

## **Fashion engagement and pro-environmental attitudes: drivers of sustainable fashion consumption in Indonesia**

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### **ABSTRACT**

**Purpose** — *The purpose of this research is to explore the relationship between fashion involvement, pro-environmental attitudes, and consumption of sustainable fashion in the Indonesian market.*

**Method** — *The research was conducted in the Capital City of Jakarta and satellite cities, involving 236 respondents from three generational groups (Gen X, Gen Y, Gen Z). The study employed surveys to gather data on fashion involvement, pro-environmental attitudes, and sustainable fashion consumption.*

**Result** — *The findings of the study indicate that both fashion engagement and pro-environmental attitudes have a significant and positive relationship with the consumption of sustainable fashion in the Indonesian market. The research also highlights the importance of social norms and attitudes in influencing sustainable fashion purchasing behavior.*

**Contribution** — *This research provides valuable insights into the factors driving sustainable fashion consumption in Indonesia through the influence of fashion engagement and pro-environmental attitude variables on three different generational groups, namely gen X, gen Y, and gen Z in Indonesia.*

**Keywords:** *sustainable fashion consumption, fashion involvement, pro-environmental attitudes*



## **INTRODUCTION**

Sustainable fashion consumption is an important issue in Indonesia's fashion industry. Sustainable fashion is commonly associated with organic cotton, natural dyes, recycled and recyclable material, but the concept is much wider than that (Tanzil et al., 2017). The sustainable fashion brands in Indonesia include Controlnew, Reclotches Indonesia, FOYYA studio, Jivaloka, and RIMMBA, which produces high-quality designer swimwear and garments meant to be worn and cherished over many years (Fikri, 2020; Gracia, 2018). These brands are contributing to the growth of sustainable fashion in Indonesia and promoting more responsible and ethical practices in the fashion industry, while the fast fashion industry in Indonesia is contributing to environmental pollution (Elizabeth, 2021). Consumer behavior plays a significant role in sustainable fashion consumption in Indonesia (Parung, 2019; Štefko & Steffek, 2018; Suhud et al., 2020).

Behavioral science can be used to identify consumers' new beliefs, habits, and peak moments, which can be used to drive behavioral change (Charm et al., 2020). Culture is also an important factor that influences consumer behavior, as it includes the beliefs, values, customs, and traditions of a society (Lumen Learning Team, 2020).

The psychological context in consumer behavior research focuses on understanding how individual psychological factors, such as motivation, personality, perception, and learning, influence consumers' behavior and decision-making processes (Niemi, 2015). Motivation can be intrinsic, such as the satisfaction or pleasure one gets from using a product, or extrinsic, such as the desire to impress others or fit in with a certain group (Durmaz et al., 2011).

Personality is another important psychological factor in consumer behavior. Personality traits can influence consumer behavior in various ways, such as by affecting one's need for certain products or the way one responds to marketing messages (Heimbach-Steins, 2007; Williamson-Reisdorph et al., 2017). The environmental context is important in consumer behavior research. It explores how environmental factors, such as sustainability, green products, and social responsibility, impact consumers' purchase decisions. One important facet of pro-social consumption activities is environmentally-sustainable consumer behavior, which can benefit the environment and society as a whole (Han, 2021). However, despite positive attitudes toward eco-friendly products and services, few consumers actually follow through with their wallets, which presents a frustrating paradox for green businesses (Thøgersen, 2021).

In the context of a sustainable environment, one of the issues that has been researched the most is the consumption behavior of sustainable fashion ([Amasawa et al., 2023](#); [Canan & Nazan, 2019](#); [Elaine & Rong, 2019](#); [Okur et al., 2023](#)). Sustainable fashion consumption aims to minimize waste, reduce the carbon footprint of the fashion industry, and promote ethical labor practices ([Soyer & Dittrich, 2020](#)). Consumers can contribute to sustainable fashion consumption by making conscious choices about what you purchase and how you dispose of clothing items ([Lee et al., 2020](#)).

Another challenge is the lack of transparency and complexity in the supply chain, making it difficult to accurately measure the industry's environmental impact ([Kenneth P, 2022](#)). Despite these challenges, the industry is making progress towards sustainability through the use of more sustainable materials, circular fashion practices, and increased transparency in the supply chain ([Oncioiu, 2016](#)).

Sustainability fashion research has overlooked certain areas, such as the impact of technology on promoting sustainable fashion and the psychological factors that shape consumer behavior in this regard ([Suntornsan et al., 2022](#)). The theory of planned behavior (TPB) is frequently employed in sustainability studies, an extension of the Theory of Reasoned Action (TRA), which incorporates behavioral control as a construct representing the perceived ease or difficulty of engaging in a behavior ([Suntornsan et al., 2022](#)). TPB suggests that individuals make reasoned decisions based on their attitudes, subjective norms, and perceived behavioral control, taking into account logical thought processes ([Ajzen, 1991, 2002, 2011](#); [Ajzen & Madden, 1986](#); [Bosnjak et al., 2020](#); [SaraJo Paluch, 2015](#)). Previous research has explored the relationship between fashion involvement, pro-environmental attitudes (PEA), and sustainable consumption ([Khare et al., 2020](#); [Moon et al., 2015](#); [Razzaq et al., 2018](#)).

This study focuses on sustainable fashion consumption as the dependent variable, influenced by the independent variables of fashion involvement and PEA. Limited research has been conducted on sustainable fashion products within the Indonesian market. The aim of this study is to provide insights into the consumption behavior of sustainable fashion products among different generations (X, Y, and Z) in Indonesia.

## **METHOD**

Data was collected using a convenience sampling strategy using online surveys distributed via social media and the WhatsApp group platform. The respondents were separated into three generations: Gen X, Gen Y/millennials, and Gen Z. This

had to be studied to see whether there were any discrepancies in the hypothesis testing outcomes. Previous research' scales of fashion engagement views were used (Razzaq et al., 2018). We take 6 valid items from Moon et al., (2015), 10-item mode of pro-environmental attitudes (PEA) scale, and there are 6 questionnaire items for sustainable fashion consumption (SFC). The scale for sustainable fashion consumption was also adapted from Roberts and Bacon's prior research (Roberts & Bacon, 1997). To determine possible respondents' responses, a six-point Likert-type scale was used, with 1 indicating strongly disagree and 6 indicating strongly agree. We picked a six-point scale since it only allows the respondent to choose one of two options (Taherdoost, 2019).

## **Hypotheses development**

### ***Fashion involvement and sustainable fashion consumption***

Fashion involvement is an engagement with fashion as a social phenomenon and a personal expression of identity (Auty & Elliott, 1998; Cheng & Fang, 2015; Fairhurst et al., 1989; Tigert et al., 1976). Researchers have conceptualized and operationalized fashion involvement within the theoretical of consumer behavior and psychology (Fairhurst et al., 1989; Naderi, 2013). It is suggested that fashion involvement can be measured using different indicators, such as product involvement, purchase decision, and awareness of fashion trends (Tigert et al., 1976). Some studies highlight the role of fashion involvement in predicting consumer behavior, such as purchasing decisions and brand loyalty (Fairhurst et al., 1989).

It is a concept that is used to understand how individuals engage with fashion and how it influences their buying behavior. Highly fashion-involved individuals are likely to be socially inclined and motivated to fit into a particular group (Auty & Elliott, 1998). Clothing is a highly symbolic and value-expressive product category, and fashion involvement is a summary of at least five dimensions of fashion adoption-related behavior (Tigert et al., 1976).

Several factors affect fashion involvement, including sensitivity to social surroundings, motivation to fit into a particular group, and the level of interest (Auty & Elliott, 1998; Utama et al., 2022). Other factors that influence fashion involvement include antecedents of involvement with fashion, continuity commitment, and impulse buying. Instruments have been developed to measure fashion involvement, including the Fashion Involvement Scale (FIS) and the Shortened Version of FIS (Fairhurst et al., 1989; Manchiraju & Damhorst, 2016).

Fashion engagement is a complex construct defined by a variety of fashion-related activities and behavioral aspects. Fashion involvement is made up of five

dimensions of fashion adoption-related behavior: fashion innovativeness and purchase time, fashion interpersonal connection, fashion interest, fashion knowledgeable, and fashion consciousness (King & Sproles, 1973; McNeill et al., 2020; Tigert et al., 1976). Fashion involvement has two dimensions: cognitive involvement and affective involvement. Cognitive engagement refers to the extent to which consumers comprehend information, whereas affective involvement refers to the degree to which a consumer's emotional emotions are aroused by an object or event (Putrevu & Lord, 1994; Sullivan et al., 2012; Tung et al., 2017).

Fashion involvement can be measured using various methods, including factor analytic techniques, self-monitoring, and self-reports (Mcfatter, 2005; Tigert et al., 1976). Females were more involved in fashion clothes than males on average, and age also influences fashion clothing involvement (O'Cass, 2004). In summary, fashion involvement can lead to unsustainable fashion consumption, but sustainable fashion consumption involves using more sustainable materials. There is a growing need for sustainability in the fashion industry, but there are still challenges in defining and measuring sustainable fashion practices. The current study proposed the hypothesis that people who are passionate about fashion are more inclined to buy sustainable clothing, and by doing so, they may inspire others to do the same, becoming change agents in the fashion business. As a result, the following hypothesis was advanced:

H1: Fashion involvement has a positive influence on sustainable fashion consumption

### ***Pro-environmental attitude and sustainable fashion consumption***

PEA can be defined as an individual's positive feelings and beliefs towards the environment, which reflect their concern for environmental issues and their readiness to participate in actions that safeguard the environment. PEA refers to an individual's positive feelings, beliefs, and values towards the environment, which can influence their behavior towards protecting the environment (Kaiser & Kibbe, 2017; Nkaizirwa et al., 2021).

PEA are considered to be related to personality traits such as honesty, agreeableness, openness, and proactive personality (Pavalache-Ilie & Cazan, 2018). Pro-environmental behavior (PEB) is a term used interchangeably with pro-environmental attitude. PEBs include actions such as recycling household waste, conserving water or energy, using public transportation, and purchasing sustainable products. However, there is a need to reexamine the measurement

of PEA and behaviors to ensure that they adequately cover current environmental issues ([Nkaizirwa et al., 2021](#)).

Therefore, PEA can play a role in sustainable fashion consumption, and there is a need for the fashion industry to prioritize sustainability to meet the growing demand for eco-friendly fashion among consumers. The following hypothesis was proposed based on the above research:

H2: PEA is positively related to sustainable fashion consumption

### ***Generational group and gender***

Members of Generation Z are highly collaborative, self-reliant, and pragmatic. They are the first true digital native generation, having grown up fully connected digitally ([Gawda & Korniluk, 2022](#); [Seemiller & Grace, 2016](#)). Generation Z is particularly relevant in eco-friendly fashion because they are socially responsible and environmentally conscious ([Tran et al., 2022](#)).

The study informs us that women tend to engage in more sustainable consumption practices than men, such as purchasing organic food, using reusable bags, and buying environmentally-friendly household products ([Bloodhart & Swim, 2020](#)). Generation Z is more environmentally conscious and willing to pay more for sustainable products ([Tran et al., 2022](#)). They are highly connected by social media and digital platforms, and they have a distinct personality type, sources of inspiration, preferred brands, and approach to sustainable fashion ([Andersen et al., 2021](#); [Kaihatu, 2020](#)).

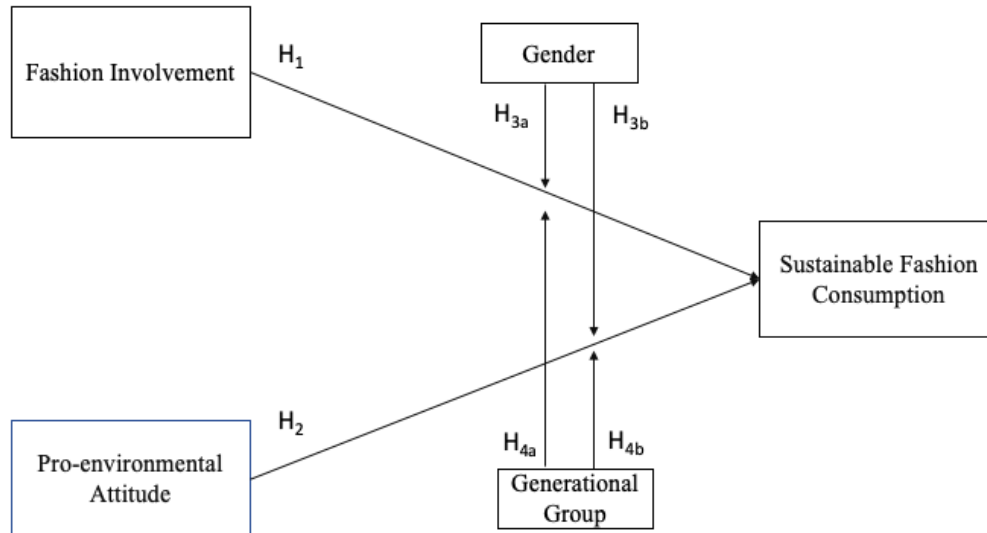
Gen Z engages in climate change activism and expresses anxiety about the future ([Tyson et al., 2021](#)) is more likely to make sustainability-first buying decisions and prefers to buy sustainably rather than go for brand names ([Prayag et al., 2022](#)), and considers the resale value of clothing, the possibility of apparel having multiple owners, and selling clothing instead of throwing it away ([Dąbrowski et al., 2022](#)). All of the above explanations produce the following basic hypotheses:

H3a: Gender has a significant moderating effect on the relationship between fashion involvement and sustainable fashion consumption

H3b: Gender has a significant moderating effect on the relationship between PEA and sustainable fashion consumption

H4a: Generational group has a significant moderating effect on the relationship between fashion involvement and sustainable fashion consumption

**Figure 1.** Theoretical framework of the research



## RESULT AND DISCUSSION

A total of 236 samples were collected from Jakarta, the Capital of Indonesia, and cities around Jakarta (Bogor, Depok, Bekasi, and Tangerang), consisting of 119 men and 117 women. In addition, 60.9 percent of the sample represents the 15–24 year age category, and 38 percent represents the 25–54 year age category. The age category with years of birth 1946–1964 consisted of 1 percent of the sample, or 3 people. Born in 1965–1979 (baby boomers), as many as 14 percent, or 32 people, millennial generation, 18 percent, as many as 42 people, and Gen Z, as many as 67 percent, or 159 people. In this study, we took three generations of the X, Y, and Z generational groups to test their moderating role. Based on the sample, there were 81 married respondents and 155 single respondents.

To assure clean data devoid of common bias or variance techniques, the Harman one-factor test must be done in all cross-sectional survey research. The results, as expected, indicated that the data is free of bias, with no significant bias seen. According to the correlation analysis results, no extremely high, extreme, or significant correlation above ( $r, 0.90$ ) was discovered within the research



variables. According to [Bagozzi et al. \(1991\)](#), common procedure bias is not an issue in this study, as indicated by the outcomes and tenability of the research instruments, with a first factor result of 43.86%.

### **Reliability and validity of the measures**

The study employed three metrics to assess the model's reliability and convergent validity, namely: individual item reliability, Composite Reliability (CR), and Average Variance Extracted (AVE). All construct elements obtained a factor loading better than 0.5, indicating that they can all be used in the study. The CR values ranged from 0.888 to 0.943, showing that dependability was reached. The constructs' Cronbach a scores varied from 0.863 to 0.932, meeting the recommended criterion of 0.7. Finally, AVE was utilized to test the structural variables' convergent validity. The study's findings indicate that the model is trustworthy and has convergent validity.

**Table 1.** Composite reliability

	<b>Cronbach's Alpha</b>	<b>rho_A</b>	<b>Composite Reliability</b>	<b>Average Variance Extracted (AVE)</b>
Fashion Involvement	0.863	0.992	0.888	0.571
Pro-environmental Attitude	0.932	0.934	0.943	0.623
Sustainable Fashion Consumption	0.908	0.915	0.930	0.692

Source: Own data by SmartPLS (2023)

According to [Fornell and Larcker \(1981\)](#), the results that above the suggested threshold of 0.5 indicated that convergent validity was obtained because the AVE of each construct ranged from 0.571 to 0.692. Discriminant validity exists when the square root of the AVE score exceeds the intercorrelations. The IC scores were fewer than the square root of the AVE scores showing that discriminant validity was established. The examination of R square 0.630 and R square adjusted 0.627 which are both greater than 0.26, demonstrate that the research model is fit.

### **Results of the hypotheses testing**

If the value of the t statistic is greater than 1.96, then the relationship between the latent variables is significant ([Coman et al., 2013](#)). The results of the analysis of the H1 hypothesis show that variable fashion involvement has a significant effect on sustainable fashion consumption (2.39). As for the H2 hypothesis, the PEA variable also has a significant positive effect on sustainable fashion



consumption (18.74) (see Table 2). In the H3 hypothesis, the role of the control variable gender has no effect on sustainable fashion consumption with a t-statistic value of 0.312, while in the H4 hypothesis, the control variable generational group also has no effect with a t-statistic value of 0.572.

**Table 2.** Hypotheses testing before adding variables control

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Fashion Involvement -> Sustainable Fashion Consumption	0.107	0.111	0.044	2.39	0.017
Pro-environmental Attitude -> Sustainable Fashion Consumption	0.741	0.740	0.040	18.74	0.000

Source: Own data by SmartPLS (2023)

It was found that there was a difference in the results of the t statistics between the first model, which had not added the control variable for gender and the generation group, and the second model, which had added the control variable for gender and the generation group. Whereas in the second model, the number of t statistics in hypothesis 1, the influence of fashion on sustainable fashion consumption, fell to 2.18. A different thing happened to the influence of PEA, which rose to 18.87 (see Table 3).

**Table 3.** Hypotheses testing after adding variables control

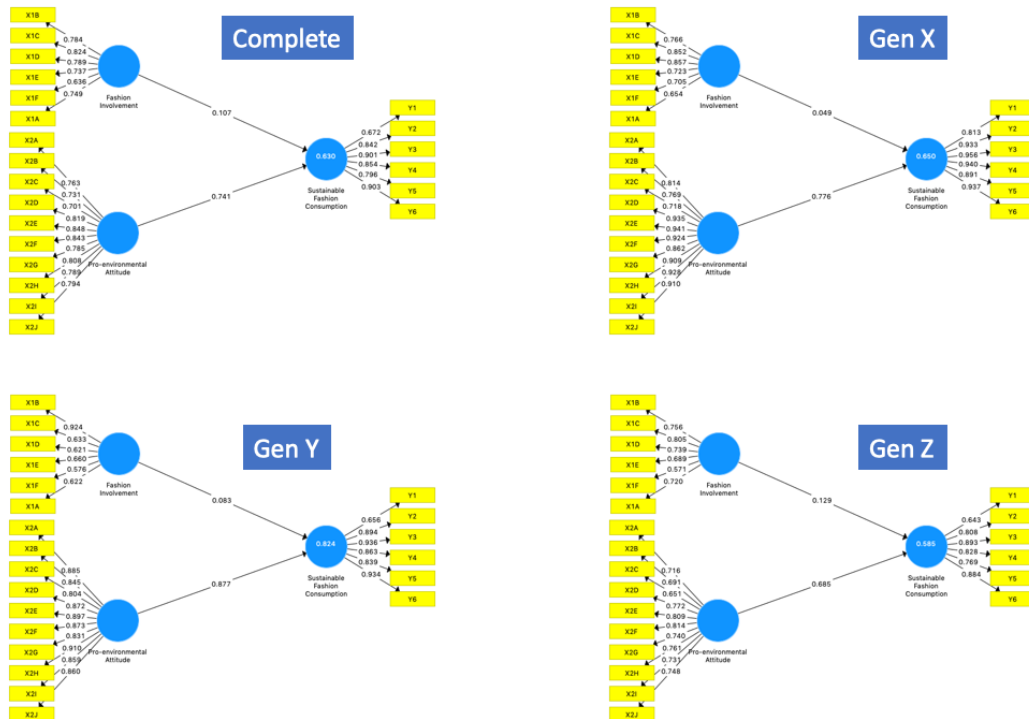
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics ( O/STDEV )	P Values
Fashion Involvement -> Sustainable Fashion Consumption	0.099	0.104	0.045	2.182	0.030
Gender -> Sustainable Fashion Consumption	-0.013	-0.013	0.041	0.312	0.756
Generation -> Sustainable Fashion Consumption	0.024	0.021	0.042	0.572	0.568
Pro-environmental Attitude -> Sustainable Fashion Consumption	0.746	0.744	0.040	18.87	0.000

Source: Own data by SmartPLS (2023)

### Multigroup analysis

In this study, we examined the findings of two huge groups of data. The first group is based on gender (male and female), and the second group is based on generation (generation X, Y, and Z). Previous research identified gender and generational disparities in sustainable fashion consumption (Bloodhart & Swim, 2020; Gazzola et al., 2020).

**Figure 2.** PLS algorithm by generational groups



Source: own data by SmartPLS (2023)

The effect of fashion involvement on sustainable fashion consumption in the female group was found to be insignificant (P value=0.411), while in the male group the effect was significantly positive (P value=0.000). The maximum limit of P value is 0.050, which indicates a significant influence (Andrade, 2019). As for the influence of PEA on sustainable fashion consumption, all have a positive effect on female and male. This shows that the male group tends to have sustainable fashion consumption compared to the female group, as seen from the original sample /O value (see table 4).

**Table 4.** Path coefficients by gender

	Complete		Female		Male	
	Original Sample (O)	P Values	Original Sample (O)	P Values	Original Sample (O)	P Values
Fashion Involvement -> Sustainable Fashion Consumption	0.107	0.014	0.057	0.411	0.137	0.012
Pro-environmental Attitude -> Sustainable Fashion Consumption	0.741	0.000	0.735	0.000	0.759	0.000

Source: own data by SmartPLS (2023)

It is possible for the results of multi-group analysis to produce a positive relationship in the complete data, but when separated per group it produces a relationship that has no effect. This can happen due to the differences in characteristics between the groups being analyzed. In multi-group analysis, these differences may be ignored or considered as noise, resulting in a significant relationship in the complete data. However, when analyzed per group, these differences become more apparent and can affect the results. Therefore, it is important to consider the differences in characteristics between groups in multi-group analysis and to examine the results per group to understand the true relationship between variables (Hwa et al., 2020).

In Table 5, it is stated that fashion involvement and a PEA have a significant effect on sustainable fashion consumption in the combined data. However, when separated per generation group, there were different results for the fashion involvement variable. The three generation groups show no effect on sustainable fashion consumption (genes X = 0.679, Y = 0.433, and Z = 0.054). Meanwhile, the PEA shows the same significant positive effect.

**Table 5.** Path coefficients by generational groups

	P Values			
	Complete	Gen X	Gen Y	Gen Z
Fashion Involvement -> Sustainable Fashion Consumption	0.014	0.679	0.433	0.054
Pro-environmental Attitude -> Sustainable Fashion Consumption	0.000	0.000	0.000	0.000

Source: own data by SmartPLS (2023)

However, Gen Z shows results that are closer to the P value of 0.050. The results suggest that there are differences between Gen X, Gen Y, and Gen Z in terms of sustainable fashion consumption (Gazzola et al., 2020). Younger generations, including Gen Z, are more likely to make sustainable choices in the fashion industry Gen Z consumes sustainable fashion for a variety of reasons, including trends, economic benefits, and sustainability. Furthermore, fashion is less about being trendy or denoting status for Gen Z, and more about boosting confidence and establishing identities. Overall, the differences between generations in terms of sustainable fashion consumption may be influenced by factors such as age, values, and access to information (Gazzola et al., 2020; Williams & Hodges, 2020).

## **Discussion**

The findings of the study on the effect of fashion engagement and PEA on sustainable fashion consumption corroborate the Theory of Planned Behavior (TPB). The TPB believes that three elements influence behavior: attitudes toward behavior, subjective norms, and perceived behavioral control. Attitudes towards the behavior refer to an individual's PEA in the context of sustainable fashion consumption, subjective norms refer to social pressure to engage in sustainable fashion consumption, and perceived behavioral control refers to an individual's ability to engage in sustainable fashion consumption.

The study's findings suggest that individuals who have a strong interest in fashion and hold PEA are more likely to engage in sustainable fashion consumption behaviors. This supports the idea that attitudes towards the behavior play a crucial role in influencing behavior. The study's results also suggest that subjective norms and perceived behavioral control may have a role to play in shaping sustainable fashion consumption behaviors, although this may require further research.

## **CONCLUSION**

The study highlights the importance of education and awareness of eco-friendly fashion practices to encourage individuals to adopt sustainable fashion consumption practices. The research can contribute to the development of new theories or the refinement of existing theories related to sustainable fashion practices. The findings can also serve as a foundation for future studies on sustainable fashion practices and their influence on the environment and society. Researchers can use the findings to gain a better understanding of the elements that influence sustainable fashion consumption patterns.

The research suggests that education and awareness of eco-friendly fashion practices are essential to encourage individuals to adopt sustainable fashion consumption practices. Practitioners and policymakers can use this information to develop campaigns and initiatives that promote sustainable fashion practices and increase awareness of eco-friendly fashion practices. Policymakers can use this information to develop policies that promote sustainable fashion practices and encourage businesses to adopt sustainable practices.

Promoting sustainable fashion consumption practices faces several challenges, as highlighted by the research studies. The high cost of sustainable products, which can make them less accessible to consumers. The fashion industry's fast-paced nature and the pressure to produce new collections frequently can also make it challenging to adopt sustainable practices. Finally, the lack of

collaboration and coordination among stakeholders in the fashion industry can hinder the adoption of sustainable fashion practices.

Future research recommendations for sustainable fashion practices include recognizing prospects for social effect and doing additional study ([Mukendi et al., 2019](#)). More research on sustainable fashion consumption is needed, as research in the larger context of ethical consumption indicates that personal values play an important impact ([Kutsenkova, 2017](#)). Future study should concentrate on increasing consumer awareness and adoption of sustainable fashion techniques ([Sinha et al., 2022](#)). There is also a need for more research on the challenges of employing sustainability in fashion design practices, including a lack of knowledge and understanding of sustainable fashion practices. Future research can also focus on developing strategies to promote sustainable fashion practices and increase awareness of eco-friendly fashion practices.

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