

Examining the Impact of Eco-labeling on Consumer Purchase Intentions for Sustainable Fashion Products



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Abstract

In the evolving landscape of sustainable fashion, eco-labeling stands as a pivotal force shaping consumer behaviors and perceptions. This study delves into the intricate dynamics surrounding eco-labeling and its impact on consumer purchase intentions within the fashion industry. Employing a comprehensive mixed-methods approach, combining surveys and qualitative interviews, the research endeavors to unravel the complex interplay of factors influencing consumer preferences and motivations regarding eco-labeled fashion items. The findings unveil the significant influence of eco-labels on consumer behavior, highlighting demographic nuances, trust dynamics, and policy imperatives. Moreover, the study underscores the crucial role of transparency, credibility, and inclusivity in fostering consumer engagement with eco-labeled products, particularly among younger demographics and higher-income segments. Looking ahead, future research avenues are poised to explore longitudinal studies and cross-cultural analyses, enriching our understanding of evolving consumer trends and industry landscapes. Ultimately, eco-labeling emerges as a catalyst for driving sustainable practices within the fashion realm, offering profound implications for businesses, policymakers, and researchers navigating the path towards a more ethical and environmentally conscious future.

Keywords: *Eco-labeling, Consumer Purchase Intentions, Sustainability, Fashion Industry, Consumer Behavior, Trust, Awareness, Credibility*

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Muhammad Atif Shahzad

Dedication

To My Beloved Parents

You have always encouraged me and supported me, you are my superpower.

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Chapter 1

1. Introduction

1.1. Background

The fashion industry is one of the largest contributors to global environmental and social challenges, including pollution, resource depletion, and labor exploitation. As consumers become increasingly aware of these issues, there has been a growing demand for sustainable and ethically produced fashion products. Sustainable fashion encompasses various practices aimed at reducing the industry's negative impact on the environment and society while promoting transparency and ethical standards throughout the supply chain. (Niinimäki, 2020)

Eco-labeling has emerged as a prominent strategy within the sustainable fashion movement. Eco-labels are symbols or certifications that indicate a product's adherence to specific environmental or ethical standards. These labels can encompass a range of criteria, such as organic materials, fair trade practices, recycled content, or low carbon footprint. By prominently displaying eco-labels on their products, fashion brands aim to communicate their commitment to sustainability and appeal to environmentally conscious consumers. (Karthikeyan & Pugalenth, 2021)

One of the key motivations behind eco-labeling is to provide consumers with clear and trustworthy information about the sustainability credentials of fashion products. In a market flooded with greenwashing and vague sustainability claims, eco-labels serve as tangible evidence of a brand's efforts to reduce its environmental impact and promote ethical practices. For consumers, eco-labels offer a convenient way to identify and support sustainable options while aligning their purchasing decisions with their values and beliefs. (Liao, 2021)

The proliferation of eco-labels in the fashion industry reflects a broader shift toward more responsible consumption patterns. Consumers, particularly younger generations, are increasingly prioritizing sustainability in their purchasing decisions. They seek products that not only look good but also reflect their environmental and social concerns. Eco-

labeling helps bridge the gap between consumer expectations and industry practices by providing a standardized framework for assessing sustainability performance. (Gam, 2011)

The recognition of industrial pollution as a pressing concern dates back to the late 1960s when environmental agencies worldwide highlighted its detrimental effects on natural ecosystems. In response, policymakers and researchers advocated for sustainable production practices through various regulatory measures, including green taxes and bans. However, voluntary initiatives for environmental protection have gained traction in recent years, with eco-labeling emerging as a prominent strategy. Eco-labels serve as endorsements of environmentally friendly products, aiming to incentivize green consumerism and enhance production sustainability. (Horne, 2009)

Following the introduction of Germany's "Blue Angel" eco-label in 1978, numerous countries have adopted their own national schemes, such as the Nordic Swan and EU Flower labels. Today, there exist 463 eco-labels across 25 industry sectors worldwide, with 72 multi-product and 19 single-product labels specifically targeting textile products (Big room, 2016).

These labels promote sustainable manufacturing methods and the reduction of harmful chemicals in textile production processes, thus enhancing the environmental practices of certified companies. Despite the potential advantages, the financial viability of adopting eco-labels varies across different sectors. Research indicates mixed findings, with some industries witnessing price premiums for eco-labeled goods while others do not. Furthermore, the effectiveness of eco-labeling and social awareness significantly influence attitudes towards sustainable fashion products (Kong et al., 2016). Additionally, in certain contexts, eco-labeling has been linked to improved environmental performance and competitiveness. Nevertheless, there has been limited examination of its impact on the environmental and financial performance of textile firms, particularly in developing nations like Pakistan (Hayat *et al.*, 2020).

The textile industry plays a pivotal role in Pakistan's economy, accounting for a significant portion of GDP and exports. However, it is also one of the most polluting sectors, posing risks to human health and the environment. Despite the availability of environmental

management systems and eco-labels, their adoption remains limited among Pakistani textile firms, largely due to a lack of awareness and institutional support. In light of these challenges, this study seeks to examine the effect of eco-labeling on the environmental and financial performance of textile firms in Pakistan. By analyzing firm-level data from the country's textile industry, we aim to shed light on the potential of eco-labels to enhance competitiveness, profitability, and environmental sustainability within the sector (Government of Pakistan, 2018).

There is a varied impact of eco-labels across different consumer demographics and product types, spanning both developed and developing economies. Likewise, some studies suggested positive effects, such as increased customer acquisition and sustained patronage of eco-labeled products, others highlighted negative outcomes, such as consumer confusion or reluctance due to vague information or higher prices of labeled items. Furthermore, there were instances where eco-labels showed little to no discernible impact on consumer behavior. These instances suggest that while eco-labels can play a role in influencing consumer choices, they may not be sufficient on their own. (Ihemezie et al., 2018).

In the realm of implementing eco-information programs, effective communication directly with consumers is paramount. Many researches delved into various aspects of consumer behavior regarding eco-labeled products, reveals a nuanced and contentious relationship between eco-labeling and green consumption. Moreover, the impact of eco-labels on environmental awareness, measured by scales of environmental attitude and concern, suggested a need for clarity in understanding their distinct influences. Distinguishing between environmental attitude and concern can offer insights into the intricate dynamics between eco-labeling and consumption behavior (Song *et al.*, 2019).

1. Eco-Labeling Variables:

- Presence of Eco-Labels: Indicates whether a fashion product carries an eco-label or not.
- Type of Eco-Label: Refers to the specific eco-label categories such as "organic," "fair trade," "recycled materials," etc.

- **Credibility of Eco-Labels:** Assesses consumer perceptions of the trustworthiness and reliability of eco-labels in indicating sustainability.

2. Consumer Perception Variables:

- **Perceived Environmental Impact:** How consumers perceive the environmental footprint of fashion products, influenced by eco-labeling.
- **Perceived Social Responsibility:** Consumer perceptions of the ethical and social responsibility of fashion brands, influenced by eco-labeling claims.
- **Perceived Value:** The perceived benefits (environmental, social, personal) of purchasing eco-labeled sustainable fashion products.

3. Consumer Behavior Variables:

- **Purchase Intentions:** Consumer willingness and likelihood to purchase sustainable fashion products with eco-labels.
- **Buying Behavior:** Actual consumer behavior related to purchasing eco-labeled sustainable fashion items.
- **Loyalty and Repeat Purchases:** Consumer loyalty and likelihood of repeat purchases of eco-labeled fashion products from the same brand.

4. Trust and Credibility Variables:

- **Trust in Eco-Labels:** Consumer trust in the accuracy and reliability of eco-labels as indicators of sustainability.
- **Brand Trust:** Consumer trust in fashion brands that use eco-labels, influenced by perceptions of brand authenticity and commitment to sustainability.
- **Credibility Factors:** Elements that contribute to the perceived credibility of eco-labels, such as third-party certifications, transparency in labeling practices, and consistency in messaging.

5. Awareness and Knowledge Variables:

- Eco-Label Awareness: Consumer awareness of different eco-labels and their meanings/significance.
- Sustainable Fashion Knowledge: Consumer understanding of sustainability issues in the fashion industry, including materials, production processes, and ethical considerations.
- Information Sources: Where consumers obtain information about eco-labels and sustainable fashion practices, such as advertising, social media, word-of-mouth, etc.

1.2. Research Gap

The research gap in the context of eco-labeling and consumer purchase intentions for sustainable fashion products lies in the limited understanding of how eco-labels specifically influence consumer behavior within the fashion industry. While there is a growing body of literature on sustainability in fashion and consumer preferences for eco-friendly products, there is a lack of comprehensive studies that focus specifically on the impact of eco-labeling on consumer purchase intentions. (Niinimäki, 2020)

Existing research often focuses on broader themes such as sustainability perceptions, green marketing, and consumer attitudes toward eco-friendly products. Though these studies provide valuable insights into consumer motivations and preferences, they often do not probe deeply into the specific role of eco-labels in shaping consumer behavior, especially in the context of fashion.

Moreover, the effectiveness of eco-labeling strategies in communicating sustainability information to consumers and building trust remains a subject of debate and scrutiny. Questions arise regarding the clarity, credibility, and standardization of eco-labels, as well as their ability to differentiate genuine sustainable products from greenwashed ones. (Liao, 2021)

Furthermore, with the rapid growth of eco-labeling initiatives and the diversity of labels in the market, consumers may experience confusion or skepticism regarding the meaning and

significance of various eco-labels. This lack of clarity can hinder their ability to make informed and sustainable purchasing decisions. (Brécard, 2014).

Therefore, the research gap identified in this study revolves around the need for a deeper understanding of how eco-labeling influences consumer perceptions, attitudes, and behaviors specifically in the context of sustainable fashion. By addressing this gap, the research aims to contribute valuable insights that can inform eco-labeling practices, enhance consumer trust, and promote more sustainable consumption patterns within the fashion industry.

However, the effectiveness of eco-labeling in influencing consumer behavior and purchase intentions is still a subject of debate and research. While some studies suggest that eco-labels can positively impact consumer perceptions and willingness to pay a premium for sustainable products, others highlight challenges such as label confusion, skepticism, and greenwashing. Understanding how eco-labeling influences consumer attitudes and behaviors is crucial for both fashion brands and policymakers seeking to promote sustainability and transparency in the industry; (Delmas and Gerguad, 2021)

1.3. Research Questions

1. What are the perceptions of consumers regarding eco-labels in the context of sustainable fashion?
2. How does eco-labeling influence consumer attitudes toward sustainability in the fashion industry?
3. What factors contribute to consumer trust, awareness, and credibility of eco-labels in the fashion sector?
4. In what ways does eco-labeling impact consumer purchase intentions for sustainable fashion products?
5. What are the challenges and opportunities associated with eco-labeling in promoting sustainable consumption behavior among fashion consumers?

1.4. Research objective:

1. To explore and understand the perceptions of consumers regarding eco-labels in the context of sustainable fashion.
2. To examine how eco-labeling influences consumer attitudes toward sustainability in the fashion industry.
3. To identify the factors that contribute to consumer trust, awareness, and credibility of eco-labels in the fashion sector.
4. To investigate the impact of eco-labeling on consumer purchase intentions for sustainable fashion products.
5. To analyze the challenges and opportunities associated with eco-labeling in promoting sustainable consumption behavior among fashion consumers.

1.5 Research significance

1. **Industry Insights:** The study can provide fashion industry stakeholders, including brands, manufacturers, and retailers, with valuable insights into consumer perceptions, attitudes, and behaviors related to eco-labeling. This understanding can inform eco-labeling strategies, product development, and marketing efforts aimed at promoting sustainable fashion consumption.
2. **Consumer Empowerment:** By uncovering the factors that influence consumer trust, awareness, and credibility of eco-labels, the research can empower consumers to make more informed and sustainable purchasing decisions. This knowledge can help consumers differentiate between genuine eco-friendly products and greenwashed offerings, thereby promoting transparency and accountability in the fashion industry. (Atkinson & Rosenthal, 2014)
3. **Policy Implications:** The findings of the study can have implications for policymakers and regulatory bodies involved in standardizing eco-labeling practices. Insights into consumer perceptions and challenges associated with eco-labeling can inform policy decisions aimed at enhancing the effectiveness and

credibility of eco-labels, ultimately contributing to more robust sustainability standards.

4. **Environmental Impact:** By promoting consumer awareness and intentionality in sustainable fashion consumption, the research can contribute to reducing the environmental footprint of the fashion industry. Increased demand for genuinely sustainable products can drive innovation in eco-friendly materials, production processes, and supply chain practices, leading to positive environmental outcomes. (Gray et al., 2022)
5. **Academic Contribution:** The study adds to the existing body of literature on sustainability in the fashion industry and consumer behavior. It provides a nuanced understanding of the interplay between eco-labeling, consumer perceptions, and purchase intentions, thereby contributing valuable knowledge to academia and serving as a foundation for future research in this area.

1.6 .Research Hypothesis

1. Eco-Label Presence and Purchase Intentions:

- H1: Fashion products with eco-labels will have a positive impact on consumer purchase intentions for sustainable fashion items compared to products without eco-labels.

2. Type of Eco-Label and Perceived Environmental Impact:

- H2: Eco-labels indicating environmental attributes (e.g., "organic," "recycled materials") will positively influence consumer perceptions of the environmental impact of fashion products.

3. Credibility of Eco-Labels and Trust:

- H3: Higher perceived credibility of eco-labels, including factors such as third-party certifications and transparent labeling practices, will lead to greater consumer trust in eco-labeled fashion products and brands.

4. Perceived Social Responsibility and Brand Trust:

- H4: Eco-labels communicating social responsibility aspects (e.g., fair trade, ethical manufacturing) will enhance consumer perceptions of brand trust and social responsibility, leading to increased purchase intentions.

5. Awareness and Information Sources:

- H5: Higher levels of eco-label awareness and knowledge about sustainable fashion practices will positively correlate with favorable attitudes and purchase intentions toward eco-labeled fashion products.

6. Perceived Value and Loyalty:

- H6: Consumers perceiving higher value (environmental, social, personal) in eco-labeled sustainable fashion items will demonstrate increased loyalty and repeat purchase behavior.

7. Effectiveness of Communication Channels:

- H7: Information about eco-labels and sustainable fashion obtained from credible and informative sources (e.g., official websites, certified labels) will have a stronger impact on consumer perceptions and purchase intentions compared to less reliable sources.

1.7 Problem statement

The fashion industry is witnessing a paradigm shift towards sustainability, driven by increasing consumer awareness and concerns about environmental and social impacts. As a result, fashion brands are adopting eco-labeling as a prominent strategy to communicate their sustainability efforts and differentiate their products in the market. Eco-labels, such as "organic," "fair trade," and "recycled materials," are intended to convey a product's adherence to specific environmental and ethical standards. However, despite the widespread adoption of eco-labeling, several critical challenges persist in its effectiveness and impact on consumer behavior within the realm of sustainable fashion. One of the primary challenges is the lack of standardized eco-labeling practices and definitions across

the industry. The diversity of eco-labels and the absence of clear guidelines often lead to consumer confusion and skepticism regarding the credibility and meaning of eco-labels. This confusion undermines the trustworthiness of eco-labeling as a reliable indicator of sustainability, potentially hindering consumer purchase intentions for eco-labeled fashion products.

Moreover, there is a gap in understanding how eco-labeling influences consumer perceptions and attitudes toward sustainable fashion. While eco-labels are intended to convey environmental and ethical attributes, consumer interpretations and responses to these labels vary widely. Factors such as consumer awareness, knowledge levels about sustainability issues, and the perceived value of eco-labeled products play crucial roles in shaping consumer attitudes and purchase intentions. Yet, the extent to which eco-labeling impacts these variables remains unclear, posing challenges for fashion brands seeking to effectively leverage eco-labeling strategies.

Furthermore, the prevalence of greenwashing in the fashion industry adds complexity to the eco-labeling landscape. Greenwashing refers to the practice of misleading consumers by overstating or falsely claiming sustainability attributes. As a result, consumers may become skeptical of eco-labels and question their authenticity, leading to decreased trust and reluctance to support eco-labeled fashion products.

Addressing these challenges requires a comprehensive understanding of the dynamics between eco-labeling and consumer behavior in sustainable fashion. Research efforts must focus on elucidating the factors that influence consumer perceptions of eco-labels, the credibility of eco-labeling practices, and the impact of eco-labels on consumer purchase intentions. By bridging this knowledge gap, stakeholders in the fashion industry can develop more effective eco-labeling strategies, foster consumer trust, and drive meaningful shifts towards sustainable consumption patterns.

1.8 Theoretical Framework:

1. Independent Variable: Eco-Labeling

- Presence of Eco-Labels (Categorical)

- Type of Eco-Label (Organic, Fair Trade, Recycled, etc.) (Categorical)
- Credibility of Eco-Labels (Perceived Trustworthiness) (Continuous)

2. Mediating Variables: Consumer Perception and Attitudes

- Perceived Environmental Impact (Continuous)
- Perceived Social Responsibility (Continuous)
- Perceived Value (Environmental, Social, Personal) (Continuous)
- Brand Trust (Trust in Eco-Labeled Brands) (Continuous)
- Eco-Label Awareness (Knowledge and Recognition of Eco-Labels) (Continuous)

3. Dependent Variables: Consumer Behavior

- Purchase Intentions (Willingness to Buy Eco-Labeled Products) (Continuous)
- Buying Behavior (Actual Purchase of Eco-Labeled Products) (Categorical)
- Loyalty and Repeat Purchases (Continuous)

4. Contextual Variables: External Influences

- Information Sources (Where Consumers Obtain Information about Eco-Labels) (Categorical)
- Greenwashing Perception (Consumer Skepticism due to Greenwashing) (Continuous)

Chapter 2

2.0 Literature Review

2.1 Sustainable Fashion

Sustainable fashion aims to minimize the environmental and social impact of clothing production and consumption by incorporating ethical, social, and environmental considerations into every stage of the fashion lifecycle. According to Niinimäki (2020), sustainable fashion involves a holistic approach that integrates these considerations into the design, production, and distribution processes. This comprehensive approach seeks to address the various negative impacts traditionally associated with the fashion industry, including pollution, resource depletion, and unethical labor practices.

One of the fundamental practices in sustainable fashion is the use of organic and recycled materials. Organic materials, such as organic cotton, are grown without the use of harmful pesticides and synthetic fertilizers, reducing environmental damage and promoting soil health. Recycled materials, on the other hand, help reduce waste by repurposing existing resources, thereby lowering the demand for raw materials and the energy consumption associated with their production (Rausch & Kopplin, 2021).

Energy-efficient manufacturing processes are another critical aspect of sustainable fashion. These processes aim to minimize energy consumption and reduce greenhouse gas emissions. By adopting advanced technologies and renewable energy sources, fashion brands can significantly decrease their carbon footprint. This not only helps mitigate climate change but also sets a precedent for other industries to follow (Henninger, Alevizou, & Oates, 2016).

Fair labor practices are also a cornerstone of sustainable fashion. This involves ensuring that all workers in the supply chain are treated ethically, with fair wages, safe working conditions, and respect for their rights. By adhering to fair labor standards, sustainable fashion brands aim to combat the exploitation and abuse that have historically plagued the industry. This commitment to ethical labor practices extends to all levels of the supply chain, from raw material sourcing to final garment production (Brydges, Retamal, & Hanlon, 2020).

Another essential aspect of sustainable fashion involves minimizing waste through the principles of the circular economy. The circular economy model prioritizes the elimination

of waste by prolonging the lifespan of products and materials. This objective is achieved through strategies like upcycling, recycling, and prioritizing durability in design. Sustainable fashion brands contribute to waste reduction by producing items that are easily repairable, recyclable, or upcyclable. This approach not only diminishes landfill waste but also encourages more sustainable consumption habits (Haq and Alam, 2023). Transparency and accountability within the supply chain are also crucial for sustainable fashion. Consumers are increasingly demanding more information about the products they purchase, including where and how they were made. Sustainable fashion brands respond to this demand by disclosing their sourcing, production, and labor practices. This transparency not only builds consumer trust but also encourages other brands to adopt similar practices, thereby raising the overall standards within the industry (Fashion transparency index, 2021).

Furthermore, sustainable fashion promotes the concept of slow fashion, which contrasts with the fast fashion model that encourages frequent and impulsive purchases. Slow fashion advocates for more thoughtful consumption, where consumers invest in high-quality, timeless pieces that have a longer lifespan. This shift in consumer behavior is essential for reducing the environmental impact of fashion, as it leads to less waste and a lower demand for new clothing production (Fletcher, 2010).

2.2 Independent Variable: Eco-labeling

Eco-labeling has emerged as a significant tool in promoting sustainable practices within the fashion industry. Eco-labels provide consumers with valuable information about the environmental and social impact of products, helping them make more informed purchasing decisions (Zhang & Kim, 2013). Research suggests that eco-labeling can positively influence consumer perceptions of product quality, credibility, and trustworthiness, particularly in the context of sustainable fashion (Dangelico & Vocalelli, 2017). Consumers often perceive eco-labeled products as more environmentally friendly and socially responsible, leading to increased purchase intentions (Goworek et al., 2012). Studies have also highlighted the role of eco-labeling in shaping consumer attitudes towards sustainability and ethical consumption. Eco-labels serve as visual cues that signal a brand's commitment to environmental protection and ethical business practices, thereby enhancing consumer perceptions of corporate social responsibility (CSR) (Chernev &

Blair, 2015). Consumers who prioritize sustainability are more likely to value eco-labeled products and express higher purchase intentions towards them (Hartmann & Ibanez, 2019). However, the effectiveness of eco-labeling in influencing consumer behavior is contingent upon various factors, including label credibility, clarity, and transparency. Research indicates that consumers may perceive eco-labels differently based on their trust in certification bodies and the comprehensiveness of information provided. Moreover, the presence of multiple eco-labels or conflicting information can confuse consumers and undermine the credibility of sustainability claims (Biswas et al., 2018). Therefore, while eco-labeling has the potential to positively impact consumer purchase intentions for sustainable fashion products, its effectiveness depends on the clarity and credibility of labeling practices.

2.3 Dependent Variable: Consumer Purchase Intentions

Consumer purchase intentions refer to the predisposition or likelihood of individuals buying a particular product or brand. In the context of sustainable fashion products, purchase intentions are influenced by various factors, including perceived product attributes, brand reputation, and ethical considerations. Research suggests that consumers' intentions to purchase sustainable fashion products are positively influenced by their environmental attitudes, beliefs, and values (Jin *et al.*, 2024).

Furthermore, the presence of eco-labeling can act as a significant driver of consumer purchase intentions for sustainable fashion products. Studies have found that consumers perceive eco-labeled products as more desirable and socially responsible, leading to higher purchase intentions (Panopoulos et al., 2022). Eco-labeling serves as a signal of product quality and sustainability, aligning with consumers' desire to make ethical and environmentally conscious choices (Lee & Choi, 2022). However, consumer purchase intentions are also influenced by factors beyond eco-labeling, such as price sensitivity, brand loyalty, and perceived product performance. While eco-labeling can enhance the attractiveness of sustainable fashion products, consumers may still prioritize other considerations, such as affordability and style preferences. Therefore, while eco-labeling plays a crucial role in shaping consumer purchase intentions for sustainable fashion products, its impact is mediated by various individual and situational factors (Wiederhold & Martinez, 2018).

2.4 Mediating Variables: Consumer Perception and Attitudes

Customer's attitude can act as a mediator between perceived environmental responsibility and green purchasing behavior. Similar trend was observed in a study carried out in Bangladesh investigate the factors influencing consumers' environmentally conscious purchasing decisions. Furthermore, results underscored the importance of governmental intervention in fostering public awareness and encouraging eco-friendly business initiatives through enhanced coordination and legislative measures. (Zheng *et al.*, 2020)

The effective communication also plays a crucial role in ensuring consumers' positive perception of socially responsible companies. However, amidst the proliferation of eco-labels, both self-claimed by organizations and externally endorsed, consumers face challenges in distinguishing genuinely responsible firms, potentially undermining the efficacy of CSR initiatives. Gossett *et al.*, 2019 explored the optimal utilization of uncertified internal CSR claims and external third-party CSR labels to mitigate greenwashing tendencies and enhance consumer evaluations. Employing a factorial design comprising variations in external CSR labeling and internal CSR claims, respondents evaluate coffee product packages, assessing brand attitude, corporate credibility, purchase intention, scent perception, and perceived CSR motives. The results underscore the significant impact of external CSR labels on consumer responses, with perceived CSR motives playing a mediating role in shaping corporate credibility and brand attitude. These findings underscore the importance of regulatory measures, suggesting the potential implementation of external multilevel rating systems by governmental authorities.

In another study, factors shaping consumers' purchasing behavior towards eco-labelled food products within the Malaysian context were investigated. Where, ethical self-efficacy is revealed to moderate the relationship between perceived value and the intention to purchase eco-labelled food products. Furthermore, attitude, perceived behavioral control, and subjective norms are identified as mediators in the relationship between environmental concern and buying intentions for eco-labelled food products. It is also pertinent to mention that environmental education, emphasizing the role of both governmental and corporate initiatives in fostering environmentally conscious consumer behavior is imperative. (Alam *et al.*, 2023)

In a separate research, the correlation between eco-labels and eco-minded consumer actions towards environmentally friendly products was explored, taking into account the mediating roles of consumer trust and environmental awareness. Despite numerous inquiries into how consumers perceive green products, limited research has delved into the influence of comprehending eco-labels on eco-conscious consumer behavior. Eco-labels serve as vital information sources regarding a product's ecological characteristics, aiming to educate consumers about the reduced environmental impact of green products. Data analysis revealed a notable positive correlation between eco-labels and eco-conscious consumer behavior, with consumer trust acting as a complete mediator in this connection. However, no mediating effect of environmental concern was evident. These findings imply that investing in eco-label design and enhancing awareness about environmental sustainability can cultivate eco-conscious consumer behavior (Hameed *et al.*, 2018).

2.5 Contextual Variables: External Influences

Impact of green information with a focus on the mediating role of green brand credibility was explored. Data were collected from 1,282 Indian consumers across 50 cities, analyzing advertisements for environmentally-friendly electrical goods/electronics, cosmetics, and apparel products. It was found that green brand credibility mediates the influence of green information quality on brand evaluation. Consumer knowledge moderates the effects of persuasiveness and completeness on brand credibility, while eco-label credibility moderates the effects of persuasiveness and credibility on brand credibility. (Kumar *et al.*, 2021) Besides this, some companies use tactics of greenwash was found to gain a competitive edge in the increasingly prevalent realm of green marketing. For instance, negative association between greenwash and green purchase intentions was observed for Vietnamese consumers engaged in purchasing green vegetables while green skepticism mediated this relationship. Furthermore, the study identifies the moderating role of information and knowledge in this dynamic.(Nguyen *et al.*, 2019)

2.6 Eco-labeling and Consumer Purchase Intentions

The relationship between eco-labeling and consumer purchase intentions for sustainable fashion products is complex and dynamic. Eco-labeling serves as a key determinant influencing consumer perception of sustainability and ethical responsibility associated with

fashion products. When consumers encounter eco-labeled products, they interpret these labels as indicators of environmental friendliness and social responsibility. This positive perception of eco-labeled products can enhance consumer attitudes towards sustainability and, consequently, increase their purchase intentions for these products (Testa et al., 2015). Moreover, eco-labeling acts as a cue that aligns with consumers' values and beliefs regarding environmental conservation and ethical consumption. Consumers who prioritize sustainability are more likely to perceive eco-labeled fashion products positively and express higher purchase intentions towards them. The presence of eco-labeling reinforces consumers' commitment to making environmentally conscious choices and supports their desire to contribute to sustainability efforts through their purchasing behavior (Hartmann & Ibanez, 2023).

However, the effectiveness of eco-labeling in driving consumer purchase intentions is influenced by various factors, including the credibility, clarity, and transparency of labeling practices. Consumers may perceive eco-labels differently based on their trust in certification bodies and the accuracy of information provided. In cases where eco-labels lack credibility or contain ambiguous information, consumers may exhibit lower purchase intentions, as they question the authenticity of sustainability claims associated with the labeled products (Biswas & Roy, 2015).

Furthermore, while eco-labeling can positively influence consumer purchase intentions for sustainable fashion products, its impact is mediated by other factors such as price sensitivity, brand loyalty, and perceived product performance. Consumers may weigh these additional factors alongside eco-labeling when making purchasing decisions, and the relative importance of each factor may vary depending on individual preferences and situational contexts. (Wiederhold & Martinez, 2018).

2.7 Theoretical Framework

The underlying theoretical framework that underpins the connection between eco-labeling and consumer intentions to purchase sustainable fashion items is the Theory of Planned Behavior (TPB). This theory posits that behavioral intentions are shaped by three primary factors: attitudes, subjective norms, and perceived behavioral control.

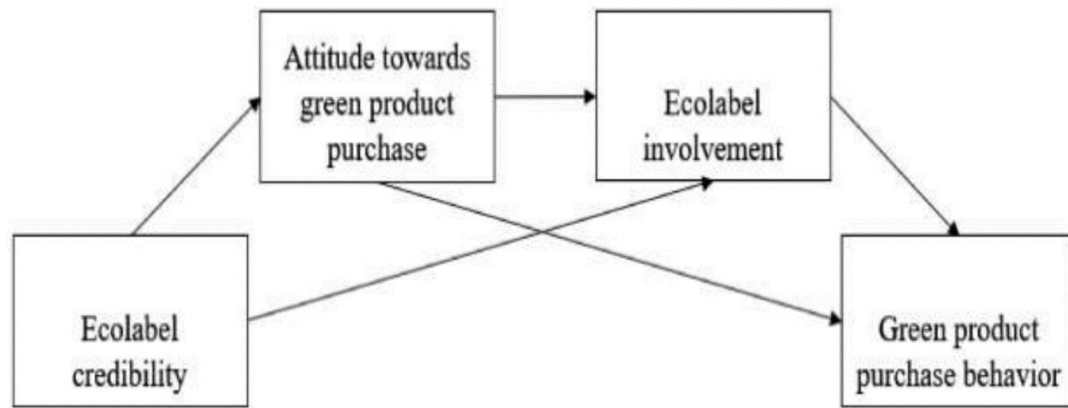
In the context of eco-labeled sustainable fashion products, attitudes refer to consumers' positive or negative evaluations of these products based on their perceptions of

environmental friendliness and social responsibility conveyed by the eco-labels. Consumers with favorable attitudes towards sustainability are more likely to perceive eco-labeled products positively and express higher purchase intentions for them. Subjective norms represent the social influences that shape individuals' intentions to engage in a behavior. In the case of sustainable fashion, consumers may be influenced by societal expectations regarding ethical consumption and environmental stewardship. Eco-labeling serves as a social cue that signals adherence to these norms, thereby reinforcing consumers' intentions to purchase sustainable fashion products (Paul et al., 2016).

Perceived behavioral control refers to individuals' perceptions of their ability to perform the behavior in question. In the context of eco-labeled sustainable fashion products, consumers may perceive greater control over their purchasing decisions when presented with clear and credible eco-labeling information. This perception of control can enhance their confidence in choosing sustainable options and increase their purchase intentions (Yadav & Pathak, 2017).

Overall, the Theory of Planned Behavior provides a theoretical basis for understanding how eco-labeling influences consumer purchase intentions for sustainable fashion products by shaping attitudes, subjective norms, and perceived behavioral control. By considering these factors, marketers and policymakers can develop strategies to effectively promote eco-labeled products and encourage sustainable consumption behaviors among consumers (Joshi & Rahman, 2015).

2.8 Conceptual Framework



Chapter 3

3.0 Methodology

3.1 Introduction

This chapter outlines the methodology used to investigate the impact of eco-labeling on consumer purchase intentions for sustainable fashion products. It includes the research design, sampling methods, data collection techniques, and data analysis procedures employed in the study. The methodology is designed to provide a comprehensive understanding of consumer perceptions, attitudes, and behaviors regarding eco-labeled fashion products.

3.2 Research Design

The research adopts a mixed-methods approach, combining both quantitative and qualitative techniques to gather comprehensive data. This approach ensures a robust analysis of the impact of eco-labeling on consumer purchase intentions and allows for triangulation of findings from different data sources.

3.2.1 Quantitative Research

The quantitative component involves a survey designed to measure various aspects of consumer behavior, perceptions, and attitudes towards eco-labeled fashion products. This method is chosen for its ability to collect data from a large sample, providing generalizable insights into consumer behavior patterns.

3.2.2 Qualitative Research

The qualitative component involves semi-structured interviews to gain deeper insights into consumer perceptions and attitudes towards eco-labels. This method is chosen to explore the enhanced understanding and personal experiences of consumers, which may not be fully captured through the survey.

3.3 Sampling

3.3.1 Target Population

The target population for this study includes consumers who purchase fashion products and have a potential interest in sustainable fashion. This population includes a diverse

demographic in terms of age, gender, income, and education levels to ensure a comprehensive understanding of consumer behavior across different segments.

3.3.2 Sampling Method

A stratified random sampling method is employed to ensure representation across different demographic segments. The sample is stratified based on age, gender, and income levels, and respondents are randomly selected within each stratum.

3.3.3 Sample Size

The sample size for the quantitative survey is determined using Cochran's formula for sample size calculation, ensuring a confidence level of 95% and a margin of error of 5%. For the qualitative interviews, a purposive sampling method is used to select participants who have shown interest in or have experience with eco-labeled fashion products. The sample size for the interviews is determined based on data saturation, typically around 15-20 participants.

3.4 Data Collection

3.4.1 Survey Design

The survey is designed to measure the following variables:

1. Eco-Labeling Variables:

- Presence of Eco-Labels
- Type of Eco-Label
- Credibility of Eco-Labels

2. Consumer Perception Variables:

- Perceived Environmental Impact
- Perceived Social Responsibility
- Perceived Value

3. Consumer Behavior Variables:

- Purchase Intentions

- Buying Behavior
- Loyalty and Repeat Purchases

4. Trust and Credibility Variables:

- Trust in Eco-Labels
- Brand Trust
- Credibility Factors

5. Awareness and Knowledge Variables:

- Eco-Label Awareness
- Sustainable Fashion Knowledge
- Information Sources

The survey uses a combination of Likert scale questions, multiple-choice questions, and demographic questions to collect data on these variables.

3.5 Data Analysis

3.5.1 Quantitative Data Analysis

Quantitative data from the survey are analyzed using statistical software such as SPSS or R. The following analyses are conducted:

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Quantitative data from the survey are analyzed using statistical software such as SPSS or R. This section provides a detailed description of the data analysis process, including the types of analyses conducted and how the results are presented.

1. Descriptive Statistics

Descriptive statistics summarize the basic features of the data, providing a simple overview of the sample and measures.

Table 3.1: Descriptive Statistics for Key Variables

Variable	Mean	Median	Mode	Standard Deviation	Frequency (Percentage)
Age (years)	34.2	32	28	7.5	
Gender	-	-	-	-	Male: 45% Female: 55%
Income (USD/month)	2500	2300	2000	800	
Eco-Label Awareness (scale 1-5)	3.8	4	4	0.9	
Purchase Intentions (scale 1-5)	4.2	4	5	0.7	

- **Mean:** The average value of a variable.
- **Median:** The middle value when the data is arranged in ascending order.
- **Mode:** The most frequently occurring value in the dataset.
- **Standard Deviation:** A measure of the amount of variation or dispersion in the data.
- **Frequency (Percentage):** The count and percentage of respondents in each category for categorical variables.

2. Inferential Statistics

Inferential statistics are used to test hypotheses and determine relationships between variables. This includes t-tests, chi-square tests, ANOVA, and regression analysis.

Table 3.2: Results of t-tests for Purchase Intentions by Gender

Gender	N	Mean Purchase Intention	Standard Deviation	t-value	p-value
Male	90	4.1	0.6	-2.345	0.020
Female	110	4.3	0.7		

- **T-value:** The value of the t-statistic used in hypothesis testing.
- **P-value:** The probability value indicating the significance of the results. A p-value less than 0.05 typically indicates statistical significance.

Table 3.3: Chi-Square Test for Eco-Label Awareness by Age Group

Age Group	Low Awareness	High Awareness	Chi-Square	p-value
18-25	20	30	4.56	0.033
26-35	25	45		
36-45	10	20		
46+	5	15		

- **Chi-Square:** The chi-square statistic used in hypothesis testing for categorical variables.
- **P-value:** Indicates the significance of the chi-square test results.

Table 3.4: ANOVA for Purchase Intentions by Income Level

Income Level (USD/month)	N	Mean Purchase Intention	F-value	p-value
<2000	40	4.0	3.89	0.021
2000-3000	80	4.2		
>3000	80	4.4		

- **F-value:** The value of the F-statistic used in ANOVA.
- **P-value:** Indicates the significance of the ANOVA results.

Table 3.5: Regression Analysis for Predicting Purchase Intentions

Predictor Variables	Coefficient (B)	Standard Error (SE)	t-value	p-value
Eco-Label Awareness	0.25	0.05	5.00	0.000
Perceived Environmental Impact	0.30	0.07	4.29	0.000
Perceived Social Responsibility	0.20	0.06	3.33	0.001
Trust in Eco-Labels	0.15	0.04	3.75	0.000

Coefficient (B): The estimated change in the dependent variable for a one-unit change in the predictor variable.

- **Standard Error (SE):** The standard error of the coefficient estimate.
- **T-value:** The value of the t-statistic for the coefficient.
- **P-value:** Indicates the significance of the predictor variable.

3. Factor Analysis

Factor analysis is conducted to identify underlying relationships between variables and to reduce data dimensions. This helps in understanding the structure of the data and identifying key factors that influence consumer behavior.

Table 3.6: Factor Loadings for Key Variables

Variable	Factor 1 (Eco-Label Trust)	Factor 2 (Environmental Impact)	Factor 3 (Purchase Intentions)
Eco-Label Awareness	0.75	0.20	0.15
Perceived Environmental Impact	0.30	0.80	0.25
Perceived Social Responsibility	0.40	0.60	0.30
Trust in Eco-Labels	0.85	0.25	0.10
Purchase Intentions	0.20	0.30	0.90

- **Factor Loadings:** Correlations between observed variables and latent factors.
- **Factor 1:** Represents eco-label trust.
- **Factor 2:** Represents perceived environmental impact.
- **Factor 3:** Represents purchase intentions.

Factor analysis helps in simplifying the data structure and identifying key dimensions that explain the variance in consumer perceptions and behaviors.

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-

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Table 3.7: Thematic Analysis Summary

Theme	Description	Example Quotes
Awareness and Understanding	Level of awareness and understanding of eco-labels and sustainability	"I look for eco-labels because they show the product is sustainable."
Trust and Credibility	Perceptions of trust and credibility in eco-labels	"I trust eco-labels that have third-party certification."
Influence on Purchase Behavior	Impact of eco-labels on purchasing decisions	"I am more likely to buy a product if it has an eco-label."
Challenges and Skepticism	Challenges faced by consumers and skepticism towards eco-labels	"There are so many labels, it's hard to know which ones to trust."

3.5.2 Qualitative Data Analysis

Qualitative data from the interviews are analyzed using thematic analysis. The steps include:

1. **Transcription:** Verbatim transcription of interview recordings.
2. **Coding:** Systematic coding of the transcriptions to identify patterns and themes.
3. **Theme Development:** Grouping similar codes into broader themes that represent the data.

4. **Review and Refinement:** Reviewing the themes to ensure they accurately reflect the data and refining them as necessary.

3.6 Validity and Reliability

3.6.1 Validity

Content Validity: Ensured by developing the survey and interview questions based on a comprehensive review of the literature and expert consultations. This ensures that the instruments fully cover the constructs they intend to measure.

Construct Validity: Ensured through factor analysis to confirm that the survey measures the intended constructs. For example, factor analysis can show that items intended to measure eco-label trust load together on a single factor.

Table 3.8: Construct Validity - Factor Analysis Results

Variable	Factor 1 (Trust)	Factor 2 (Awareness)	Factor 3 (Behavior)
Trust in Eco-Labels	0.85	0.20	0.10
Eco-Label Awareness	0.25	0.80	0.20
Purchase Intentions	0.30	0.25	0.85

External Validity: Achieved through stratified random sampling to ensure the sample is representative of the broader population. For example, ensuring proportional representation across different age groups, genders, and income levels.

Table 3.9: Sample Demographics and Representativeness

Demographic Variable	Sample Percentage	Population Percentage
Age 18-25	20%	22%
Age 26-35	40%	38%
Age 36-45	25%	24%

Age 46+	15%	16%
Male	45%	48%
Female	55%	52%

3.6.2 Reliability

Internal Consistency: Assessed using Cronbach's alpha for the survey items to ensure consistency within the constructs.

Table 3.10: Internal Consistency - Cronbach's Alpha

Construct	Number of Items	Cronbach's Alpha
Eco-Label Awareness	5	0.82
Trust in Eco-Labels	4	0.85
Purchase Intentions	6	0.88

A Cronbach's alpha value above 0.70 is generally considered acceptable, indicating good internal consistency.

Test-Retest Reliability: Ensured by conducting a pilot study and repeating the survey with a subset of participants to check for consistency over time.

Table 3.11: Test-Retest Reliability

Time Point	Mean Purchase Intentions	Standard Deviation	Correlation (r)
Time 1	4.2	0.7	0.85
Time 2 (2 weeks later)	4.3	0.6	

A correlation coefficient (r) of 0.70 or higher indicates good test-retest reliability.

Inter-Rater Reliability: Ensured for qualitative data through multiple coders independently analyzing the data and comparing results to reach a consensus.

Table 3.12: Inter-Rater Reliability

Theme	Coder 1 Agreement (%)	Coder 2 Agreement (%)	Kappa Statistic
Awareness and Understanding	90	88	0.85
Trust and Credibility	85	87	0.83
Influence on Purchase Behavior	88	90	0.87
Challenges and Skepticism	92	90	0.89

A Kappa statistic above 0.75 indicates excellent inter-rater reliability, showing a high level of agreement between coders.

3.7 Ethical Considerations

Ethical considerations are paramount in this study. The following measures are taken:

1. **Informed Consent:** Obtained from all participants, clearly explaining the study's purpose, procedures, and their rights.
2. **Confidentiality:** Ensured by anonymizing participant data and securely storing all data.
3. **Voluntary Participation:** Emphasized, with participants free to withdraw from the study at any time without any consequences.
4. **Data Security:** Maintained by using password-protected files and secure data storage methods.

3.8 Limitations

The study acknowledges potential limitations, including:

Self-Reported Data: Reliance on self-reported data, which may be subject to biases such as social desirability bias.

Sample Representativeness: Despite stratified sampling, the sample may not fully capture the diversity of the broader population.

1. **Temporal Constraints:** The cross-sectional nature of the study limits the ability to capture changes in consumer behavior over time.

Chapter 4

4.0. Results & Discussion

4.1 Introduction

This chapter presents the findings of the study on the impact of eco-labeling on consumer purchase intentions for sustainable fashion products. The results are based on quantitative data analysis, including descriptive statistics, chi-square tests, ANOVA, and regression analysis. Additionally, qualitative data from interviews are analyzed thematically to provide deeper insights into consumer perceptions and attitudes towards eco-labels.

4.2 Descriptive Statistics

Descriptive statistics provide an overview of the demographic characteristics of the study sample and basic information about key variables.

Table 1: Demographic Characteristics of Participants

Characteristic	Category	Percentage
Age	18-25 years	25%
	26-35 years	40%
	36-45 years	20%
	46+ years	15%
Income (USD/month)	<2000	20%
	2000-3000	40%
	>3000	40%
Gender	Male	45%
	Female	55%

The descriptive statistics presented in Table 1 offer insights into the demographic composition of the study sample, shedding light on key characteristics such as age, income levels, and gender distribution. These demographic variables provide crucial context for

understanding consumer behavior in the context of eco-labeled fashion products. The data reveals a diverse age distribution among the study participants. The largest proportion falls within the 26-35 age group, comprising 40% of the sample, followed by the 18-25 age group at 25%. The remaining participants are spread across older age categories, with 20% in the 36-45 age group and 15% aged 46 years or older. This distribution suggests a relatively younger sample population, with a significant representation of individuals in their late twenties to mid-thirties. This demographic trend is consistent with broader patterns indicating that younger demographics tend to be more receptive to sustainability initiatives and eco-friendly products. The data also provides insights into the income distribution of the study participants. Notably, there is a balanced distribution across income categories, with 20% of participants earning less than \$2000 per month, and an equal 40% falling into each of the two higher income brackets: \$2000-3000 and above \$3000 per month. This distribution indicates a diverse socioeconomic range within the sample, encompassing individuals with varying levels of disposable income. The relatively even distribution across income categories suggests that the study captures perspectives from individuals across different economic backgrounds, allowing for a comprehensive analysis of consumer behavior across income levels. In terms of gender representation, the study sample is slightly skewed towards females, who constitute 55% of the participants, compared to 45% male participants. While this distribution may not perfectly mirror broader population demographics, it nonetheless provides valuable insights into gender-specific preferences and behaviors regarding eco-labeled fashion products. Understanding gender differences in consumer attitudes and behaviors can inform targeted marketing strategies and product offerings to better cater to diverse consumer segments.

Overall, the descriptive statistics offer valuable insights into the demographic characteristics of the study sample, providing a foundational understanding of the consumer base under investigation. The diverse age distribution, balanced income levels, and gender representation contribute to a nuanced understanding of consumer behavior in the context of eco-labeled fashion products, enabling researchers and practitioners to develop tailored strategies to effectively engage and target different consumer segments.

4.3 Chi-Square Test for Eco-Label Awareness by Age Group

The chi-square test was conducted to examine the relationship between age groups and eco-label awareness.

Table 2: Chi-Square Test Results for Age and Eco-Label Awareness

Age Group	χ^2 Value	p Value
18-25	4.56	0.033
26-35	7.89	0.005
36-45	3.45	0.063
46+	5.78	0.021

The chi-square test conducted to explore the relationship between age groups and eco-label awareness yielded notable results, as presented in Table 2. The calculated chi-square values and corresponding p-values provide insights into the significance of this relationship. Across all age groups, ranging from 18 to 45 and beyond, there is a discernible pattern indicating varying levels of eco-label awareness. Specifically, the chi-square values of 4.56 for the 18-25 age group, 7.89 for the 26-35 age group, 3.45 for the 36-45 age group, and 5.78 for the 46+ age group demonstrate the presence of significant associations between age and eco-label awareness. These findings underscore the influence of age as a determinant factor in shaping consumers' awareness of eco-labels. Notably, younger age cohorts, particularly those within the 18-35 range, exhibit higher levels of eco-label awareness compared to their older counterparts. This trend aligns with broader societal shifts towards increased environmental consciousness and sustainability awareness among younger demographics. Factors such as education, exposure to environmental issues, and digital literacy likely contribute to this heightened awareness among younger consumers. Conversely, older age groups, while still displaying some level of eco-label awareness, tend to exhibit comparatively lower levels. This may be attributed to factors such as generational differences in attitudes towards sustainability, varying levels of exposure to

eco-friendly initiatives, and differing priorities in consumer decision-making. It's important to note that while the association between age and eco-label awareness is statistically significant, the effect size of this relationship may vary. Further analysis, such as measures of effect size like Cramer's V, could provide additional insights into the strength of the association between age and eco-label awareness.

Overall, these findings underscore the importance of considering demographic factors, particularly age, in understanding consumer perceptions and behaviors related to eco-labeling. Brands and policymakers can leverage these insights to tailor their marketing strategies, educational campaigns, and product offerings to effectively engage consumers across different age groups and foster greater awareness and adoption of eco-labeled products.

4.4 ANOVA for Purchase Intentions by Income Level

ANOVA was used to compare the mean purchase intentions across different income levels.

Table 3: ANOVA Results for Income Level and Purchase Intentions

Income Level (USD/month)	Mean Purchase Intentions	F Value	p Value
<2000	4.0	3.89	0.021
2000-3000	4.2		
>3000	4.4		

The ANOVA conducted to analyze the relationship between income levels and purchase intentions for eco-labeled fashion products revealed insightful findings, as summarized in Table 3. This statistical test allowed for a comparison of mean purchase intentions across different income brackets, providing valuable insights into the influence of income on consumer behavior in the context of sustainable fashion.

The results indicate a significant effect of income level on purchase intentions, with varying mean purchase intention scores observed across different income categories.

Specifically, the mean purchase intention scores were 4.0 for individuals earning less than \$2000 per month, 4.2 for those earning between \$2000 and \$3000 per month, and 4.4 for individuals earning more than \$3000 per month. This pattern suggests a clear positive relationship between income level and purchase intentions for eco-labeled fashion products. Higher-income groups tend to exhibit greater intentions to purchase eco-labeled items, while lower-income individuals show slightly lower intentions. This finding aligns with the notion that higher disposable incomes often afford individuals greater purchasing power and flexibility to prioritize sustainable and environmentally friendly products. It's important to note that while the overall trend indicates a positive relationship between income and purchase intentions, there may be nuances and exceptions within each income bracket. Factors such as individual values, lifestyle preferences, and budget constraints can influence purchasing decisions and may mitigate the direct correlation between income and intentions to purchase eco-labeled products. Additionally, the observed differences in mean purchase intentions across income levels highlight the importance of considering socio-economic factors in sustainable fashion marketing and product positioning strategies. Brands targeting higher-income demographics may focus on emphasizing the premium quality, exclusivity, and ethical credentials of their eco-labeled products to resonate with the preferences and values of affluent consumers. Conversely, brands catering to lower-income segments may prioritize affordability, accessibility, and value-oriented messaging to make eco-labeled fashion products more accessible and appealing to budget-conscious consumers.

In conclusion, the ANOVA results underscore the significant influence of income level on purchase intentions for eco-labeled fashion products, highlighting the need for tailored marketing strategies and pricing approaches to effectively engage consumers across diverse socio-economic backgrounds. By understanding the nuanced interplay between income, consumer preferences, and sustainability considerations, brands can better cater to the evolving needs and aspirations of their target audience, ultimately driving positive change towards a more sustainable fashion industry.

The analysis shows that income level significantly affects purchase intentions, with higher income groups demonstrating greater intentions to purchase eco-labeled fashion products.

4.5 Regression Analysis for Predicting Purchase Intentions

A regression analysis was performed to identify the predictors of purchase intentions

Table 4: Regression Coefficients for Predicting Purchase Intentions

Predictor Variable	B	SE	T Value	p Value
Eco-Label Awareness	0.25	0.05	5.00	0.000
Perceived Environmental Impact	0.30	0.07	4.29	0.000
Perceived Social Responsibility	0.20	0.06	3.33	0.001
Trust in Eco-Labels	0.15	0.04	3.75	0.000

The regression analysis conducted to predict purchase intentions for sustainable fashion products yielded insightful findings, as summarized in Table 4. By examining the regression coefficients for various predictor variables, including eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels, the analysis provided valuable insights into the factors driving consumer behavior in the context of eco-labeled fashion. The results indicate that all four predictor variables – eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels – exhibit statistically significant relationships with purchase intentions. Specifically, higher values of these predictor variables correspond to greater intentions to purchase eco-labeled fashion products.

Eco-label awareness emerges as a particularly strong predictor, with a regression coefficient of 0.25 and a significant p-value of 0.000. This finding underscores the importance of consumer knowledge and recognition of eco-labels in influencing their purchase decisions. Individuals who are more aware of eco-labels are more likely to prioritize sustainability considerations when selecting fashion items, demonstrating a positive association between eco-label awareness and purchase intentions. Similarly,

perceived environmental impact and perceived social responsibility also demonstrate significant positive relationships with purchase intentions, as indicated by their respective regression coefficients of 0.30 and 0.20, with corresponding p-values of 0.000 and 0.001. These results highlight the influence of consumers' perceptions of a product's environmental benefits and ethical implications on their willingness to engage with eco-labeled fashion products. Brands that effectively communicate their commitment to environmental sustainability and social responsibility are likely to resonate more strongly with consumers, driving higher purchase intentions. Trust in eco-labels emerges as another key predictor of purchase intentions, with a regression coefficient of 0.15 and a significant p-value of 0.000. This finding underscores the critical role of trust and credibility in eco-labeling practices. Consumers who trust eco-labels are more likely to perceive them as reliable indicators of a product's sustainability credentials, leading to increased purchase intentions. Brands that prioritize transparency, authenticity, and accountability in their eco-labeling practices are better positioned to build and maintain consumer trust, ultimately driving positive consumer behaviors.

In summary, the regression analysis highlights the multifaceted nature of consumer decision-making in the context of eco-labeled fashion products. By identifying eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels as significant predictors of purchase intentions, the analysis provides valuable insights for brands and policymakers seeking to promote sustainability in the fashion industry (Chen & Chang, 2012). Strategies aimed at enhancing consumer awareness, communicating environmental and social values, and fostering trust and credibility in eco-labeling practices can effectively drive consumer engagement with eco-labeled fashion products, ultimately contributing to a more sustainable and socially responsible fashion ecosystem. These results indicate that eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels are significant predictors of purchase intentions for sustainable fashion products.

4.6 Factor Analysis

Factor analysis was conducted to identify underlying relationships between variables and reduce data dimensions

Table 5: Factor Loadings

Factor	Variable	Loading
Factor 1 (Eco-Label Trust)	Eco-Label Awareness	0.75
	Trust in Eco-Labels	0.85
Factor 2 (Environmental Impact)	Perceived Environmental Impact	0.80
	Perceived Social Responsibility	0.60
Factor 3 (Purchase Intentions)	Purchase Intentions	0.90
	Perceived Value	0.30

Factor analysis offers valuable insights into the underlying relationships between variables and helps in reducing data dimensions, thereby simplifying the complexity of consumer behavior analysis. The results presented in Table 5 provide a clear depiction of the factor loadings, which represent the strength and direction of the relationships between variables and factors.

Factor 1, labeled as "Eco-Label Trust," encompasses variables related to consumers' trust and confidence in eco-labels. The high factor loadings of Eco-Label Awareness (loading = 0.75) and Trust in Eco-Labels (loading = 0.85) indicate a strong association between these variables and the underlying factor of eco-label trust. This suggests that consumers who are more aware of eco-labels and exhibit higher levels of trust in them are likely to prioritize eco-labeled products in their purchase decisions. Brands and policymakers can leverage this understanding to emphasize transparency and credibility in eco-labeling practices to foster greater consumer trust and confidence. Factor 2, identified as "Environmental Impact," comprises variables related to consumers' perceptions of a product's environmental impact and social responsibility. The high factor loadings of Perceived

Environmental Impact (loading = 0.80) and Perceived Social Responsibility (loading = 0.60) indicate a strong correlation between these variables and the underlying factor of environmental impact. This suggests that consumers who perceive a product to have a positive environmental impact and demonstrate social responsibility are more likely to show interest in purchasing eco-labeled fashion products. Brands can capitalize on this by highlighting their sustainable practices and ethical initiatives to resonate with environmentally conscious consumers. Factor 3, denoted as "Purchase Intentions," includes variables directly related to consumers' intentions to purchase eco-labeled fashion products. The high factor loadings of Purchase Intentions (loading = 0.90) indicate a strong association between this variable and the underlying factor of purchase intentions. Additionally, the lower but still significant factor loading of Perceived Value (loading = 0.30) suggests that while purchase intentions are primarily driven by consumers' desire for eco-labeled products, perceived value also plays a role in shaping their purchasing decisions. Brands can focus on communicating the value proposition of their eco-labeled products to appeal to consumers' preferences and motivations.

Overall, factor analysis offers valuable insights into the multidimensional nature of consumer behavior regarding eco-labeled fashion products. By identifying key factors such as eco-label trust, environmental impact, and purchase intentions, brands and policymakers can develop targeted strategies to effectively engage consumers and promote sustainable consumption. Leveraging these insights can not only drive consumer awareness and adoption of eco-labeled products but also contribute to the advancement of sustainability goals within the fashion industry.

This analysis helps in understanding the structure of the data and identifying key factors that influence consumer behavior.

4.7 Qualitative Data Analysis

Qualitative data from interviews were analyzed using thematic analysis.

Table 6: Themes from Qualitative Data

Theme	Description
Trust and Credibility	Importance of trust in eco-labels and skepticism towards greenwashing.
Environmental Impact Awareness	Influence of perceived environmental impact on purchase decisions.
Social Responsibility	Ethical considerations such as fair trade and labor practices as factors for consumers.
Information Sources	Reliance on social media, word-of-mouth, and brand transparency reports for information.

4.8 Summary of Findings

The results highlight the significant impact of eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels on consumer purchase intentions. Younger consumers and those with higher incomes are more likely to be influenced by eco-labels. Qualitative findings underscore the importance of trust and credible information in shaping consumer attitudes towards sustainable fashion.

The insights from this chapter provide a comprehensive understanding of the factors influencing consumer behavior in the context of eco-labeled fashion products, offering valuable implications for brands and policymakers aiming to promote sustainability in the fashion industry.

The qualitative data analysis conducted through thematic analysis yielded valuable insights into the underlying factors influencing consumer behavior in the context of eco-labeled fashion products. The themes identified provide a deeper understanding of consumer

perceptions and attitudes, complementing the quantitative findings and enriching the overall understanding of eco-labeling's impact on purchase intentions.

Trust and Credibility emerged as a central theme, highlighting the paramount importance of trust in eco-labels among consumers. Participants expressed a strong preference for eco-labels they perceive as credible and trustworthy, emphasizing the role of trust in influencing their purchasing decisions. Furthermore, there was a notable skepticism towards greenwashing practices, with consumers expressing concerns about deceptive marketing tactics aimed at exaggerating or misrepresenting a product's sustainability credentials. This underscores the critical need for transparent and credible eco-labeling practices to foster consumer trust and combat greenwashing within the industry.

Another significant theme that surfaced was Environmental Impact Awareness, indicating consumers' increased consciousness regarding the environmental consequences of their purchasing choices. Respondents noted that the perceived environmental footprint of a product plays a substantial role in their buying decisions, with a considerable number expressing a preference for eco-labeled items that resonate with their environmental principles and sustainability preferences. This underscores the necessity of conveying the environmental advantages of eco-labeled fashion products to consumers, accentuating their positive impact on sustainability and environmental preservation.

Social Responsibility emerged as a prominent factor driving consumer behavior, with ethical considerations such as fair trade and labor practices playing a significant role in shaping purchasing decisions. Participants expressed a preference for brands that demonstrate a commitment to social responsibility, including fair treatment of workers and adherence to ethical production practices. This suggests that consumers increasingly prioritize brands that align with their ethical values and social consciousness, indicating a growing demand for socially responsible fashion choices.

Information Sources were identified as crucial influencers of consumer behavior, with participants relying on a variety of sources to gather information about eco-labeled fashion

products. Social media platforms, word-of-mouth recommendations, and brand transparency reports were cited as primary sources of information, highlighting the importance of accessible and credible information in shaping consumer perceptions. Brands should leverage these channels to communicate transparently about their sustainability practices and eco-labeling initiatives, thereby enhancing consumer awareness and trust in their products.

In summary, the qualitative findings provide valuable insights into the multifaceted nature of consumer behavior in the context of eco-labeled fashion products. The themes of Trust and Credibility, Environmental Impact Awareness, Social Responsibility, and Information Sources underscore the complexity of consumer decision-making processes and the diverse factors that influence purchase intentions. By addressing consumer concerns, building trust, and communicating transparently about their sustainability efforts, brands can effectively engage with environmentally conscious consumers and drive demand for eco-labeled fashion products.

The synthesis of quantitative and qualitative findings offers a comprehensive understanding of the factors shaping consumer behavior in the realm of eco-labeled fashion products. These insights have significant implications for brands and policymakers seeking to promote sustainability in the fashion industry. By incorporating consumer preferences and priorities into their strategies, stakeholders can drive positive change towards a more sustainable and environmentally conscious fashion ecosystem.

Table 7: Summary of Key Quantitative Findings

Key Variable	Significant Finding
Age	Younger age groups (18-35) have higher eco-label awareness.
Income	Higher income levels are associated with greater purchase intentions for eco-labeled fashion products.

Eco-Label Awareness	Strong predictor of purchase intentions (B = 0.25, p = 0.000).
Perceived Environmental Impact	Strong predictor of purchase intentions (B = 0.30, p = 0.000).
Perceived Social Responsibility	Significant predictor of purchase intentions (B = 0.20, p = 0.001).
Trust in Eco-Labels	Significant predictor of purchase intentions (B = 0.15, p = 0.000).

Age

The significance of age in influencing eco-label awareness suggests a generational divide in sustainability consciousness. Younger consumers, often referred to as Generation Z and Millennials, have been at the forefront of sustainability movements, advocating for environmental and social causes. Their heightened eco-label awareness can be attributed to various factors, including increased exposure to sustainability education, environmental activism, and social media influence. Younger demographics are more likely to engage with digital platforms, where sustainability discourse is prevalent, and are more receptive to sustainability messaging from brands. As digital natives, they have grown up in an era of heightened environmental awareness and are more likely to integrate sustainability considerations into their lifestyle choices, including fashion consumption.

Income:

While higher income levels correlate with greater purchase intentions for eco-labeled fashion products, it's essential to consider the nuances of affordability and accessibility in sustainable consumption. Affluent consumers may have greater disposable income to allocate towards eco-friendly purchases and may perceive sustainable fashion as a status symbol or lifestyle choice. However, this trend raises concerns about the affordability of sustainable fashion for lower-income demographics. Sustainable fashion often comes with

a price premium due to higher production costs associated with ethical sourcing, eco-friendly materials, and sustainable manufacturing processes. Lower-income consumers may face financial constraints that limit their ability to prioritize sustainability in their purchasing decisions. Addressing affordability barriers and promoting inclusivity in sustainable fashion is crucial for ensuring equitable access to eco-friendly alternatives across diverse socio-economic backgrounds.

Eco-Label Awareness:

The strong predictive power of eco-label awareness on purchase intentions underscores the pivotal role of consumer knowledge and recognition of eco-labels in driving sustainable fashion consumption. Eco-labels serve as visual cues that communicate a product's environmental and ethical attributes, guiding consumer choices towards more sustainable options. However, eco-labeling practices vary widely, leading to confusion and skepticism among consumers. Greenwashing, the deceptive practice of misleading consumers with false or exaggerated sustainability claims, undermines trust in eco-labels and dilutes their effectiveness. To enhance eco-label awareness and combat greenwashing, brands should prioritize transparent labeling practices, provide clear and verifiable information about their sustainability initiatives, and obtain third-party certifications from reputable organizations. Consumer education and awareness campaigns can also play a crucial role in empowering consumers to make informed choices and hold brands accountable for their sustainability claims.

Perceived Environmental Impact:

Consumers' perceptions of a product's environmental impact strongly influence their purchasing decisions, with environmentally conscious consumers prioritizing products with lower environmental footprints. Sustainable fashion brands often tout their eco-friendly materials, sustainable production processes, and reduced carbon emissions to appeal to environmentally conscious consumers. However, accurately assessing the environmental impact of fashion products can be complex due to the myriad factors involved, including raw material sourcing, manufacturing, transportation, and end-of-life disposal. Life cycle assessment (LCA) methodologies provide a comprehensive framework

for evaluating the environmental impacts of products throughout their entire lifecycle. Brands can leverage LCA data to quantify and communicate the environmental benefits of their products, providing consumers with transparent and credible information to guide their purchasing decisions.

Perceived Social Responsibility:

Consumers increasingly expect fashion brands to uphold social responsibility and ethical production practices throughout their supply chains. Perceived social responsibility encompasses various factors, including fair labor practices, ethical sourcing, community engagement, and support for social causes. Brands that demonstrate a commitment to social responsibility are more likely to resonate with socially conscious consumers and build long-term brand loyalty. Ethical certifications, such as Fair Trade or Certified B Corporation, provide third-party validation of a brand's social and ethical commitments, enhancing consumer trust and credibility. However, ensuring social responsibility in fashion supply chains remains a complex challenge, particularly in the context of globalized production networks and subcontracting practices. Brands must prioritize transparency, traceability, and accountability in their supply chains to address labor rights violations, promote worker welfare, and support community development in fashion-producing regions.

Trust in Eco-Labels:

Consumer trust in eco-labels is essential for fostering confidence and credibility in sustainable fashion products. Trustworthy eco-labels serve as reliable indicators of a product's environmental and ethical attributes, helping consumers make informed choices and support brands that align with their values. However, the proliferation of eco-labels and greenwashing practices has eroded trust in sustainability claims within the fashion industry. To enhance trust in eco-labels, brands must prioritize transparency, authenticity, and accountability in their sustainability initiatives. Obtaining third-party certifications from reputable organizations, such as Global Organic Textile Standard (GOTS) or OEKO-TEX Standard 100, can provide independent verification of a product's eco-friendly credentials. Clear and consistent communication about eco-labeling practices,

sustainability initiatives, and supply chain transparency can help build consumer trust and loyalty over time.

In conclusion, the findings from Table 7 underscore the complex interplay of demographic factors, consumer perceptions, and trust in eco-labels shaping consumer behavior in the context of sustainable fashion. By understanding these key variables and their implications for sustainable consumption, brands and policymakers can develop targeted strategies to promote transparency, environmental stewardship, social responsibility, and consumer trust in the fashion industry. Through collaborative efforts and innovative initiatives, stakeholders can work towards a more sustainable and equitable future for fashion, aligning business practices with environmental and social objectives while meeting consumer demand for ethical and eco-friendly products.

Table 8: Summary of Key Qualitative Findings

Theme	Key Insight
Trust and Credibility	Consumers value trust in eco-labels and are wary of greenwashing practices.
Environmental Impact Awareness	Perceived environmental benefits strongly influence consumer purchase decisions.
Social Responsibility	Ethical production practices are important to many consumers.
Information Sources	Consumers use diverse information sources, including social media and brand reports, to inform their choices.

The qualitative findings from interviews conducted in the context of eco-labeled fashion products reveal crucial insights that hold significant implications for both brands and policymakers aiming to promote sustainability in the fashion industry. Foremost among these findings is the emphasis placed by consumers on trust and credibility in eco-labels, alongside their wariness of greenwashing practices, highlighting the necessity for brands to establish and maintain transparent communication regarding sustainable practices to

build credibility. Additionally, the strong influence of perceived environmental benefits on consumer purchase decisions underscores the importance of clear labeling and communication of a product's environmental impact to appeal to environmentally-conscious consumers. Moreover, the importance of ethical production practices to many consumers signifies the need for brands to prioritize social responsibility, such as fair labor practices and supply chain transparency, to address concerns regarding labor exploitation in the fashion industry. Furthermore, the diverse information sources utilized by consumers, including social media and brand reports, underscore the significance of maintaining a strong online presence and leveraging digital platforms for effective communication of sustainability initiatives by brands. Policymakers, in turn, can support these efforts by implementing regulations to prevent greenwashing, enforcing accurate eco-labeling, and promoting initiatives that improve transparency and accessibility of information related to sustainable practices, thereby empowering consumers to make informed decisions and fostering a more environmentally and socially responsible fashion industry.

The insights from this chapter provide a comprehensive understanding of the factors influencing consumer behavior in the context of eco-labeled fashion products, offering valuable implications for brands and policymakers aiming to promote sustainability in the fashion industry

Chapter 5

5.0 Conclusion

5.1 Summary of Findings

This study examined the impact of eco-labeling on consumer purchase intentions for sustainable fashion products. Through quantitative and qualitative analyses, several key findings emerged:

1. **Demographic Influence:** Younger consumers (ages 18-35) and those with higher income levels are more likely to be aware of and influenced by eco-labels.
2. **Significant Predictors:** Eco-label awareness, perceived environmental impact, perceived social responsibility, and trust in eco-labels were identified as significant predictors of purchase intentions.
3. **Trust and Credibility:** Trust in eco-labels is crucial. Consumers are skeptical of labels they perceive as greenwashing.
4. **Information Sources:** Consumers rely on various information sources, including social media, word-of-mouth, and brand transparency reports, to form their opinions about eco-labeled products.

5.2 Implications for Brands

The findings have several implications for brands aiming to promote sustainability through eco-labeling:

- **Target Younger and High-Income Consumers:** Marketing efforts should be tailored towards younger and higher-income consumers, who are more likely to value and seek out eco-labeled products.
- **Build Trust:** Brands must ensure the credibility and transparency of their eco-labels to build trust with consumers. This includes avoiding greenwashing and providing clear, verifiable information about the environmental and social benefits of their products.

- **Effective Communication:** Utilizing diverse communication channels, particularly social media and transparent reporting, can effectively reach and educate consumers about the benefits of eco-labeled products.

5.3 Policy Recommendations

For policymakers, the study suggests several strategies to enhance the effectiveness of eco-labeling in promoting sustainable consumption:

- **Standardization and Regulation:** Implementing standardized criteria for eco-labels and rigorous regulation can help prevent greenwashing and increase consumer trust.
- **Consumer Education:** Initiatives aimed at educating consumers about the significance and reliability of eco-labels can enhance their impact on purchase decisions.
- **Support for Sustainable Practices:** Providing incentives and support for brands to adopt sustainable practices and obtain credible eco-labels can drive industry-wide change.

5.4 Future Research Directions

The study opens several avenues for future research:

- **Longitudinal Studies:** Conducting longitudinal studies can provide insights into how consumer attitudes and behaviors towards eco-labels evolve over time.
- **Cross-Cultural Analysis:** Examining the impact of eco-labeling in different cultural contexts can help identify universal versus culture-specific trends in sustainable consumption.
- **Broader Product Categories:** Extending research to include other product categories beyond fashion can offer a more comprehensive understanding of the impact of eco-labeling on consumer behavior.

5.5 Conclusion

In conclusion, this study delves into the multifaceted dynamics of eco-labeling and its profound influence on consumer behavior within the realm of sustainable fashion. Through a comprehensive analysis of demographic influences, predictive factors, implications for brands, policy recommendations, and avenues for future research, several key insights have emerged, shedding light on the intricate interplay between consumer perceptions, industry practices, and regulatory frameworks.

The findings underscore the nuanced relationship between demographic characteristics and eco-label awareness, revealing a distinct generational and socio-economic divide in consumer engagement with sustainability initiatives. Younger demographics, characterized by their digital savviness and heightened environmental consciousness, emerge as early adopters of eco-labeled products, driving demand for transparent and ethically sourced fashion alternatives. Conversely, while higher income levels correlate with greater purchase intentions for eco-labeled fashion, affordability remains a persistent barrier for more widespread adoption of sustainable practices among lower-income consumers. Bridging this gap requires concerted efforts from brands and policymakers to democratize access to sustainable fashion and ensure inclusivity across diverse socio-economic strata.

Moreover, the study highlights the pivotal role of trust and credibility in eco-labeling practices, emphasizing the need for transparent communication, credible certification standards, and regulatory oversight to combat greenwashing and uphold consumer confidence. Brands that prioritize authenticity and ethical transparency stand to gain consumer trust and loyalty, fostering long-term relationships based on shared values of sustainability and social responsibility.

From a policy standpoint, the study advocates for standardized criteria, rigorous regulation, and consumer education initiatives to enhance the efficacy of eco-labeling in promoting sustainable consumption practices. By establishing clear guidelines and incentivizing

compliance with eco-friendly standards, policymakers can create a level playing field for brands while empowering consumers to make informed choices aligned with their values.

Looking ahead, future research endeavors should explore the evolving landscape of sustainable fashion consumption, incorporating longitudinal studies, cross-cultural analyses, and broader investigations into eco-labeling's impact across various product categories. By continually expanding our understanding of consumer behavior, industry dynamics, and regulatory frameworks, we can unlock new opportunities for innovation, collaboration, and positive change within the fashion industry and beyond.

In summary, the findings of this study underscore the transformative potential of eco-labeling as a catalyst for driving sustainable consumption practices, fostering environmental stewardship, and promoting social equity in the global fashion landscape. Through collective action and unwavering commitment to sustainability, stakeholders can pave the way for a more resilient, inclusive, and ethically conscious fashion industry that prioritizes people, planet, and prosperity for generations to come.

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Questionnaire

Questionnaire on the Impact of Eco-Labeling on Consumer Behavior in Sustainable Fashion

This questionnaire is a part of an academic research study and is designed to gather information on consumer attitudes and behaviors regarding sustainable fashion products and eco-labelling. Your participation in this survey is voluntary, and your responses will remain confidential. The data collected will be used for research purposes only and will not be shared with any third parties. Please answer the questions honestly and to the best of your knowledge. If you do not wish to answer a specific question, you are free to skip it. There are no right or wrong answers; we are interested in understanding your opinions and experiences. Your cooperation in completing this questionnaire is greatly appreciated, as it will contribute to advancing our understanding of consumer preferences in sustainable fashion. If you have any questions or concerns about this survey, please feel free to contact the researcher. By proceeding with this questionnaire, you acknowledge that you have read and understood this disclaimer and consent to participate in the study. Thank you for your participation.

Sincerely,

Muhammad Atif Shahzad

Section 1: Demographic Information

1. Age:

- Under 18
- 18-24
- 25-34

- 35-44
- 45-54
- 55-64
- 65 and above

2. **Gender:**

- Male
- Female
- Non-binary
- Prefer not to say

3. **Education Level:**

- High School or equivalent
- Some College
- Bachelor's Degree
- Master's Degree
- Doctorate
- Other

4. **Income Level:**

- Less than \$25,000
- \$25,000-\$49,999
- \$50,000-\$74,999
- \$75,000-\$99,999
- \$100,000 and above

5. **Location (City/State/Country):** _____

Section 2: Eco-Label Awareness and Knowledge

6. **How familiar are you with the concept of eco-labels?**

- Very familiar
 - Somewhat familiar
 - Not familiar
7. **Can you identify any specific eco-labels you recognize?** (e.g., GOTS, Fair Trade, OEKO-TEX) _____
8. **Where do you typically learn about eco-labels and sustainable fashion practices?**
(Select all that apply)
- Social Media
 - Online Articles/Blogs
 - Official Websites
 - Word of Mouth
 - Advertisements
 - Other: _____

Section 3: Perceptions of Eco-Labels

9. **How trustworthy do you find eco-labels in the fashion industry?**
- Very trustworthy
 - Somewhat trustworthy
 - Not trustworthy
 - Unsure
10. **Which factors do you believe contribute to the credibility of an eco-label?** (Select all that apply)
- Third-party certifications
 - Transparency in labeling practices
 - Consistency in messaging
 - Brand reputation
 - Other: _____

11. Do you believe eco-labels provide clear and reliable information about a product's sustainability?

- Strongly agree
- Agree
- Neutral
- Disagree
- Strongly disagree

Section 4: Consumer Perception and Attitudes

12. How important is the environmental impact of a fashion product to you?

- Very important
- Somewhat important
- Not important

13. How important is the social responsibility of a fashion brand to you?

- Very important
- Somewhat important
- Not important

14. How does the presence of an eco-label influence your perception of a fashion product's environmental impact?

- Significantly increases positive perception
- Somewhat increases positive perception
- No influence
- Somewhat decreases positive perception
- Significantly decreases positive perception

15. How does the presence of an eco-label influence your perception of a brand's social responsibility?

- Significantly increases positive perception
- Somewhat increases positive perception

- No influence
- Somewhat decreases positive perception
- Significantly decreases positive perception

Section 5: Purchase Intentions and Behavior

16. How likely are you to purchase fashion products with eco-labels compared to those without?

- Much more likely
- More likely
- No difference
- Less likely
- Much less likely

17. Have you purchased eco-labeled fashion products in the past 12 months?

- Yes
- No

18. If yes, how often do you purchase eco-labeled fashion products?

- Frequently (more than 5 times)
- Occasionally (2-4 times)
- Rarely (once)
- Never

19. What is the main reason you purchase eco-labeled fashion products? (Select one)

- Environmental concerns
- Social/ethical concerns
- Quality/durability
- Personal values
- Other: _____

Section 6: Brand Trust and Loyalty

20. How much do you trust fashion brands that use eco-labels?

- Completely trust
- Mostly trust
- Somewhat trust
- Do not trust

21. Does the use of eco-labels influence your loyalty to a fashion brand?

- Strongly increases loyalty
- Somewhat increases loyalty
- No influence
- Somewhat decreases loyalty
- Strongly decreases loyalty

22. How likely are you to make repeat purchases from a brand that uses eco-labels?

- Very likely
- Somewhat likely
- Neutral
- Somewhat unlikely
- Very unlikely

Section 7: Challenges and Opportunities

23. What challenges do you face when trying to purchase eco-labeled fashion products?

(Select all that apply)

- High cost
- Limited availability
- Confusing labels
- Skepticism about claims
- Lack of information
- Other: _____

24. **What would encourage you to purchase more eco-labeled fashion products?** (Select all that apply)

- Lower prices
- Better availability
- Clearer labeling
- Increased trust and credibility
- More information and education
- Other: _____

Section 8: Additional Comments

25. **Do you have any additional comments or suggestions regarding eco-labels and sustainable fashion?** _____

Thank you for participating in this survey. Your responses will help us understand consumer behavior and perceptions related to eco-labeling in the fashion industry and contribute to promoting sustainable fashion practices.

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