

Ethical Consumerism and Sustainable Apparel Retailing in the Philippines: The Role of Environmental Gatekeepers in Advancing Sustainable Development Goals

Christian Cabungcal¹, Klint Allen Mariñas² and Michael G. Calamba³

¹*School of Industrial Engineering and Engineering Management, Mapua University, 1002 Manila, Philippines*

²*School of Graduate Studies, Mapua University, 1002 Manila, Philippines*

³*College of Engineering and Architecture, Mapua Malayan Colleges Mindanao, 8000 Davao City, Philippines*
cecabungcal@mymail.mapua.edu.ph, kaamarinas@mapua.edu.ph, mgcalamba@mcm.edu.ph

Keywords: Sustainability, Consumption Behavior, Behavioral Intentions, Sustainable Fashion, Clothing Industry, Sustainable Development Goals.

Abstract: The supply chain's retail aspect is still poorly understood despite the increasing prominence of sustainability in the apparel sector. The intricacy of sustainable apparel retailing makes this knowledge gap especially urgent. Theory development, systematic literature reviews, and bibliometric analysis were combined, adhering to the multi-method guidelines of the B-SLR, achieving an integrative examination of the body of dominant literature to address this problem. The suggested hierarchical framework, applicable to diverse consumer segments, delivers a profound understanding of the intricate dynamics underlying sustainable apparel buying patterns. The multi-tiered strategy to recognize consumer preferences and promote eco-friendly apparel combines numerous concepts and components from recognized frameworks, underscoring implementation intentions and buying patterns. It provides conclusive proof supporting the crucial part that consumers' attitudes, morals, awareness, self-reliance, social influences, and emotional ties play in influencing the use of eco-friendly clothing. The generalizability of the results has significant implications for educators, legislators, and retailers who want to advance eco-fashion and environmental preservation.

1 INTRODUCTION

A company's success in the cutthroat apparel sector, where efficient supply chain optimization is critical, depends on balancing the flow of outputs. The ever-evolving fashion trends present apparel retailers with intricate supply chains [1]. In a world with a multitrillion-dollar global economy, the textile and apparel industries are intertwined [2]. This industry provides global supplies by producing everything from fibers to clothing. It is an intricate system that has an impact on the entire world [2]. Known as the worst pollutants in the world, these sectors have millions of workers and contribute 2% of the world's GDP [3]. They are essential to achieving Sustainable Development Goal 12 set by the UN, which highlights the need to change corporate behavior to promote sustainable production and consumption throughout the chain, alongside the EU Commission's Green New Deal initiative [3].

The fashion industry's supply chain involves multiple businesses from product conception to consumer, including growers and retailers, crossing international borders and adhering to trade regulations [1]. According to Statista [4], the combined effects of online shopping and rising demand for clothing would propel retail sales to a 7.6% (CAGR) through 2030.

The global textile industry was severely disrupted by the coronavirus outbreak, which altered supply chains and led to a decline in demand [5]. Due to the evolving customer needs that set a greater focus on environmental responsibility, comfort, and ease of use, the disruption accelerated the industry's shift toward automation and digitalization. As a result, companies have responded by establishing recycling programs, promoting eco-friendly goods, and establishing a variety of partnerships [6].

Due to market conditions, stakeholders in the apparel industry must be adaptable [7]. A strong financial position enables retailers to overcome obstacles and adjust to shifting market conditions

more skillfully [8]. In their role as environmental gatekeepers, they link suppliers and consumers, advocating sustainability and deepening knowledge of social and ecological issues while highlighting the importance of sustainable supply chains [8].

Digital marketing has a huge impact on Filipino consumers' buying choices, especially among younger audiences [9]. Decision-making is accelerated by social media, as users consult their peers' advice and opinions before making purchases [9]. Green ambassadors on social media promote responsible consumption and brand loyalty [10].

Through groups like the decentralized Zero Waste Philippines initiative, which aims to reduce waste, and the Philippine Social Enterprise Network (PhilSEN), which promotes environmentally sustainable practices, the Philippines promotes mindful consumption [11]. By encouraging sustainable waste management in homes and businesses, the government backs these initiatives through R.A. 11367 or the "National Integrated Waste Management Act" of 2019 [11].

Mindful consumption also faces challenges due to limitations in conscious consumerism. A major obstacle is the lack of understanding of consumer behavior regarding sustainability [7]. Key barriers include low awareness, limited resources, and high adoption costs [7]. Consumers prioritize quality, affordability, and convenience over sustainable products [12].

The Philippines' focus on conscious consumerism is a promising development. While sustainable apparel gains attention, the retail aspect remains overlooked. Retailers can reduce emissions and waste through improved operations [13].

This research followed the guidelines of bibliometric analysis and systematic literature reviews to examine sustainable apparel retailing and

ethical consumerism, identifying trends, suggesting future directions, and proposing a framework integrating various factors.

2 RESEARCH METHOD

In August 2024, a Scopus search identified 248 papers, with 149 relevant to the apparel industry. A taxonomy from 106 articles categorized themes: sustainable fashion consumption (23 articles), supply chain sustainability (20 articles), consumer psychology (25 articles), cultural influences (18 articles), and marketing strategies (20 articles).

The B-SLR standards [14] employ a holistic approach that integrates systematic literature reviews (SLRs) with bibliometric analysis to create the Biblio-metric-Systematic Literature Reviews (B-SLR). This integrated processes balance quantitative and qualitative methods, addressing the limitations of standalone bibliometric analysis and SLRs, thus enhancing methodological coherence. The structured 10-step process, depicted in Figure 1, facilitated significant literature reviews that improved purpose-method fit [15], [16].

The approach identified gaps in existing frameworks, as presented in Table 1, confirmed relevance, and developed a new framework, enhancing the perception of green apparel purchasing behavior.

The suggested integrated three-tiered framework for sustainable fashion consumer decision-making, illustrated in Figure 2, identified behavioral, sociative, emotive, and cognitive factors influencing Filipino customers, progressing from intention to social influence, purchasing, and culminating in ecological responsibility and self-reliance.

Table 1: Summary of the proposed integrated multi-tiered framework.

Proposed Integrated Framework	Existing Framework	Difference from the Proposed Integrated Framework	Reference
Theory of Planned Behavior (TPB)	Integrated TPB, SCT, and VAB that examine eco-friendly fashion purchasing.	Lacks the ECF and moderating variables.	[17]
Value-Attitude-Behavior (VAB)	Integrated ECF, TPB, and VAB that examine ethical consumerism.	Excludes SCT and SFC.	[18]
Social Cognitive Theory (SCT)	Combined SCT, SFC, and TPB that examine sustainable apparel consumption.	Integrates SCT and TPB but excludes ECF and VAB.	[19]
Sustainable Fashion Consumption (SFC)	Combined VAB, TPB, and SCT that evaluate societal effects.	Comprises SFC and ECF, which are absent from the authors' study.	[20]
Ethical Consumerism Framework (ECF)	Integrated VAB, ECF, and TPB that examine moral consumption.	SCT and SFC are not integrated.	[7]

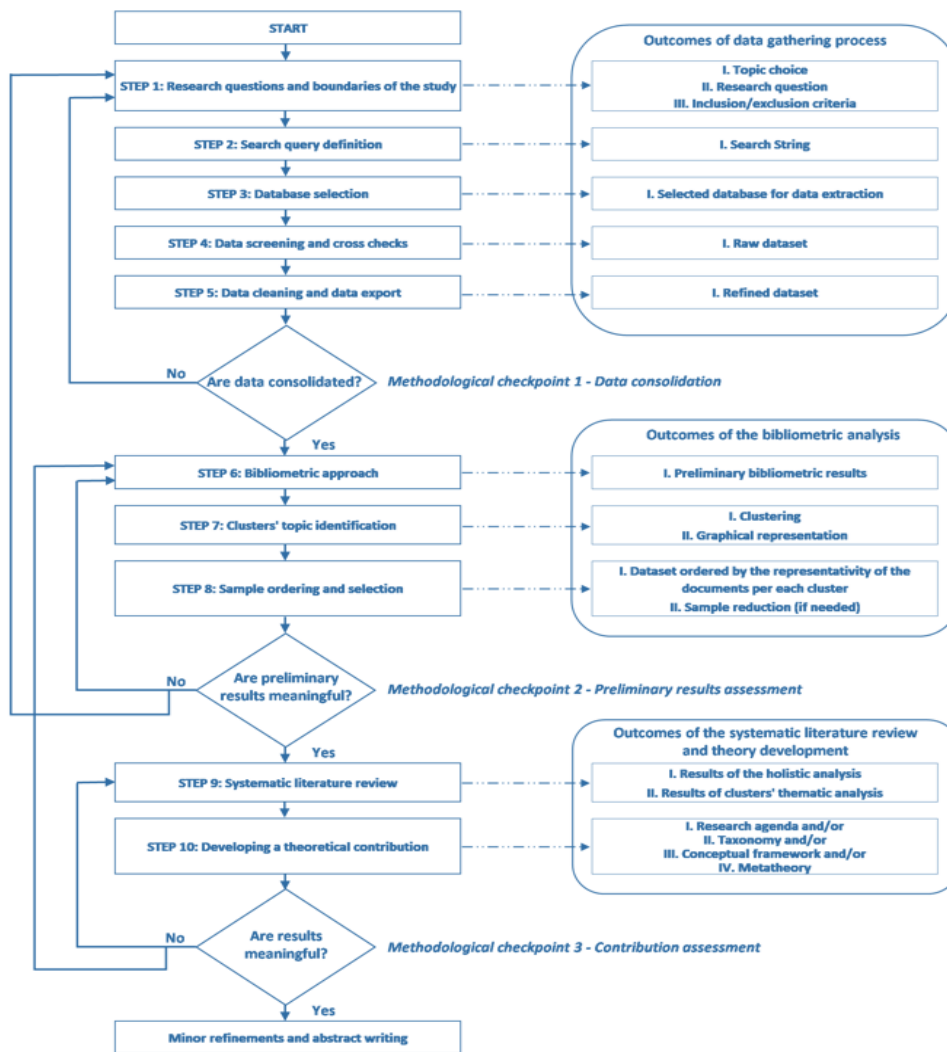


Figure 1: Ten-step bibliometric-systematic literature review workflow.

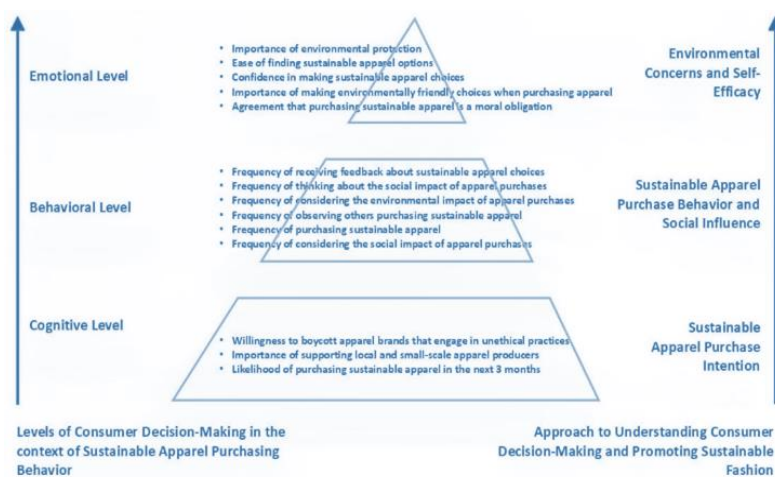


Figure 2: Three-tiered framework for sustainable apparel purchasing behavior.

Table 2: Measurement items, frequency distribution, and constructs.

Constructs/ Items	Rating	Frequency	Median	Mean	Std. Deviation
Ethical Consumerism Theory					
EC1: How crucial is it to purchase apparel from ethical brands or employers.	3 4 5	320 48 7	3.0	3.165	0.419
EC2: How frequently do you consider how your clothing choices affect society.	1 3 4 5	7 157 204 7	4.0	3.544	0.631
EC3: Would you boycott brands with unethical practices.	1 3 4 5	1,60, 286, 28	4.0	3.907	0.501
EC4: How important is transparency about sustainable practices in apparel retail.	3 4 5	297 71 7	3.0	3.227	0.462
EC5: How important is supporting local/small-scale apparel producers to you.	3 4 5	87 260 28	4.0	3.843	0.532
Theory of Planned Behavior TPB1: Will you buy eco-apparel in the next 3 months.	1 3 4 5	1 86 259 29	4.0	3.840	0.553
TPB2: Do you feel in control of your sustainable clothing choices.	1 5	150 225	5.0	3.400	1.962
TPB3: How important is making eco-friendly apparel choices to you?	3 4 5	37 207 131	4.0	4.251	0.621
TPB4: Are you amenable to paying more for green apparel.	3 4 5	43 51 281	5.0	4.269	1.360
Value-Attitude-Behavior Model VAB1: How important is protecting the environment to you.	3 4 5	73 156 145	4.0	4.193	0.740
VAB2: Is buying sustainable apparel a moral obligation.	3 4 5	29 215 131	4.0	4.272	0.595
VAB3: How frequently do you consider how your clothing purchases will be perceived by others.	1 3 4 5	6 147 178 44	4.0	3.677	0.742
VAB4: How imperative is sustainability when buying clothing.	3 4 5	288 81 36	3.0	3.248	0.468
VAB5: How frequently do you consider how your clothing purchases will affect the environment.	1 3 4 5	6 183 179 7	3.0	3.483	0.620
Social Cognitive Theory					
SCT1: How often do you see others buying eco-apparel.	1 3 4 5	5 188 175 7	3.0	3.477	0.606
SCT2: Are you confident in making eco-apparel choices.	3 4 5	28 148 199	5.0	4.456	0.631
SCT3: Can you easily find sustainable apparel options.	3 4 5	90 136 149	4.0	4.157	0.784
SCT4: Do you get feedback from others about your sustainable apparel choices.	1 3 4 5	65 144 158 8	3.0	3.117	1.091
Sustainable Fashion Consumption Framework					
SFC1: How important is it that you cut down on clothing waste	3 4 5	55 209 111	4.0	4.224	1.625
SFC2: Have you ever recycled or restored used clothing.	1 2	208 167	1.0	1.445	0.498
SFC3: How imperative is it for you to buy clothing made from eco materials.	1 2 3 4 5	8 11 43 212 101	4.0	4.032	0.833
Sustainable Apparel Purchase Behavior SAPB1: How often do you buy sustainable clothes.	1 2 3 4 5	8 4 171 181 11	4.0	3.488	0.678
SAPB2: Would you recommend eco-apparel to others.	3 4 5	17 250 108	4.0	4.243	0.525
SAPB3: Are you satisfied with your eco-apparel purchases.	1 3 4 5	1 73 242 59	4.0	3.955	0.612

3 RESULTS

3.1 Knowledge Network Analysis

A bibliometric analysis using Biblioshiny and VOSviewer mapped the evolution of research, presenting visuals such as word cloud, shown in Figure 3, that indicate key themes. The thematic map, illustrated in Figure 4, highlighted knowledge, waste management, and willingness to pay as key themes, with sustainability and ethics becoming increasingly relevant, particularly in 2022.



Figure 3: Word cloud.

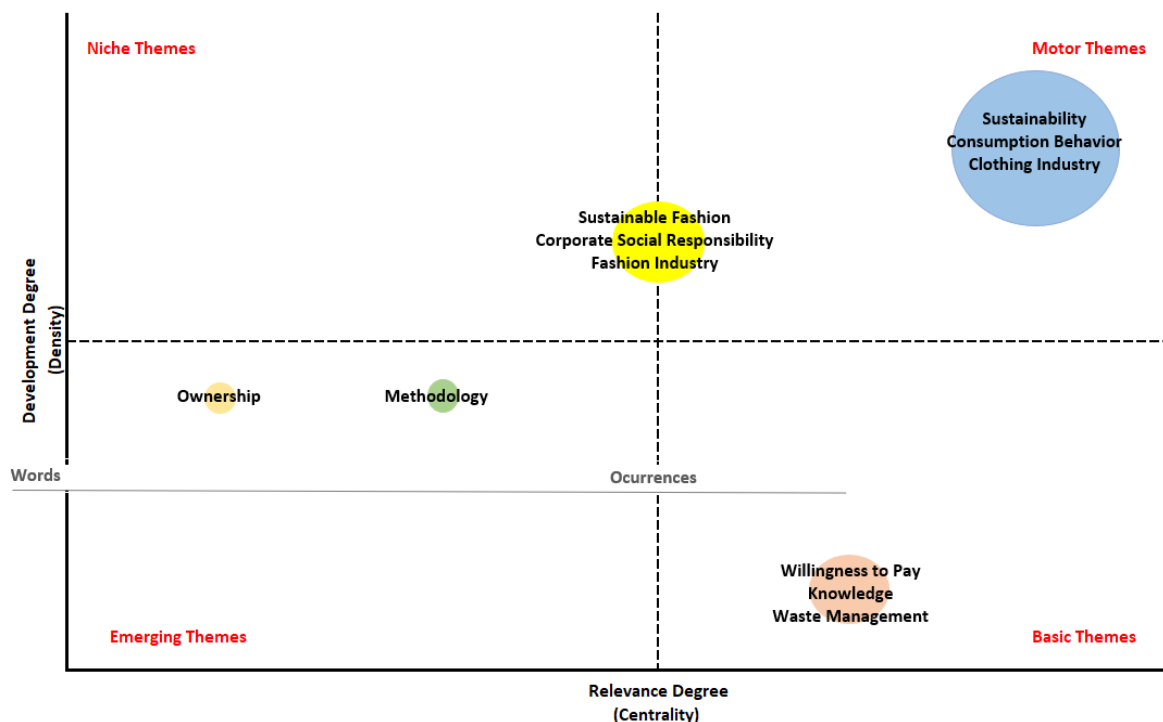


Figure 4: Thematic map.

3.2 Sampling

An online survey via Google Forms revealed six key factors affecting sustainable clothing purchases: demographics, sustainable retailing, ethical consumerism, cultural values, personality traits, and pricing. A quantitative analysis validated findings from 443 respondents, predominantly Gen Z (60.5%). Generational differences affect purchasing priorities, influenced by income and education levels.

3.3 Descriptive Analysis

The variable selection was optimized by analyzing distributions, outliers, and correlations. Table 2 presents the constructs, frequency distributions, and measurement items on sustainable apparel behavior using a Five-point Likert scale.

4 CONCLUSIONS

The sustainability dialogue in fashion frequently overlooks the unique challenges faced by developing countries. This review evaluated sustainable retail practices in the region, identified obstacles, and

offered improvement suggestions while emphasizing the necessity for dedicated research on sustainable fashion in underdeveloped markets.

Despite progress, the apparel industry struggles with sustainability and transparency regarding ethical products, impacting consumer attitudes and necessitating the integration of sustainability into retail strategies. Understanding consumer motivations, shaped by social factors and positive sustainability attitudes, is vital amidst rising global environmental concerns.

The study investigated how environmental gatekeepers influence sustainable garment purchasing attitudes among Filipino consumers, advocating for collaboration among regulators, policymakers, and industry stakeholders to foster ethical consumption. Future research should also examine how green supply chain management practices [21] implemented by retailers affect consumer perceptions and purchasing behavior. Education, awareness, and supportive policies are essential to enhance sustainable practices and transform the Philippine apparel market towards ecological responsibility.

The necessity of equitable employment and sustainable economic growth, robust and

environmentally friendly industrialization, and reduced inequities are some of the ways that SDGs 8, 9, 10, and 12 relate to the apparel retailing. Throughout its supply chain, the apparel industry must prioritize moral and fair labor practices, ensuring secure employment settings. Retailers may help by providing access to financial services, supporting small producers, and integrating them into global value chains. A more efficient and responsible sector is encouraged by investments in long-lasting and sustainable infrastructure, which includes both local and international logistics as well as equitable and easily accessible services. Reducing waste and improving resource efficiency requires promoting innovation in circular business processes, sustainable design, and material use. By ensuring fair treatment and opportunities for all supply chain participants, retailers help reduce inequities. Closing social disparities is facilitated by promoting equitable access to reasonably priced, environmentally friendly goods and services and by providing buyers with the information needed to make conscious choices. A fairer and impartial sector is promoted by implementing inclusive strategies that assist local communities and different groups throughout the value chain.

REFERENCES

- [1] L. Sampson, "Fashion supply chain: Everything you need to know," Oracle, 2023. [Online]. Available: <https://www.oracle.com/ph/retail/fashion/fashion-supply-chain>.
- [2] K. Fernandez-Stark, P. Bamber, and V. Couto, "Analysis of the textile and clothing industry global value chains," 2022. [Online]. Available: <https://doi.org/10.18235/0004638>.
- [3] A. M. Thakker and D. Sun, "Sustainable development goals for textiles and fashion," *Environmental Science and Pollution Research*, vol. 30, pp. 101989–102009, 2023, doi: 10.1007/s11356-023-29453-1.
- [4] "Statistics and facts on the apparel market in the U.S.," 2024. [Online]. Available: <https://www.statista.com/topics/965/apparel-market-in-the-us>.
- [5] E. M.-H. Chan, J. Cheung, C. A. Leslie, Y.-Y. Lau, D. W.-S. Suen, and C.-W. Tsang, "Revolutionizing the textile and clothing industry: Pioneering sustainability and resilience in a post-COVID era," *Sustainability*, vol. 16, no. 6, Art. 2474, 2024, doi: 10.3390/su16062474.
- [6] K. P. Reddy, V. Chandu, S. Srilakshmi, E. Thagaram, C. Sahyaja, and B. Osei, "Consumers' perception on green marketing towards eco-friendly fast moving consumer goods," *International Journal of Engineering Business Management*, vol. 15, 2023, doi: 10.1177/184797902311170.
- [7] C. Joergens, "Ethical fashion: Myth or future trend?," *Journal of Fashion Marketing and Management: An International Journal*, vol. 10, no. 3, pp. 360–371, 2006, doi: 10.1108/13612020610679321.
- [8] B. Mrutzek-Hartmann, H. Kotzab, I. Ö. Yumurtacı Hüseyinoğlu, and S. Kühling, "Omni-channel retailing resources and capabilities of SME specialty retailers – Insights from Germany and Turkey," *International Journal of Retail & Distribution Management*, vol. 50, no. 8–9, pp. 1129–1155, 2022, doi: 10.1108/IJRDM-10-2021-0503.
- [9] L. Astoriano, J. A. D. Gerona, and J. C. R. Marzan, "The impact of digital marketing on customer buying intention of customers in the Philippines," *Journal of Business and Management Studies*, vol. 4, no. 2, p. 383, 2022, doi: 10.47604/ijfd.3014.
- [10] A. Rajput, K. Suryavanshi, S. B. Thapa, P. Gahlot, and A. Gandhi, "The impact of social media influencers on eco-conscious consumers," in *Proc. 2024 ASU Int. Conf. Emerging Technologies for Sustainability and Intelligent Systems (ICETISIS)*, 2024, pp. 1–6, doi: 10.1109/ICETISIS61505.2024.10459444.
- [11] R. Jabal, "Mainstreaming conscious consumerism," 2023. [Online]. Available: <https://www.bworldonline.com/opinion/2023/03/07/509165/mainstreaming-conscious-consumerism>.
- [12] A. G. Agu, S. G. Etuk, and N. O. Madichie, "Exploring the role of sustainability-oriented marketing education in promoting consciousness for sustainable consumption," *Sustainability*, vol. 14, no. 13, Art. 8077, 2022, doi: 10.3390/su14138077.
- [13] A. K. Tang, K. H. Lai, and T. C. E. Cheng, "A multi-research-method approach to studying environmental sustainability in retail operations," *International Journal of Production Economics*, vol. 171, pp. 394–404, 2016, doi: 10.1016/j.ijpe.2015.09.042.
- [14] G. Marzi, M. Balzano, A. Caputo, and M. M. Pellegrini, "Guidelines for bibliometric-systematic literature reviews: 10 steps to combine analysis, synthesis and theory development," *International Journal of Management Reviews*, vol. 27, no. 1, pp. 81–103, 2025, doi: 10.1111/ijmr.12381.
- [15] D. Gough, J. Thomas, and S. Oliver, "Clarifying differences between review designs and methods," *Systematic Reviews*, vol. 1, no. 1, Art. 28, 2012, doi: 10.1186/2046-4053-1-28.
- [16] S. Kunisch, D. Denyer, J. M. Bartunek, M. Menz, and L. B. Cardinal, "Review research as scientific inquiry," *Organizational Research Methods*, vol. 26, no. 1, pp. 3–45, 2023, doi: 10.1177/10944281221127292.
- [17] B. Shen, Y. Cao, and X. Xu, "Product line design and quality differentiation for green and non-green products in a supply chain," *International Journal of Production Research*, vol. 58, no. 1, pp. 148–164, 2020, doi: 10.1080/00207543.2019.1656843.
- [18] H. I. Duh and O. Iyiola, "Explaining clothing decision-making styles among South-African and Nigerian young adults using two life-course theories," *Journal of Fashion Marketing and Management: An International Journal*, vol. 24, no. 2, pp. 303–321, 2020, doi: 10.1108/JFMM-08-2019-0171.

- [19] O. Rahman, D. Hu, and B. C. Fung, "A systematic literature review of fashion, sustainability, and consumption using a mixed methods approach," *Sustainability*, vol. 15, no. 16, Art. 12213, 2023, doi: 10.3390/su151612213.
- [20] P. Wang, A. T. Kuah, Q. Lu, C. Wong, K. Thirumaran, E. Adegbite, and W. Kendall, "The impact of value perceptions on purchase intention of sustainable luxury brands in China and the UK," *Journal of Brand Management*, vol. 28, no. 3, p. 325, 2021, doi: 10.1057/s41262-020-00228-0.
- [21] M. T. Khan, M. D. Idrees, M. Rauf, A. Sami, A. Ansari, and A. Jamil, "Green supply chain management practices' impact on operational performance with the mediation of technological innovation," *Sustainability*, vol. 14, no. 6, Art. 3362, 2022, doi: 10.3390/su14063362.