

Constructive Controversy on Fashion from Plastic: Perceived Value, Attitude, and Purchase Intentions Toward Apparel Made of Recycled Polyester Fabric

FNU Al-Amin^a and Amrut Sadachar^a

^aDepartment of Consumer and Design Sciences, Auburn University, Auburn, Alabama, USA

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Background. Almost any country's economy, commerce, and employment depend heavily on the textile and apparel sector which was reflected in the apparel industry's 2023 expected revenue of more than \$1.7 trillion (Gaubys, 2023), a 13.7% increase from the previous year, with the U.S. market leading at \$312 billion (Smith, 2023). Despite its economic success, the apparel industry is the second-largest polluter (Jia et al., 2020; Muthukumarana et al., 2018). Synthetic fibers like polyester, preferred for their cost-effectiveness and durability, dominate the market at 63% compared to natural fibers like cotton at 24% (Sandin & Peters, 2018). Recycling efforts are turning polyester waste into usable fabrics, a move towards sustainability (Albini et al., 2019) embraced by brands like Patagonia, H&M, Levi's, and Adidas. However, consumer uptake of sustainable fashion is low due to unclear perceptions and prioritization of design, function, and cost (Chang & Watchravesringkan, 2018; Lin & Chen, 2022). Understanding consumer values towards apparel made of recycled polyester fabric is vital to increasing sustainable fashion consumption.

Problem Statement and Purpose. Awareness of sustainable apparel is growing, leading to inquiries into the role of recycled polyester in fashion (Bhatia et al., 2014), prompting a closer examination of the advantages and disadvantages associated with such materials. The environmental benefits of recycling polyester, including reduced ecological footprint and lower energy consumption (Majumdar et al., 2020; Payne, 2015), contrast with challenges such as the health risks from VOC emissions (Yamashita et al., 2007), the difficulty of collecting ocean plastics (DW Planet A, 2021), and the inevitable quality degradation from repeated recycling processes. Moreover, the minimal differences between the qualities of virgin and recycled polyester (Ross, 2015) juxtapose the issue of low breathability, leading to discomfort from sweating (Petra, 2021), and the limitation on indefinite recycling due to quality loss. While existing research (Chi et al., 2021; Lin & Chen, 2022) often highlights the positives of sustainable clothing, it seldom focuses on recycled polyester.

This study aims to explore how consumers' perceived value of apparel made of recycled polyester fabric influences their attitudes and purchase intentions, incorporating 'Constructive Controversy' by presenting both pros and cons to elicit informed decisions (Johnson et al., 2000). The study will assess the impact of functional, emotional, and social values on attitudes and how these, in turn, influence purchase intentions, while also examining the moderating effects of value for money, environmental consciousness, and age on these relationships.

Literature review. This study examines how the Value-Attitude-Behavior (VAB) Model (Homer & Kahle, 1988) can shed light on consumer behavior towards apparel made of recycled

polyester fabric. Perceived value, a subjective assessment balancing benefits against costs (Zeithaml, 1988), is critical in understanding consumer choices. Functional value, which considers a product's overall performance, quality, cost, and usefulness (Chi et al., 2021), significantly impacts purchase intentions, particularly in recycled fashion products (Eunha et al., 2018; Koller et al., 2011). Emotional value arises from the feelings associated with a product (Sheth et al., 1991). The psychological benefit of purchasing recycled goods, such as the feeling of doing good, boosts the likelihood of purchasing (Bei & Simpson, 1995). Additionally, environmental concerns affect the purchasing decisions of 37% of consumers, highlighting an increased awareness of sustainable fashion and its emotional value (Ditty, 2018). Social value derives from a product's ability to enhance social status (Sweeney & Soutar, 2001). Consumers may display their environmental views to gain public recognition (Griskevicius et al., 2010), but social pressures can also deter purchases if they are deemed socially unacceptable (Chi, 2015; Koller et al., 2011). Chi (2015) identified social value as a key factor in choosing environment-friendly apparel.

However, challenges like lack of availability, access, variety, and higher prices can hinder sustainable apparel purchases (Connell, 2010; Gwozdz et al., 2013). Chi et al. (2021) found that cost is a decisive factor in the choice of eco-friendly athleisure wear although most consumers would pay a 5-10% premium for eco-friendly athleisure, some would pay 15%, or even 25-30%, for environmentally beneficial products. Studies consistently show that increased environmental awareness leads to a positive attitude towards eco-friendly apparel and influences purchase intentions (D'Souza et al., 2015; Gam, 2011). Gen Z consumers are willing to pay more for sustainability and reject brands that do not align with their sustainability values (First Insight, 2020). Yet, research indicates that adolescents prioritize cost, trends, and functionality over sustainability (Fischer et al., 2017), while older female consumers were encouraged to purchase more environmentally sustainable apparel for a long-term outlook (Kim & Jin, 2019).

Attitudes significantly influence sustainable purchase intentions, as prior research (Maichum et al., 2016; Maloney et al., 2014) highlights that attitude is a decisive factor in sustainable fashion purchasing. Chan (1999) proposed that green purchasing behaviors are mediated by purchase intentions, which are in turn influenced by attitudes toward green purchases. In summary, different perceived values such as functional, emotional, and social, along with value for money, environmental consciousness, and age factors, may contribute to shaping attitudes and purchase intentions toward apparel made from recycled polyester. Therefore, we propose that,

Proposition: *Consumers' perceived (1) functional, (2) emotional, and (3) social value for apparel made of recycled polyester fabric positively influences their attitude towards these products, which in turn, increases their (4) purchase intentions, especially when they perceive good (5) value for money and have a high (6) environmental consciousness influencing functional value-attitude and emotional value-attitude relationship respectively, while research explores if (7) age influences the social value-attitude relationship.*

Proposal for Future Action. Building on the insights from this research on consumer perceptions towards apparel made from recycled polyester fabric, we propose a strategic framework for advancing sustainable fashion practices regarding such apparel. This framework will be grounded in empirical data collected through an online survey that assesses the impact of functional, emotional, and social values on consumers' attitudes and purchase intentions, taking into account the moderating effects of value for money, environmental consciousness, and age. By informing participants beforehand about both the advantages and disadvantages of such apparel, they will be engaged in 'Constructive Controversy', experiencing opposing views to come to a consensus guided by the strongest evidence and logic, following the method proposed by Johnson et al., (2000). By examining responses from diverse age groups, like Gen Z (born after 1995), Gen Y/millennials (born in 1980–1995), and Gen X (born in 1965–1979) (Dolot, 2018), the nuances of consumer behavior in the sustainable fashion market will be analyzed, thus developing targeted communication strategies that can benefit a variety of stakeholders, including academics, apparel manufacturers, and retailers in the recycled polyester context.

Selected References

- Albini, G., Brunella, V., Placenza, B., Martorana, B., & Guido Lambertini, V. (2019). Comparative study of mechanical characteristics of recycled PET fibres for automobile seat cover application. *Journal of Industrial Textiles*, 48(6), 992–1008. <https://doi.org/10.1177/1528083717750887>
- Bei, L.-T., & Simpson, E. (1995). The determinants of consumers' purchase decisions for recycled products: An application of acquisition-transaction utility theory. *ACR North American Advances*. <https://www.semanticscholar.org/paper/The-Determinants-of-Consumers%27-Purchase-Decisions-Bei-Simpson/62d67be16cc8a7d16413fe0e7e08aab5c47d03ec>
- Bhatia, D., Sharma, A., & Malhotra, U. (2014). Recycled fibers: An overview. *International Journal of Fiber and Textile Research*, 4(4), 77–82.
- Chang, H. J., & Watchravesringkan, K. (Tu). (2018). Who are sustainably minded apparel shoppers? An investigation to the influencing factors of sustainable apparel consumption. *International Journal of Retail & Distribution Management*, 46(2), 148–162. <https://doi.org/10.1108/IJRDM-10-2016-0176>
- Chi, T., Ganak, J., Summers, L., Adesanya, O., McCoy, L., Liu, H., & Tai, Y. (2021). Understanding perceived value and purchase intention toward eco-friendly athleisure apparel: Insights from U.S. millennials. *Sustainability*, 13, 7946–7963. <https://doi.org/10.3390/su13147946>
- Eunha, C., Jiang, W., Yu, J., & Ko, E. (2018). Perceived consumption value, pro-environmental belief, attitude, eWOM, and purchase intention toward upcycling fashion products. *Fashion & Textile Research Journal*, 20, 177–190. <https://doi.org/10.5805/SFTI.2018.20.2.177>
- Gam, J. H. (2011). Are fashion-conscious consumers more likely to adopt eco-friendly clothing? *Journal of Fashion Marketing and Management: An International Journal*, 15(2), 178–193. <https://doi.org/10.1108/13612021111132627>
- Homer, P., & Kahle, L. (1988). A structural equation test of the value-attitude-behavior

- hierarchy. *Journal of Personality and Social Psychology*, 54, 638–646.
<https://doi.org/10.1037/0022-3514.54.4.638>
- Jia, F., Yin, S., Chen, L., & Chen, X. (2020). The circular economy in the textile and apparel industry: A systematic literature review. *Journal of Cleaner Production*, 259, 120728.
<https://doi.org/10.1016/j.jclepro.2020.120728>
- Lin, P.-H., & Chen, W.-H. (2022). Factors that influence consumers' sustainable apparel purchase intention: The moderating effect of generational cohorts. *Sustainability*, 14(14), Article 14. <https://doi.org/10.3390/su14148950>
- Payne, A. (2015). Open-and closed-loop recycling of textile and apparel products. *Handbook of Life Cycle Assessment (LCA) of Textiles and Clothing*, 103–123.
<https://doi.org/10.1016/B978-0-08-100169-1.00006-X>
- Sweeney, J. C., & Soutar, G. N. (2001). Consumer perceived value: The development of a multiple item scale. *Journal of Retailing*, 77(2), 203–220. [https://doi.org/10.1016/S0022-4359\(01\)00041-0](https://doi.org/10.1016/S0022-4359(01)00041-0)
- Zeithaml, V. A. (1988). Consumer perceptions of price, quality, and value: A means-end model and synthesis of evidence. *Journal of Marketing*, 52(3), 2–22.
<https://doi.org/10.2307/1251446>