How to Be Responsible in Clothing Consumption?

An Analysis of Available Resources on Sustainable Apparel Consumption Practices

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Key words: responsible clothing consumption, sustainable consumption, guide, resource

Background and Research Purpose. Textile and apparel production and consumption are recognized for a significant environmental impact (Marcketti & Karpova, 2020). While many companies and industry associations have launched various initiatives to curb the footprint, there is a growing awareness that consumers' actions can be instrumental in transforming the apparel market (Muthu, 2020). Consumers are bombarded with green messages as many fashion brands have a "sustainability" tab on their websites describing their related practices. At the same, there is no clear understanding of what exactly a responsible citizen could do to minimize the ecological damage resulting from their clothing consumption. What is better, organic cotton or recycled polyester? Renting or shopping secondhand? What are the steps to 'green' a wardrobe with minimal sacrifices and maximum effectiveness? Where can interested consumers get such information? No study has explored what information on sustainable apparel consumption practices is currently available for consumers. It is important to know what consumers can learn from open sources to guide their consumption decisions and whether the available guides are accurate and complete. To answer these questions, the **purpose of this research** was to critically examine resources available for consumers interested in greening their clothing consumption practices—from acquisition to care and disposal.

Types of Knowledge. Scholars agree that knowledge indirectly influences behavior by impacting attitudes and beliefs (Nguyen et al., 2019; Pratkanis et al., 2014). There are two distinct types of knowledge, declarative and procedural (Wyer, 2022). Declarative knowledge pertains to factual and conceptual information, while procedural is practical knowledge on how to perform a specific task (Schrader & Lawless, 2004). In the context of sustainable apparel consumption, declarative knowledge involves facts about the environmental impact of products from fiber to disposal, whereas procedural knowledge provides practical guidelines for engaging in sustainable apparel consumption practices. Research has demonstrated that procedural knowledge can facilitate environmentally friendly behavior (Phuphisith et al., 2021; Schultz, 2002). Nonetheless, both types of knowledge are required for promoting behavioral change

(Kaiser & Fuhrer, 2003). Therefore, it is important to supply both declarative and procedural knowledge in a sustainable apparel consumption guide.

   Life Cycle Assessment. Life Cycle Assessment is a well-established approach for evaluating the environmental impacts of products, including production, usage, and end-of-life scenarios (Piontek & Müller, 2018). For a sustainable apparel consumption resource, it is crucial to provide information regarding each stage of a product's lifecycle in an easy-to-understand format. A comprehensive understanding of a product's environmental footprint throughout the entire lifecycle can help prevent the transfer of problems from one stage to another (Lewandowska et al., 2018). To address the purpose of the study, existing sustainable apparel consumption resources, or guides, were identified and analyzed to determine their:

1. comprehensiveness – completeness in terms of providing information across the stages of an apparel life cycle from production (fiber, yarn, fabric, garments) and distribution (transport, retail) to acquisition (purchasing new vs. used garments, renting, swapping, etc.), use and care (cleaning, repair), and disposal (reuse, recycling);
2. types of knowledge provided – declarative (science-based facts) and procedural (practical advice describing sustainable consumption practices);
3. credibility of information – trustworthiness of facts cited from science-based sources;
4. accessibility (free access vs. subscription-based, paid resources) as well as readability level (how easy to understand).

Method. A comprehensive search was conducted to identify any available resources that explain and promote sustainable apparel consumption. Various keywords were employed in the search, for example: sustainable living, sustainable consumption, capsule wardrobe, sustainable clothing care, sustainable shopping, sustainable fabric, etc. *Google Keyword Planner* (a popular keyword research tool used in search engine optimization marketing) was used to determine trending keywords and their usage metrics (e.g., click rates) in order to identify related keywords via a machine learning algorithm to further expand the list of keywords. The comprehensive search resulted in 74 sustainable apparel consumption guides, most of which (66%) were blogs by individual consumers with very limited information provided. Out of the 74 resources, eleven most comprehensive guides were selected for further analysis based on coverage of sustainability practices in at least two life cycle stages. The final eleven guides were analyzed based on the following five criteria:

- comprehensiveness – was coded based on the coverage of apparel life cycle stages,
- declarative information – was coded based on the scientific facts presented,

- procedural information – was coded based on the availability of practical advice that can be adopted by consumers,
- accessibility – was coded based on free access to the guide available at no cost,
- readability – was coded based on how easy it was to understand the information provided in the source, including effective use of visuals.

Results. Examples of the eleven guides included in the final analysis of the study were: Tabassum (2022) and Uncover Handbook (2018). In terms of comprehensiveness, most of the eleven sources (64%) included information on different stages of an apparel lifecycle, with the footprint of fiber and yarn covered the least. With respect to the knowledge type, most sources (82%) included procedural information and only half of the sources (55%) provided declarative information. Alarmingly, only half of the sources (55%) were based on scientific facts supported by credible citations. Most of the sources (88%) were easy to follow and understand and provided engaging visuals. Finally, ten out of the eleven sources were accessible to anyone surfing the Internet, at no cost.

As a result of the analysis, a matrix was constructed to provide a holistic evaluation of the top existing sustainable apparel consumption guides. The matrix was accompanied by qualitative commentary compiled for each of the eleven guides. For example, none of the guides was published by a research organization or a scholar affiliated with an academic institution.

Conclusions and Implications. The research results indicate that existing sustainable apparel consumption guides are not comprehensive, not supported by science-based facts, and/or lack clear recommendations for consumers. The fragmented and inconsistent nature of available information on how to practice sustainable apparel consumption poses a challenge to consumers seeking to make informed decisions. There is a need to create a comprehensive science-based resource that can be easily used by consumers who seek guidelines when acquiring, using, caring for, and disposing clothing. Such a guide will help promote sustainable consumption practices and mitigate the negative environmental effects of the apparel industry and market.

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