% agreed to purchase the product considering the product is sustainable. These results suggest that the participants were willing to protect the environment; however, the knowledge of identifying the green apparel was insufficient, and that is a gap to be addressed to prevent the influence of green washing and protect the environment.

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