

Pre-purchase satisfaction of work shirts worn by women in agriculture.

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Introduction: Women's roles in agriculture are often underrepresented when in fact, 43% of all agricultural participants are female. (SOFA, 2011). With women actively working in the agriculture industry, there exists a need for functional clothing that is designed specifically for them. Currently, the majority of clothing is designed for men, but due to their different physiological features, they may have different clothing needs from males (Worland, Black, & Freeman, 2016). The \$121 billion dollar a year outdoor clothing industry often neglects the female wearer, instead preferring to market mostly to the male consumer (OIA, 2012). Currently, limited research exists regarding women's satisfaction with and evidence on the clothing needs of women wearing outdoor apparel. As part of a larger comprehensive study on clothing preferences in women's outdoor apparel, the purpose of this study is to assess the pre-purchase satisfaction of women participating in agriculture and to compare with functional, expressive, and aesthetic attributes, specific to shirts. From preliminary data analysis, shirts were identified as a major concern of the participants.

Methodology: This study used the Functional, Expressive, and Aesthetic (FEA) model as the conceptual framework (Lamb & Kallal, 1992). A total of 205 questionnaires were collected using Qualtrics. The instrument was directly distributed through an online organization: Women in Agriculture, which is an exclusive group for only women who have a direct involvement in agriculture. Comprised of three sections, the questionnaire included demographic items, 17 attributes pertaining the functional, expressive, and aesthetic pre-purchase satisfaction (modified from Worland et al., 2016), and 3 open-ended responses addressing personal issues with current functional clothing. Participants ranged in age from 18 to over 65, with a majority of between the ages of 26 to 55 (69%), and the largest percentage between 26 and 35 (30%), followed by 36-45 (20%). Ninety-five percent of the participants were from all regions of the United States.

Results: *Pre-purchase Satisfaction:* Participants indicated the importance of 11 attributes when purchasing overall outdoor clothing. The three most important attributes were comfort, durability, and fit. Participants indicated that color, pleasing others, and brand name were not important when purchasing outdoor clothing. To further investigate, participants were asked to evaluate specific garment characteristics of shirts. Participants were asked to rank order eight clothing attributes from most to least important. Of the eight attributes, three were ranked as most important by the participants: comfort (86%), durability (65%), and length (42%). When purchasing shirts for the outdoors, 52% of the women indicated that the overall fit of shirts was either too tight or too loose. Additionally, 66% of the participants reported chest circumference as either too tight or too loose; also 63% indicated torso length as either too short or too long. These attributes and characteristic issues were also reflected in the qualitative analysis.

Qualitative Analysis: Participants were asked if there was anything else they would like to share regarding their experiences with shirts for the outdoors. Three main themes were identified in the

analysis of their responses. *Theme 1* related to specific fit issues, such as the cross back measurement and upper sleeve circumference being too tight. A majority of the responses concerning fit focused on the chest and shoulders. For example, one participant indicated “Upper arm circumference is the biggest problem...often have to buy clothing 2 sizes too big to accommodate arms and shoulders.” Another participant indicated “I am big busted and have trouble finding shirts that give me enough room to move when working in the barn.” *Theme 2* identified the issue of women choosing men’s clothing over women’s clothing. For example, one participant wrote “Most of my clothing ends up being men’s because women’s sizing makes no sense.” While another reiterated “I tend to just purchase men’s clothing, as they tend to be thicker fabrics (therefore I assume more durable) and more comfortable overall.” The last major theme, *Theme 3* identified related to concerns the quality and durability of fabric and findings performance. For example, one participant stated, “Also, ¾ sleeves just don’t work for me when working outdoors, neither does the thin cheap poplin fabric.” Another stated: “Women’s ‘work’ tops, unless you’re talking the really high end stuff, tends to be made with cheaper, flimsier, fabrics than the same item type in men’s and sometimes fewer options.” In conclusion, the quantitative and qualitative results both support the consumers’ dissatisfaction with comfort, durability, and fit.

Discussion: Regarding the functional, expressive, and aesthetic considerations of the FEA model, the participants were most concerned with the functional considerations. This finding is similar to Worland et al. (2016) study that also found functional characteristics as most important to female skiers and snowboarders when purchasing clothing. Additionally, the current study supported the findings of Worland et al. (2016) in relation to the lack of importance of a brand name for outdoor apparel pre-purchase satisfaction. This study provides evidence to support that overall women in agriculture are unsatisfied when purchasing clothing. However, based on participants responses, many of the consumer issues could be addressed through product development to improve the durability of fabrics sourced; specific fit issues of the chest, cross back, and sleeve measurements; and extending the torso length. Future research could include fit issues of women’s outdoor clothing, a comparison between men’s and women’s outdoor clothing, quality and durability assessment of outdoor clothing currently available.

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