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## From one outfit to more looks: Identifying the factors influencing consumers' purchase intention of transformable apparel products

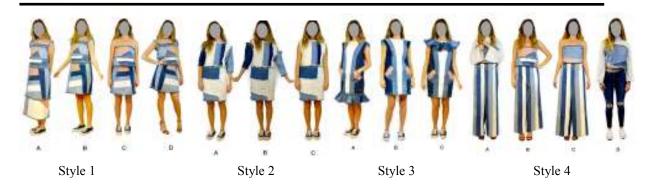
Chunmin Lang, Louisiana State University; Bingyue Wei, Iowa State University

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Introduction: The need for novelty and newness has driven consumers to purchase new apparel products frequently and dispose of diverse garments that are underutilized. Approximately, only about 6–38% of the wardrobe is regularly worn (Koo et al., 2014). More specifically, fast fashion speeds up consumer's acquisition and makes it possible for consumers to obtain more styles at lower prices and with lower quality (Cao et al., 2014), which increase the landfill wastes. Transformable designed apparel provides an alternative option to consumers to change different styles without purchasing new products, which could be a possible solution for the excess apparel consumption problem. Transformable apparel allows the aesthetics and functionality to be converted into multiple looks and functions to satisfy varied consumer needs and wants (Koo et al., 2014). Being able to be transformed into different looks, transformable garments are expected to increase the use intensity, postpone disposal, and extend the lifespan (Koo et al., 2014).

However, there is an overall lack of research about transformable apparel products. Current research mainly focuses on the design strategy of transformable apparel (Gam et al., 2011; Koo et al., 2014; Rahman & Gong, 2016), no studies have been done on consumers' attitude and purchase intention toward transformable apparel. Therefore, the purpose of this study is expected to fill this research gap; to identify the factors influencing consumers' purchase intention toward transformable apparel products. The results of this research will provide managerial insights for the promotion of transformable garments.

**Research methods:** A purposive sampling strategy was utilized with an online survey set up in Qualtrics. The survey link was sent to college students in two public universities in the United States. After data cleaning, a total of 326 usable responses were included in the main data analysis. Demographic information was collected, the majority of respondents are 18-25 years old (90.5%), and 73.9% of them are female. In regard to the education, there are 40.2% of participants reported that they are seniors, 23% are Junior, Freshman and Sophomore are 18.7% and 12% respectively, there are also 6.7% of respondents stated that they are in the graduate level. Multi-item scales were used to evaluate the variables, utilizing a 7-point Likert scale with "1=strongly disagree, to 7 = strongly agree." Fashion consciousness ( $\alpha = 0.918$ ), need for uniqueness ( $\alpha = 0.921$ ), environmental belief ( $\alpha = 0.858$ ), environmental apparel knowledge ( $\alpha = 0.913$ ), and attitude ( $\alpha = 0.929$ ) were all measured by five items respectively. In addition, four groups of transformable-designed apparel products were utilized in this study (shown in the figure). One female college student was invited to wear the garments; photos were taken from the front of the student in each garment. After seeing the photos of each group of transformable garments, participants were asked to evaluate their willingness to purchase this group of a transformable-designed garment by responding to the statement "I would like to purchase transformable clothing like this if they are available in the market." Then an overall question was asked after viewing all the four groups of transformabledesigned garments by evaluating the statement "Overall, I would like to purchase transformable clothing in future."



**Results:** A structural equation model (SEM) was then conducted to examine the proposed hypotheses. The statistic results revealed an acceptable model fit ( $\chi 2_{(df=446)} = 908.452$ , p < 0.000,  $\chi 2/df = 2.04$ ; RMSEA = 0.056; CFI = 0.943; TLI = 0.933; SRMR = 0.044). Surprisingly, only environmental belief (β=0.274, p<0.001) was found to have a positive influence on attitude toward transformable apparel. Relationships to evaluation of each group of transformable garments: As predicted, respondents who reported positive attitude toward transformable garment are more likely to purchase any of the four groups of transformable garments (style 1:  $\beta$ =0.358, p<0.001; style 2:  $\beta$ =0.311, p<0.003; style 3:  $\beta$ =0.263, p<0.014; style 4:  $\beta$ =0.297, p<0.006). However, need for uniqueness was found to have positive influence on the purchase intention of style 1 ( $\beta$ =0.235, p<0.012), style 2 ( $\beta$ =0.184, p<0.040) and style 4 ( $\beta$ =0.205, p<0.027), but have no influence on style 3 ( $\beta$ =0.120, p<0.191). Not as predicted, fashion consciousness ( $\beta$ =0.192, p<0.027) and environmental belief (β=0.369, p<0.021) were only found to be associated with style 4, but no significant relationships were found in the evaluation of other three groups of transformable garments. Relationships to the overall point of view of transformable garments: Respondents who reported higher positive attitude towards transformable are more likely to purchase those garments  $(\beta=0.572, p<0.000)$ . Additionally, respondents who have a higher level of need for uniqueness  $(\beta=0.230, p<0.003)$ , a higher level of environmental belief  $(\beta=0.259, p<0.049)$ , and more environmental apparel knowledge (β=0.380, p<0.001) are more likely to purchase transformable garments in general.

**Discussion:** Overall, the relationships between the need for uniqueness, attitude, and environmental apparel knowledge with the intention to purchase transformable garments were confirmed. However, for the particular style of transformable apparel, the influences of need for uniqueness, fashion consciousness, and environmental belief on purchase intention vary. Specifically, participants who demonstrated a high level of fashion consciousness and need for uniqueness showed no influence on the acceptance of style 3. Retailers and designers need to consider consumers' preferences for different styles during the development of transformable apparel.

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