

The Perception of Odor in Textiles: An Exploratory Study

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Odor in clothing may be problematic because “olfaction intersects with social, cultural, and moral order” and therefore, evokes judgments about the person, place or situation in which the perceiver finds themselves (Waskul, 2008, p. 53, 54). It has been generally assumed that odor build-up in textiles is a concern for consumers and as such, influences behavior patterns which relate to purchase, laundering, and disposal of clothing items. Although, there are many personal or individual reasons for people discarding clothing (Shim, 1995), odor has not specifically been mentioned as a reason for prematurely discarding of clothing. Niinimaki & Armstrong (2013) discuss the importance of a pleasurable use-experience in relation to continued ownership of clothing, it could also be concluded that a connection between odor detection and a particular item could facilitate a negative use-experience that might initiate premature disposal of the item.

Excessive laundering, due to perceptions of hygiene and odor, also contributes to the growing sustainability problem. As Shove (2003) has reported, the average American household produces approximately 392 loads of laundry annually, an increase from the average 156 loads done in 1950 (p. 401). By auditing our ever-changing definition of “cleanliness” Shove (2003) uncovers how our conventions have evolved and created the basis for our current cleaning habits. One report based on UK focus groups stated that “there is a reluctance to reduce the frequency with which clothes are washed because of the attraction of ‘fresh’ clothes and a fear of odor” (Fisher, Cooper, Woodward, Hiller, & Goworek, 2008, p. 8), this may also translate into other behaviors such as increased wash temperature and water levels, use of bleach or fabric softeners. This paper reports a study to explore what consumers experiences were with odor in their clothing and whether odor in clothing lead to behaviors which facilitated premature discard and changes in laundering of that clothing.

Methods: This was exploratory research to begin to address the lack of research related to peoples experiences and associated behaviors in relation to odor in clothing. Three focus group interviews comprised of 6-7 participants (male and female) (19 participants in total) were undertaken. Focus group participants initially completed a survey addressing their experience with odor in clothing as well as their typical laundering and clothing disposal behaviors. The focus group questions were based on ten open-ended questions intended to act as a platform for conversation while maintaining an impartiality which allowed the participants to develop their own conclusions. The questions were based on their experiences and behaviors related to odor build-up in clothing. The results from the focus group were transcribed and qualitatively analyzed looking for themes which emerged from the data.

Results/Discussion: The focus groups revealed a broad consensus on several issues, however, the most conclusive of the findings suggests that odorous clothing is undesirable in the majority of instances. All participants agreed having noticed odor build up in various pieces of clothing. Participants generally felt that when they could perceive odor in their clothing that this affected their level of personal comfort with the exception of exercise clothing where odors were

more acceptable. One male participant noted “I’ll be self-conscious all day and there’s nothing worse than like, worrying about what you’re wearing in your office or whatever”.

A trend in the types of clothing most often associated with odor retention was apparent from the study. In relation to underarm body odor, participants acknowledged persistent odor in tops constructed from synthetic fibers, heavier knitted fabrics, and clothing designed to hug the underarm area.

The findings from the focus group suggest that both premature disposal and increased laundering were employed by the majority of participants. Eighteen out of the 19 individuals reported having had discarded an item which was otherwise in good condition because of persistent odor. The survey data confirmed the disposal behaviors discussed in the focus groups as 7 participants said they had owned an item that became too odorous to wear. As such 13 of the 19 participants had thrown out an item, 7 recycled one for another use such as rags, and 12 donated an item regardless of its odor. This suggests that odor perception does, in fact, contribute to premature disposal of the textile item as it was the most common way to remove the offending item from one’s wardrobe.

According to the survey data, all participants said that the frequency of washes increased significantly when a clothing item presented a tendency to emit body odor. However, during the focus group it was apparent that the washing treatment varied among the participants, while 13 of the 19 employed additional cleaning or pre-treatment techniques for items noted as odorous. For example, one female participant stated that: “you use some sort of nilodor thing and then your add the detergent, then you add the Downy, and then you add the fabric sheets” in attempt to control body odors in her clothing. The remaining six participants claimed that although they wash more often, they weren’t willing to change their laundering style.

Conclusions: Overall, the data collected during this study has helped condense the personal attitudes and experiences of odor perception among garment consumers into tangible, qualitative research data. All of our participants concluded that odor build up in clothing is problematic and each individual was able to recall a negative use-experience with an odorous item. Furthermore, all participants had also noted a series of behavioral changes with respect to laundering, disposal, and care of an odorous item.

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