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Preferred Product Attributes for Sustainable Outdoor Clothes

Luo Wang, Donghua University, Shanghai, China Yingjiao Xu, North Carolina State University, Raleigh, NC

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The recent emergence of sustainability in fashion industry has drawn great attention from both academicians and industrialists. Fashion industry has sizeable impact on global environment due to its long supply chain. The demand to minimize the pollution of environment is not only from fashion companies but also from consumers (Shen et al. 2012). Many fashion brands have developed the sustainable fashion products and adopted recycling practices. Outdoor wear companies such as Patagonia have been playing a very active role in incorporating sustainable initiatives in their production, distribution, retailing and management process. Consumers are increasingly aware that their purchase behavior affects the environment and willing to purchase sustainable fashion products even though they are more expensive than the conventional one (Carrigan and de Pelsmacker, 2009; Shen et al. 2012). Wearing sustainable fashion is beneficial to reduce the risk of environmental pollution and enhance the social responsibility in every stage of supply chain (Curwen et al. 2012; Niinimaki and Hassi 2011). However, it is still not clear that what sustainable product attributes are the most important in consumers' purchase decision.

Research suggest consumers often made trade-offs in their product choice. Holding other factors constant, consumers may indicate strong intention to purchase a green product. However, in reality, product attributes are often related to other. An increased performance on one attribute may be negatively associated with the performance on another attribute, e.g. price vs. quality. In the context of green products, the price of a green product may be higher than another one not claimed to be green.

Therefore, using conjoint analysis, the purpose of this study is to investigate the importance of and trade off made among product attributes in consumers' purchase of sustainable outdoor clothing products, particularly outdoor down jackets by Patagonia. There are three reasons to choose this product as the focus of this study: 1) consumers buying outdoor wear products may be more interested in environmental issue (Masanell et al. 2009); 2) there is a growing confustion regarding the sustainable contribution of traceable down to the environment; and 3) Patagonia is known for its sustainable business practices and enjoys its great reputation for selling sustainable fashion products (Casadesus-Masanell et al. 2009).

In the experiment design, the following four salient product attributes were identified for analysis in consumers' purchase decision process of outdoor down jackets: price, type of fabric, type of down, and sustainable certificate label. The attributes were assigned with different levels of values: Price (\$199, \$299, \$399), type of fabric (recycled, non-recycled), type of down (traceable and non-traceable), and sustainable certificate (Fairtrade lable, Blue Sign Lable, no lable). A full factorial design will generate 36 combinations of attributes. An orthogonal factorial design

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generated nine combinations of attributes. Nine cards each representing Patgonia down jacket possessing a unique combination of attributes were designed and presented to participants to solicit their intention to purchase the item on a 7-point Liker scale. An example card is shown in Figure 1. A sample of 404 subjects in the age range of 18-40 were recruited from a national panel to participate in this study. The survey was conducted online.

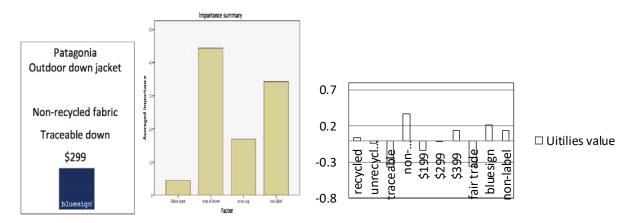


Figure 1: Attributes card

Figure 2: Importance of attributes

Figure 3: part-worth utility

A conjoint analysis was conducted on the 404 completed survey. The results suggested the important attributes in the following order: type of down (44.36%), Label (34.26%), price (16.88%), and fabric (4.5%) as depicted in the Figure 2 above. The part-worth utility for each attribute value indicated that consumers prefer non-traceable down over traceable down, higher price, recycled fabric, having Bluesign lable or no-label on the products (Figure 3).

The results of this study is very interesting and promising. It is interesting to notice that consumers prefer non-traceable down, while outdoor wear companies are promoting their usage of non-traceable down as a sustainable initiative by tracing the source of the down to make sure no animal rights are abused. Sustainable certificate was the next important attribute in consumers' consideration of outdoor down jackets, with Bluesign label or no-label preferred than a Fairtrade label. It is also interesting to notice consumers prefer a higher price for their down jackets. Acknowledging the limitation due to the nature of online survey and particular brand associated with the product, further investigation is needed to explain this finding. It is consistent with the literature that consumers prefer recycled fabric vs. non-recycled ones, even though comparing to other attributes, type of fabric was not found as being very important in consumers outdoor down jacket choice.

Note: Due to page limit, the full list of references will be provided by the author upon request.