



## Changing clothes for sustainability? The how and why of clothing redesign

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**Introduction/Significance.** Many Western consumers donate their unwanted used clothing to charities (Ha-Brookshire & Hodges, 2009); however, large amounts still end up in landfills (Chen & Burns, 2006). Redesigning used clothing – requiring deconstruction and reconstruction beyond basic repair and alteration – could be a sustainable alternative to these problems. Only a few authors have researched clothing redesign but even so have identified potential opportunities for economic and environmental gain (Janigo & Wu, in press; Young, Jirousek, & Ashdown, 2004). Our research goals were to add a longitudinal element to previous research which involved women in a collaborative redesign project in 2011 (Janigo & Wu, in press), to further understand how and why female consumers might redesign used clothing, and to identify what characteristics, if any, are shared among consumers of redesign.

**Theoretical Framework.** The theory of planned behavior (Ajzen, 1991) was used as a theoretical lens in the design of the data collection instruments and for data analysis. In the field of clothing and textiles, it has been successfully applied to explain, understand, and predict consumer behavior (Ha-Brookshire & Hodges, 2009; Kim & Karpova, 2010). The antecedents in the TPB model are beliefs, subjective norms, attitudes, perceived behavioral control, and intentions related to a behavior (Ajzen, 1991). Further, the data from the previous study demonstrated characteristics of the TPB, with themes similar to TPB variables emerging.

**Methods and Sample.** Twelve women participated in this study, the majority Caucasian (75%), aged 21 to 64 (mean age 38.58). Annual family incomes fell between \$26-50,000 (33.33%), between \$75-100,000 (33.33%), and more than \$100,000 (33.33%). In-depth interviews in participants' homes lasted one hour. Redesigned garments were photographed. Participants completed questionnaires with closed-ended questions. All in-depth interviews were recorded with audio devices and transcribed by an author. Interviews were analyzed with phenomenological inquiry procedures (Creswell, 2007). Data were organized according to concepts in the theory of planned behavior, with other themes emerging interpretively.

**Results.** Half of participants had participated in the previous study, where women were assisted in redesigning an article of used clothing, and all but one still had the garment. The individual who had divested of her redesigned garment had donated it, having worn it just once because she did not like the redesigned garment's construction and fit. Interestingly, one individual from the previous study had taken a basic sewing class and now frequently redesigns a variety of clothing. All of participants expressed intentions to redesign at least one article of used clothing in the near future, and many described specific plans for the redesign or an event to which they would wear it. All of participants were concerned about the environment, thought about ecological issues such as global climate change, and changed their behavior to minimize impact on the environment such as recycling. Participants worried about preserving the

environment for future generations, especially if they had children and grandchildren. On the contrary, only one third of participants purposefully sought information to increase their knowledge about the environment. Regarding subjective norms, close friends and family were reported as having similar beliefs about the environment and engaging in similar behaviors. In terms of sustainable fashion behavior, all participants repaired their own clothing such as hand sewing holes or attaching buttons, most bought and wore used clothing (n = 11), many made their own clothing (n = 10), and several had hired tailors or cobblers to service garments or shoes (n = 8). An equal number bought vintage clothing, high-quality luxury items, and clothing made in the USA (n = 7). Some bought fair trade clothing (n = 5), but few bought locally made clothing (n = 3) and organic clothing (n = 2), which could mean these items were limited in availability. Most of participants (83%, n = 10) kept their clothing more than three years on average. In terms of perceived behavioral control, participants who could sew were likely to complete the redesign themselves to avoid having to travel anywhere or pay someone else money for the service. Those who did not know how to sew were concerned about how much a complicated redesign might cost them. All participants had some concern regardless of who completed the redesign that it might not turn out as intended in terms of fit or styling.

**Conclusions/Future Research.** These findings may have practical implications for business owners or community organizers, who might become more confident in the potential success of their venture based on these results. A conceptual model using the TPB will be developed to describe redesign behavior to facilitate future qualitative research and quantitative measurement tools.

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