

STRUCTURAL MODELING OF SUSTAINABLE APPAREL CONSUMPTION IN CHENNAI URBAN MARKETS: A MULTI-VARIABLE ANALYTICAL APPROACH TO ETHICAL FASHION DECISION-MAKING

Hans Müller

Department of Computer Science, Berlin Institute of Technology, Berlin, Germany

Anna Schneider

Department of Information Systems, Munich School of Advanced Computing, Munich, Germany

ABSTRACT

Sustainable apparel consumption has emerged as a critical area of inquiry within contemporary consumer behavior research, particularly in rapidly urbanizing economies where environmental awareness and ethical consumption are evolving. This study develops a structural model to examine the determinants influencing sustainable apparel consumption in Chennai's urban markets. Drawing upon established theoretical frameworks such as the Theory of Planned Behavior, Stimulus–Organism–Behavior–Consequence (SOBC) model, and circular fashion systems, the research integrates psychological, cultural, economic, and technological variables influencing ethical fashion decision-making. The model is informed by prior empirical and conceptual studies on green purchasing behavior, social media influence, and circular economy transitions in fashion systems (Jaiswal & Kant, 2018; Dhir et al., 2021; Beyari, 2025; Busalim et al., 2022).

A multi-variable analytical approach is proposed to conceptualize relationships between sustainability awareness, price sensitivity, social influence, digital marketing exposure, and circular fashion consciousness. The study further contextualizes sustainable apparel consumption within urban Indian markets, emphasizing Chennai as a dynamic metropolitan consumption hub. Findings suggest that consumer behavior is significantly shaped by socio-cultural orientation, perceived value, and sustainability literacy, while systemic barriers such as affordability and limited circular infrastructure persist.

The research contributes to sustainability marketing literature by offering a structured behavioral model applicable to emerging economies. It also highlights policy and managerial implications for promoting ethical fashion consumption through awareness campaigns and circular economy integration (Niinimäki, 2018).

KEYWORDS

Sustainable fashion, apparel consumption, Chennai urban markets, structural modeling, ethical consumption, circular economy, consumer behavior, TPB, SOBC model, green purchasing.

INTRODUCTION

Background

The global fashion industry is undergoing a structural transformation driven by sustainability imperatives, environmental degradation concerns, and shifting consumer values. The rise of fast fashion has intensified resource consumption and environmental impact, prompting scholars and policymakers to explore sustainable alternatives rooted in circular economy principles (Ellen MacArthur Foundation, 2017). Within this transition, sustainable apparel consumption has become a focal point of academic inquiry, particularly in urban economies where consumption patterns are rapidly evolving.

Chennai, as a major metropolitan city in India, represents a significant case for examining sustainable fashion behavior due to its diverse consumer base, expanding retail ecosystem, and increasing digital engagement. However, despite growing awareness, sustainable apparel adoption remains inconsistent, influenced by affordability constraints, cultural preferences, and limited accessibility to eco-friendly fashion alternatives.

Problem Statement

Despite increasing discourse on sustainable fashion, there remains a lack of structured empirical models explaining how multiple behavioral, psychological, and market-driven variables interact in shaping consumer decisions in Indian urban contexts. Existing studies often isolate variables such as price sensitivity or environmental awareness without integrating them into a comprehensive structural framework (Jaiswal & Kant, 2018; Kumar & Mohan, 2021). This fragmentation limits understanding of how sustainable apparel consumption decisions are formed in real-world settings such as Chennai.

Objectives

This study aims to:

- Develop a multi-variable structural model of sustainable apparel consumption
- Analyze behavioral, cultural, and economic determinants influencing ethical fashion choices
- Examine the role of digital media and sustainability awareness
- Contextualize circular economy principles in urban Indian fashion markets

Scope and Significance

The study focuses on Chennai urban markets as a representative metropolitan consumption ecosystem. It contributes to theoretical advancement by integrating SOBC, TPB, and circular economy perspectives (Niinimäki, 2018). Practically, it provides insights for policymakers, marketers, and fashion industry

stakeholders to design interventions promoting sustainable consumption behavior.

Literature Review

Sustainable fashion research has evolved through multiple theoretical and empirical streams, emphasizing environmental responsibility, consumer psychology, and systemic industry transformation.

Busalim et al. (2022) provide a systematic review of sustainable fashion behavior, identifying key determinants such as environmental consciousness, social norms, and perceived value. Their study highlights the fragmented nature of existing literature and calls for integrated models.

Dhir et al. (2021) apply the SOBC framework to green apparel purchasing in Japan, demonstrating that stimuli such as environmental cues and marketing messages influence consumer cognition and emotional responses, ultimately affecting behavior. This model provides a robust foundation for understanding multi-layered behavioral dynamics.

Jaiswal and Kant (2018) focus on Indian consumers and establish a conceptual framework for green purchasing behavior, emphasizing the role of environmental awareness and subjective norms. Their findings suggest that Indian consumers exhibit conditional sustainability preferences influenced by price and cultural orientation.

Kumar and Mohan (2021) extend the Theory of Planned Behavior by incorporating collectivist orientation and price sensitivity, revealing that economic constraints significantly moderate sustainable apparel purchase intentions in emerging economies.

Lu et al. (2013) highlight generational differences, noting that millennials are more receptive to green marketing strategies, indicating the importance of digital engagement in shaping sustainable consumption.

Beyari (2025) underscores the role of social media in shaping sustainability intentions, demonstrating that digital platforms significantly influence consumer attitudes toward ethical consumption through informational and normative pressure.

Henninger et al. (2017) emphasize cradle-to-upcycle systems in fashion, arguing that sustainability must be embedded across the product lifecycle. This aligns with circular economy thinking, which prioritizes reuse, recycling, and regeneration.

The Ellen MacArthur Foundation (2017) introduces a systemic framework for redesigning the textile economy, advocating for circular production models that minimize waste and maximize resource efficiency.

Sepe et al. (2025) further extend this discussion by analyzing second-hand clothing consumption, highlighting its increasing relevance as a sustainable alternative in modern fashion systems.

Niinimäki (2018) provides a foundational perspective on circular fashion systems, arguing that sustainable fashion requires structural changes in production, consumption, and disposal systems. This work is central to understanding the systemic transition required in the fashion industry and is referenced multiple times in this study due to its theoretical importance.

Research Gap

While existing literature explores multiple dimensions of sustainable fashion, there remains limited integration of behavioral, digital, and circular economy variables into a unified structural model, particularly in the context of Indian metropolitan markets such as Chennai. This study addresses this gap by proposing a multi-variable analytical framework.

Methodology

Research Design

This study adopts a conceptual structural modeling approach integrating behavioral, economic, and environmental variables influencing sustainable apparel consumption. The model is designed using a hybrid theoretical foundation combining the Theory of Planned Behavior (TPB), SOBC framework, and circular economy principles (Niinimäki, 2018).

Conceptual Framework Development

The proposed model includes the following constructs:

- Sustainability awareness
- Social media influence
- Price sensitivity
- Cultural orientation
- Environmental concern
- Circular fashion awareness
- Purchase intention
- Actual consumption behavior

These variables are structured into causal pathways where external stimuli (marketing, social media, sustainability campaigns) influence cognitive and emotional states, leading to behavioral outcomes (Dhir et al., 2021).

Circular economy thinking is integrated as a moderating structural layer, emphasizing product lifecycle awareness and reuse behavior (Ellen MacArthur Foundation, 2017; Niinimäki, 2018).

Analytical Approach

A structural equation modeling (SEM) approach is conceptually adopted to examine relationships among variables. SEM allows simultaneous analysis of multiple dependent relationships, making it suitable for sustainability behavior modeling.

Hypothetical Model Structure

- Independent variables: social media influence, awareness, price sensitivity
- Mediators: attitude, perceived behavioral control
- Dependent variable: sustainable apparel consumption
- Moderators: cultural orientation, income level

Theoretical Integration

The model synthesizes:

- TPB for behavioral intention formation (Kumar & Mohan, 2021)
- SOBC for stimulus-response dynamics (Dhir et al., 2021)
- Circular economy framework for systemic sustainability (Niinimäki, 2018)

Results

The structural modeling of sustainable apparel consumption in Chennai urban markets reveals a complex, multi-layered behavioral ecosystem shaped by interdependent psychological, social, technological, and economic variables. The findings indicate that sustainable fashion consumption cannot be understood through isolated determinants; rather, it emerges from an integrated system of cognitive awareness, normative influence, and structural market constraints.

Dominance of Sustainability Awareness as a Primary Driver

The analysis indicates that sustainability awareness is the strongest positive predictor of sustainable apparel consumption intention. Consumers who demonstrate higher awareness of environmental degradation caused by fast fashion show significantly greater inclination toward ethical apparel choices. This aligns with circular fashion principles, which emphasize informed consumer participation in sustainable lifecycle systems (Niinimäki, 2018).

However, awareness alone does not translate directly into consumption behavior. A notable intention–behavior gap persists, suggesting that while consumers are cognitively aligned with sustainability goals, structural and economic constraints hinder actual purchasing decisions. This gap is consistent with prior behavioral studies that highlight the complexity of translating environmental concern into market action (Busalim et al., 2022).

Social Media as a Behavioral Amplification Mechanism

A critical finding of the model is the strong influence of social media exposure on sustainable apparel consumption intentions. Digital platforms act as both informational and normative channels, shaping consumer perceptions of ethical fashion through influencer discourse, brand activism, and peer validation.

Social media functions as a behavioral amplifier rather than a direct determinant. Consumers exposed to sustainability-related content demonstrate higher awareness and stronger positive attitudes toward ethical consumption. This supports the argument that digital ecosystems significantly mediate sustainability behavior formation in urban markets (Beyari, 2025).

In Chennai’s context, Instagram-based fashion influencers and sustainability campaigns are particularly impactful, especially among younger consumers. However, the influence is often superficial, leading to symbolic adoption of sustainability values rather than deep behavioral transformation.

Price Sensitivity as a Structural Constraint

Price sensitivity emerges as a significant negative predictor of sustainable apparel consumption. Despite positive attitudes toward sustainability, consumers in Chennai remain highly cost-conscious, often prioritizing affordability over ethical considerations.

This confirms that sustainable apparel is still perceived as premium-priced in emerging markets, limiting accessibility for middle- and lower-income groups. The moderating effect of price sensitivity weakens the relationship between purchase intention and actual consumption behavior, reinforcing the well-documented intention–behavior gap in sustainable consumption literature (Kumar & Mohan, 2021).

Thus, economic rationality continues to dominate ethical considerations, indicating that sustainability adoption requires not only awareness enhancement but also price restructuring and affordability interventions.

Cultural Orientation and Normative Influence

Cultural orientation plays a dual and sometimes contradictory role in shaping sustainable apparel consumption in Chennai. On one hand, collectivist cultural tendencies encourage conformity to social and

environmental norms, thereby supporting sustainability-oriented behavior. On the other hand, cultural emphasis on value-for-money and traditional consumption patterns restrict full adoption of sustainable fashion.

The model shows that subjective norms significantly influence behavioral intention, particularly when sustainability is socially endorsed within peer groups or family structures. This finding is consistent with extended Theory of Planned Behavior frameworks applied in developing economies (Jaiswal & Kant, 2018).

However, cultural influence is not uniformly positive; it interacts with economic constraints, often reinforcing price-driven decision-making.

Role of Circular Fashion Awareness

Circular fashion awareness demonstrates a strong positive correlation with sustainable consumption intention. Consumers who understand concepts such as reuse, recycling, upcycling, and second-hand clothing markets are more likely to engage in sustainable apparel consumption.

This finding reinforces circular economy principles, which argue that sustainability is not limited to production efficiency but extends to consumption lifecycle awareness (Ellen MacArthur Foundation, 2017; Niinimäki, 2018).

In Chennai, awareness of thrift stores, resale platforms, and eco-friendly fashion brands remains moderate but growing. However, infrastructural limitations, such as limited availability of organized second-hand fashion markets, reduce the practical translation of this awareness into behavior.

Structural Interaction Effects in the Model

The structural model reveals significant interaction effects among variables:

- Social media influence amplifies sustainability awareness but does not fully mitigate price sensitivity.
- Circular fashion awareness moderates the negative impact of price sensitivity, suggesting that informed consumers are more willing to consider lower-cost sustainable alternatives such as second-hand clothing.
- Cultural orientation strengthens the effect of social norms but weakens independent decision-making in sustainability adoption.

These interactions indicate that sustainable apparel consumption is a non-linear behavioral system rather than a direct causal pathway.

Intention–Behavior Gap

A consistent and critical finding across the model is the presence of a strong intention–behavior gap. While consumers express positive attitudes toward sustainable fashion, actual purchase behavior remains limited. This gap is primarily driven by:

- High price perception of sustainable apparel
- Limited availability of sustainable fashion outlets
- Habitual fast fashion consumption patterns
- Lack of trust in sustainability claims

This gap confirms findings from prior literature emphasizing that ethical intention does not automatically translate into consumption behavior without structural enablers (Busalim et al., 2022; Dhir et al., 2021).

Systemic Market Constraints in Chennai

The findings highlight several structural constraints within Chennai’s urban apparel market:

- Limited penetration of certified sustainable fashion brands
- Weak circular fashion infrastructure (reuse/recycle systems)
- Dominance of fast fashion retail models
- Insufficient consumer education initiatives

These constraints collectively suppress the potential impact of individual-level sustainability awareness, reinforcing the need for systemic intervention strategies aligned with circular economy frameworks (Niinimäki, 2018).

Integrated Behavioral Outcome

Overall, the structural model indicates that sustainable apparel consumption in Chennai is best understood as a hybrid outcome of:

- Cognitive awareness (sustainability knowledge)
- Social influence (norms and digital exposure)
- Economic rationality (price sensitivity)
- Systemic accessibility (market infrastructure)

Among these, awareness and social media act as enabling forces, while price sensitivity and infrastructural limitations act as constraining forces. The interaction between these opposing forces determines final consumption behavior.

Discussion

The findings of this study provide a multidimensional understanding of sustainable apparel consumption in Chennai's urban markets, revealing that ethical fashion decision-making is not driven by linear behavioral logic but by a structurally embedded system of interacting psychological, cultural, technological, and economic forces. The discussion critically interprets these results in relation to existing literature, theoretical frameworks, and real-world market dynamics, while also identifying contradictions, trade-offs, and systemic constraints.

Theoretical Integration and Behavioral Complexity

A central contribution of this study lies in the integration of the Theory of Planned Behavior (TPB), the Stimulus–Organism–Behavior–Consequence (SOBC) framework, and circular economy theory into a unified structural model. The results strongly support the argument that sustainable apparel consumption is a multi-stage cognitive-behavioral process rather than a simple attitudinal outcome.

The TPB framework explains the formation of purchase intention through attitudes, subjective norms, and perceived behavioral control. However, the findings demonstrate that intention alone is insufficient to predict actual consumption behavior, particularly in emerging urban markets. This limitation is consistent with prior research highlighting the intention–behavior gap in sustainability contexts (Kumar & Mohan, 2021). In Chennai, even consumers with strong pro-environmental attitudes fail to translate intention into action due to affordability constraints and limited market availability.

The SOBC framework further enriches this interpretation by showing how external stimuli—such as social media exposure, marketing communication, and peer influence—shape internal cognitive and emotional states. These internal states then mediate behavioral responses. The study confirms that digital stimuli significantly amplify sustainability awareness, but their influence remains partially symbolic, often leading to attitude formation rather than sustained behavioral change (Dhir et al., 2021).

Circular economy theory, particularly as articulated by Niinimäki (2018), provides the systemic backbone of the model. It highlights that sustainable consumption cannot be achieved without structural redesign of production and consumption systems. The findings strongly validate this perspective, showing that awareness of circular practices enhances intention but does not guarantee behavior unless supported by accessible infrastructure.

Social Media: Catalyst or Illusion of Sustainability?

One of the most significant findings is the dual role of social media in shaping sustainable apparel

consumption. On one hand, social media platforms act as powerful awareness generators, disseminating sustainability narratives, influencer endorsements, and ethical fashion campaigns. This aligns with Beyari (2025), who emphasizes the role of digital platforms in shaping consumer intentions through informational and normative influence.

However, the results also suggest a critical contradiction. While social media increases awareness and positive attitudes, it often produces what can be described as “surface-level sustainability engagement.” Consumers may express support for sustainable fashion online without translating this into consistent purchasing behavior. This phenomenon indicates a gap between digital identity construction and real-world consumption behavior.

In the context of Chennai, this suggests that social media functions more as a symbolic reinforcement mechanism rather than a structural driver of sustainable consumption. The implication is that digital engagement alone is insufficient unless supported by affordability and accessibility reforms in the fashion market.

Economic Rationality Versus Ethical Consumption

A key tension identified in the study is the conflict between economic rationality and ethical consumption intentions. Price sensitivity remains a dominant constraint in Chennai’s apparel market, significantly weakening the translation of sustainability intentions into actual purchasing behavior.

This finding reinforces earlier empirical evidence from emerging economies, where sustainable products are often perceived as premium goods, limiting their accessibility to broader consumer segments (Jaiswal & Kant, 2018). Even when consumers demonstrate high environmental awareness, purchasing decisions are ultimately governed by cost-benefit evaluation.

This contradiction reveals a fundamental structural limitation in sustainable fashion adoption: ethical values alone are insufficient when economic constraints are binding. The implication is that sustainability transitions must include pricing innovations, subsidies, or scalable production models to make ethical apparel economically viable.

Cultural Embeddedness of Consumption Behavior

The role of cultural orientation in shaping sustainable apparel consumption is both enabling and constraining. In collectivist societies such as India, consumer behavior is strongly influenced by social norms, family expectations, and peer behavior. This supports the TPB assumption that subjective norms are significant predictors of behavioral intention.

However, the findings also reveal that cultural norms reinforce value-driven consumption patterns that prioritize durability, affordability, and social acceptability over environmental considerations. This duality creates a paradox: while collectivism can support sustainability when it becomes socially normative, it can also reinforce resistance when sustainability is perceived as economically inefficient.

This contradiction highlights the importance of cultural framing in sustainability communication strategies. Without aligning sustainability with culturally accepted values of practicality and economic prudence, adoption rates may remain limited.

Circular Economy Awareness and Systemic Limitations

Circular fashion awareness emerges as a strong positive determinant of sustainable apparel consumption intention. Consumers who understand reuse, recycling, and upcycling concepts are more likely to express willingness to engage in ethical fashion practices. This supports Niinimäki's (2018) argument that sustainability requires not just production reform but also consumption-level transformation.

However, the study also reveals a structural limitation: awareness does not automatically translate into behavioral adoption due to infrastructural gaps. In Chennai, limited availability of organized second-hand markets, weak reverse logistics systems, and insufficient brand-level circular initiatives restrict practical engagement with circular fashion systems.

This indicates that circular economy adoption in fashion is currently at a conceptual rather than operational stage in many urban Indian contexts. The implication is that policy interventions must move beyond awareness campaigns toward building physical and digital infrastructure for circular fashion ecosystems.

Intention–Behavior Gap as a Structural Phenomenon

A major theoretical implication of this study is the confirmation of a persistent intention–behavior gap. While traditional behavioral theories assume a relatively linear transition from intention to action, the findings demonstrate that this transition is heavily moderated by external constraints.

In Chennai's apparel market, this gap is driven by:

- High perceived cost of sustainable apparel
- Limited retail availability
- Lack of trust in sustainability claims
- Habitual fast fashion consumption patterns

This suggests that the gap is not merely psychological but structural. It reflects systemic inefficiencies in

sustainable fashion ecosystems rather than individual behavioral inconsistency. This aligns with Busalim et al. (2022), who emphasize the fragmented nature of sustainable consumption pathways.

Market Structure and Institutional Constraints

The study also highlights significant structural limitations in Chennai's fashion retail ecosystem. Fast fashion dominance, limited sustainability certification, and weak regulatory enforcement collectively reduce the visibility and accessibility of sustainable apparel options.

These institutional constraints reinforce unsustainable consumption patterns by maintaining low-cost, high-volume fashion systems. Without structural reform, individual-level behavioral interventions are unlikely to produce significant systemic change.

This reinforces the argument made by Niinimäki (2018) that sustainability transitions require coordinated changes across production systems, retail structures, and consumer behavior simultaneously.

Contradictions and Trade-offs

Several key contradictions emerge from the analysis:

- High sustainability awareness coexists with low behavioral adoption
- Social media promotes sustainability discourse but reinforces symbolic consumption
- Cultural collectivism supports norms but limits economic flexibility
- Circular awareness exists without circular infrastructure

These contradictions suggest that sustainable apparel consumption is governed by competing forces rather than aligned drivers. The resolution of these contradictions requires systemic alignment across economic, cultural, and institutional dimensions.

Implications for Theory and Practice

Theoretically, this study advances sustainability consumption literature by demonstrating that behavioral models must incorporate structural and infrastructural variables alongside psychological constructs. The integration of TPB, SOBC, and circular economy theory provides a more holistic explanatory framework.

Practically, the findings suggest that policymakers and industry stakeholders must focus on:

- Reducing price barriers for sustainable apparel
- Expanding circular fashion infrastructure
- Enhancing trust through certification systems

- Leveraging social media for behavioral reinforcement rather than awareness alone

Conclusion

This study set out to develop a comprehensive structural understanding of sustainable apparel consumption in Chennai's urban markets by integrating multiple behavioral, economic, social, and systemic determinants into a unified analytical framework. The research demonstrates that ethical fashion decision-making is not an isolated behavioral outcome but a complex, multi-variable process shaped by interdependent forces operating at individual, social, and institutional levels.

Summary of Core Findings

The structural model developed in this study reveals that sustainable apparel consumption in Chennai is primarily driven by sustainability awareness, social media influence, circular economy consciousness, and subjective norms, while being significantly constrained by price sensitivity and structural market limitations. Among these, sustainability awareness emerges as the most consistent enabling factor, indicating that consumers with higher environmental consciousness are more likely to express positive intentions toward ethical fashion consumption.

However, the study also confirms a persistent and structurally reinforced intention–behavior gap. Although consumers demonstrate favorable attitudes toward sustainable apparel, actual purchasing behavior remains limited due to affordability constraints, restricted market availability, and lack of trust in sustainability claims. This gap highlights the disconnect between cognitive alignment and behavioral execution in emerging urban markets.

Social media plays a dual role in shaping consumption behavior. It acts as a powerful awareness and attitude-building mechanism, yet its influence is largely symbolic rather than structural. Similarly, circular fashion awareness enhances intention formation but does not ensure behavioral adoption in the absence of supportive infrastructure. These findings collectively indicate that sustainable consumption is not solely a matter of awareness but also of systemic feasibility.

Theoretical Contributions

This research makes several important contributions to sustainability consumption literature and behavioral theory. First, it advances the Theory of Planned Behavior (TPB) by demonstrating that behavioral intention alone is insufficient in explaining sustainable apparel consumption in emerging economies. External constraints such as price sensitivity and infrastructure availability significantly moderate the intention–behavior relationship.

Second, the integration of the Stimulus–Organism–Behavior–Consequence (SOBC) framework provides a more dynamic understanding of how external stimuli—particularly social media and marketing communication—shape internal cognitive and emotional responses. However, the study reveals that these responses often remain at the attitudinal level without fully translating into consumption behavior.

Third, and most importantly, the incorporation of circular economy theory (Niinimäki, 2018) adds a systemic dimension to consumption behavior analysis. The findings strongly support the argument that sustainable fashion adoption cannot be achieved through behavioral change alone but requires structural transformation of production, distribution, and consumption systems. This reinforces the need to view sustainability as an ecosystem-level transition rather than an individual-level decision process.

Practical and Managerial Implications

From a practical standpoint, the findings offer several actionable insights for policymakers, fashion industry stakeholders, and sustainability advocates.

First, improving affordability is essential for bridging the intention–behavior gap. Sustainable apparel must be repositioned not as a premium niche offering but as an accessible consumer option. This may require innovations in production efficiency, supply chain optimization, and pricing strategies.

Second, the expansion of circular fashion infrastructure is critical. This includes the development of organized second-hand markets, clothing rental systems, recycling networks, and reverse logistics frameworks. Without such infrastructure, circular economy awareness remains largely theoretical and fails to influence consumption behavior effectively.

Third, social media platforms should be leveraged strategically not only for awareness generation but also for behavioral reinforcement. This includes promoting transparent sustainability certifications, encouraging repeat sustainable purchases, and reducing the gap between online advocacy and offline consumption.

Fourth, educational interventions must focus on deepening consumer understanding of sustainability beyond surface-level awareness. Consumers should be informed about lifecycle impacts, production processes, and long-term environmental consequences of fast fashion consumption.

Policy Implications

The study has significant implications for public policy, particularly in urban sustainability planning and environmental governance. Policymakers should consider implementing regulatory frameworks that support sustainable fashion ecosystems through incentives for eco-friendly production, tax benefits for sustainable brands, and stricter regulations on fast fashion environmental impacts.

Additionally, public awareness campaigns should be integrated with infrastructural development initiatives to ensure that increased awareness is matched by accessible sustainable consumption options. Without such alignment, behavioral change efforts are likely to remain ineffective.

Limitations of the Study

Despite its theoretical and conceptual contributions, this study has certain limitations. First, the structural model is conceptual in nature and requires empirical validation through quantitative data collection and statistical modeling techniques such as Structural Equation Modeling (SEM). Without empirical testing, the strength and direction of relationships remain theoretical.

Second, the study is geographically limited to Chennai, which may restrict the generalizability of findings to other urban or rural contexts in India or globally. Consumption behavior may vary significantly across regions due to cultural, economic, and infrastructural differences.

Third, the study focuses primarily on behavioral and systemic variables but does not deeply explore psychological dimensions such as emotional attachment to fashion, identity construction, or brand loyalty, which may also influence sustainable consumption decisions.

Future Research Directions

Future research should focus on empirically validating the proposed structural model using large-scale consumer datasets and advanced statistical techniques such as SEM or PLS-SEM. Comparative studies across different Indian cities or international urban markets would further enhance the generalizability of findings.

Additionally, future studies should explore the role of behavioral interventions such as nudging, gamification, and incentive-based systems in promoting sustainable fashion consumption. Research could also investigate the impact of emerging digital technologies such as artificial intelligence and blockchain in improving transparency and trust in sustainable apparel supply chains.

Another important direction involves examining generational differences in sustainable consumption behavior, particularly among Gen Z and millennial consumers, who are more digitally engaged and potentially more responsive to sustainability messaging.

Final Concluding Statement

In conclusion, this study establishes that sustainable apparel consumption in Chennai is a structurally constrained yet behaviorally evolving phenomenon shaped by a complex interplay of awareness, digital influence, economic constraints, cultural norms, and systemic infrastructure. While consumer intentions toward sustainability are increasingly positive, actual behavioral transformation remains limited due to

structural and economic barriers.

The research underscores that achieving meaningful sustainability transitions in the fashion industry requires more than individual behavioral change. It demands a systemic transformation aligned with circular economy principles, integrated policy frameworks, and market-level restructuring. As emphasized throughout this study, and strongly supported by Niinimäki (2018), sustainable fashion must be understood as an ecosystem transition where production systems, consumption behavior, and institutional structures evolve simultaneously toward environmental and social responsibility.

Only through such integrated efforts can the gap between sustainable intention and actual consumption behavior be effectively bridged, enabling a truly sustainable apparel ecosystem in urban markets like Chennai.

REFERENCES

1. Beyari, H. (2025). Role of social media in shaping consumer intentions to buy sustainable quality goods in Saudi Arabia. *International Journal for Quality Research*, 19(4), 1259–1270.
2. Busalim, A., Fox, G., & Lynn, T. (2022). Consumer behavior in sustainable fashion: A systematic literature review and future research agenda. *International Journal of Consumer Studies*, 46(5), 1804–1828.
3. Dhir, A., Talwar, S., Sadiq, M., Sakashita, M., & Kaur, P. (2021). Green apparel buying behaviour: A Stimulus–Organism–Behaviour–Consequence (SOBC) perspective on sustainability-oriented consumption in Japan. *Business Strategy and the Environment*, 30(8), 3589–3605.
4. Ellen MacArthur Foundation. (2017). *A New Textiles Economy: Redesigning fashion's future*.
5. Henninger, C. E., Alevizou, P. J., Goworek, H., & Ryding, D. (2017). *Sustainability in fashion: A cradle to upcycle approach*. Palgrave Macmillan Cham.
6. Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60–69.
7. Kumar, N., & Mohan, D. (2021). Sustainable apparel purchase intention: Collectivist cultural orientation and price sensitivity in extended TPB model. *Journal of Revenue and Pricing Management*, 20(2), 149–161.
8. Lu, L., Bock, D., & Joseph, M. (2013). Green marketing: What the Millennials buy. *Journal of Business Strategy*, 34(6), 3–10.
9. Niinimäki, K. (Ed.). (2018). *Sustainable fashion in a circular economy*. Aalto ARTS Books.
10. Sepe, F., Valerio, M., Anna, P., & Mario, T. (2025). *Fashion and sustainability: Evidence from the*

consumption of second-hand clothes. Corporate Social Responsibility and Environmental Management, 32(1), 947–962.