



Green threads: Unveiling sustainable fashion preferences among Indonesian gen Z consumers

Tiara Nur Anisah^{1*}, Della Nanda Luthfiana², Vikas Kumar³, Gesty Ernestivita⁴,
Bimo Harnaji⁵, Mohamad Najmudin⁶

^{1,2,4,5,6}Faculty of Economics and Business, Janabadra University, Yogyakarta, Indonesia

³Central University of Haryana, Mahendergarh, Haryana, India

Article History

Received : 2024-06-18

Revised : 2024-08-20

Accepted : 2024-08-23

Published : 2024-09-14

Keywords:

Green fashion; sustainability; green apparel; green self-concept; self-efficacy.

*Corresponding author:

tiara@janabadra.ac.id

DOI:

10.20885/AMBR.vol4.iss2.art13

Abstract

The textile industry has been a critical driver of global economic growth in recent decades. However, this growth is inextricably linked to its environmental impact. The textile industry causes significant environmental issues, including water pollution from dyes, high water usage, and greenhouse gas emissions. Understanding these specific environmental issues highlights the need to explore solutions, such as using eco-friendly clothing. This study aims to identify the factors that influence generation Z consumers' preferences for eco-friendly clothing products in Indonesia by adopting the theoretical framework of the Information-Motivation-Behavioural Skills (IMB) model. The IMB model was chosen for its comprehensive approach to explaining how information and motivation, combined with behavioral skills, drive consumer actions, making it suitable for analyzing sustainable purchasing behavior. 201 generation Z respondents in Indonesia completed the survey using consecutive sampling. The data was then analyzed using structural equation modeling (SEM). The results showed a positive and significant influence between green self-concept and subjective norm on the purchase intention of environmentally friendly clothing. However, green clothing knowledge's effect on purchase intention was not statistically significant. Further results found that green clothing self-efficacy can mediate the influence of green self-concept and subjective norm on green clothing purchase intention. However, green self-efficacy has not been proven to mediate the effect of environmental apparel knowledge on purchase intention.

Introduction

The textile industry has emerged as a significant driver of global economic growth in recent decades. The global apparel market is expected to reach a value of USD 1.3 trillion by 2025 (IBIS World, 2024). Although the sector contributes positively to social and economic development, the textile industry also presents significant environmental challenges. A recent report from Amed and Berg (2022) shows that the textile industry is responsible for serious ecological problems, including a contribution to about 10% of total global carbon emissions, which exceeds emissions from Indonesia's aviation and maritime shipping combined. This highlights the need for the adoption of more sustainable practices in the industry to reduce the environmental impact it causes. The Zero Waste Indonesia Community reports that textile waste in Indonesia reaches almost 80% of the total waste produced. As a result, the textile apparel industry comes under heavy criticism for the use of harmful chemicals (Rausch & Kopplin, 2021; Singha et al., 2021). This development is driving a paradigm shift among consumers towards more sustainable and environmentally friendly clothing choices.

Understanding the factors that motivate consumers to buy eco-friendly clothing, which refers to garments produced using sustainable processes and materials, such as organic cotton, recycled fibers, and low-impact dyes, while minimizing the use of water and chemicals and ensuring

fair labor practices is crucial to understanding the dynamics behind this trend (Zheng & Chi, 2015). Consumers, particularly gen Z, have shown increased awareness and concern about eco-friendly products (Gomes et al., 2023). This heightened awareness can be attributed to gen Z's upbringing in a digitally connected world where climate change and environmental issues are prominent topics. Growing up with easy access to information via the internet and social media, gen Z is more informed about the environmental impact of consumers (Walters, 2021). Many clothing manufacturers are adopting environmentally friendly business practices (Prados-Peña, Gálvez-Sánchez, 2022; Zameer, 2022). Numerous studies have explored the dynamics of consumer preferences and market penetration of green products across various industries, such as organic food (Katt & Meixner, 2020), green energy (Ainou et al., 2023; Alsmadi et al., 2023), green vehicles (Hussain et al., 2023), green cosmetics (Limbu et al., 2022); green buildings (Dong et al., 2023) and green sportswear (Nam et al., 2017). These studies highlight the critical factors driving consumer adoption, such as environmental awareness, perceived product effectiveness, and social influence. However, there remains a gap in understanding how these drivers vary across different product categories and cultural contexts, particularly in industries like textiles and clothing, where consumer attitudes toward green products have also been investigated (Abrar et al., 2021; Mishra et al., 2023). This study aims to bridge this gap by examining how the factors influencing consumer attitudes toward green products differ between traditional consumer goods and innovative green solutions.

Green apparel refers to textile products produced with environmental impact in mind (Lopes et al., 2022). These clothes are manufactured in fair working conditions, free from labor rights violations, and prioritize environmentally friendly materials. Consumers with environmental knowledge, a green self-concept regarding sustainable production processes, and green clothing labels tend to prefer products that align with sustainability values (Rausch & Kopplin, 2021; Witek & Kuźniar, 2021). Jeong and Ko (2021) and Legere and Kang (2020) found a positive relationship between green self-concept and green fashion consumption. Subjective norms are another factor influencing purchase decisions (Xu et al., 2022). However, Kumar et al. (2022) found no significant relationship between subjective norms and purchase intention of eco-friendly clothing. This may be because consumers prioritize personal values and perceived effectiveness over social pressure when purchasing eco-friendly products. Additionally, cultural factors may diminish the role of subjective norms in individualistic societies. Further investigation is needed to understand these conflicting results and how subjective norms influence the decision to purchase environmentally friendly clothing.

Consumers have become increasingly aware that their shopping behavior significantly impacts environmental issues (Hein, 2022). However, whether this awareness translates into consumer intention to purchase green clothing and which factors can influence their purchase intention remains to be seen. To address this question, this study employs a theoretical approach to identify the factors that shape consumer choices toward green clothing products. This research is particularly relevant in Indonesia, which produces approximately 33 million tons of textiles annually (Goodstats, 2023), with about one million tons becoming textile waste. Additionally, data indicates that used clothing imports to Indonesia have surged, with import figures in 2022 rising by 227.75% compared to the previous years (Goodstats, 2023). At the same time, Indonesian consumers argue that fashion companies should be more environmentally responsible (Rahman & Koszewska, 2020). Anisah et al. (2024) and Aprianingsih et al. (2022) showed that many Indonesian consumers are already environmentally conscious, but this environmental awareness has not consistently translated into green purchasing behavior due to the higher price of green products than conventional products. Existing research recognizes this problem but needs a comprehensive solution (Xie et al., 2019). Moreover, eco-friendly clothing often needs more aesthetic, functional and financial benefits (Rahman & Koszewska, 2020). Therefore, research on the purchase intention of environmentally friendly clothing influenced by knowledge about environmentally friendly clothing, green self-concept, and subjective norms is interesting and needs further research.

Previous studies have explored various variables influencing consumers' desire to purchase eco-friendly clothing. These variables include environmental knowledge, green self-concept, social status, environmental orientation, dispositional traits, self-identity, celebrity endorsements,

cosmopolitanism, online communities, perceived green values, attitudes, subjective norms, behavioral control, beliefs, and past behavior (Abrar et al., 2021; Khare & Kautish, 2022; Sadiq et al., 2021; Zheng & Chi, 2015). Although several previous studies have explored various factors that affect consumer purchase intentions, in Indonesia, research on eco-friendly clothing that adopts the Information-Motivation-Behavioral framework in Indonesia still does not exist, especially with specific research among generation Z, who care about the environment. Therefore, it is important to explore further related to the factors influencing consumers' purchase intention on eco-friendly clothing to address this gap.

The Information-Motivation-Behavioral Skills (IMB) theory was used in this study to see what motivates gen Z to buy eco-friendly clothing. The IMB theory was chosen because of its robust framework for understanding behavior modification, which is essential for investigating consumer habits, as well as its ability to classify and examine the factors that influence consumer preferences. Our research emphasizes the importance of self-efficacy as a bridge between knowledge and motivation in adopting eco-friendly clothing, with a particular focus on the influence of information and motivation on purchase intent. In the context of sustainable consumption, self-efficacy plays an important role, especially since it was often overlooked in previous studies (Limbu et al., 2022). The purpose of this study is to increase knowledge about the eco-friendly clothing market and help create more effective marketing plans.

Literature Review and Hypotheses Development

Theory of Planned Behavior (TPB) and Information-Motivation-Behavioral Skills (IMB) Model

In this study, the Theory of Planned Behavior (TPB) and Information-Motivation-Behavioral Skill (IMB) models are combined into a comprehensive and effective framework to predict consumer intention on purchasing green clothing. According to Ajzen (1991), TPB can be a powerful predictor for understanding how attitudes, subjective norms, and perceived behavioral control can influence consumers' intentions to behave in a particular way. On the other hand, the model developed by Fisher et al. (2003) emphasizes the relationship between motivation, information, and behavioral skills in influencing behavioral outcomes. Meanwhile, Nguyen et al. (2019); Uddin et al. (2023) have analyzed how environmental and materialistic factors participate in influencing purchase intentions. In addition, (Rausch & Kopplin, 2021; Varah et al., 2021) expands the TPB by adding a variable of willingness to pay more on environmentally friendly products. They also examined how self-efficacy factors that affect consumer intentions can be used as mediation in indirect relationships.

The IMB model includes three aspects, namely information consisting of environmental apparel knowledge, green self-concept, and subjective norms, then motivation consisting of green self-efficacy, and behavioral skills which include purchase intention in environmentally friendly clothing. Zhuang et al. (2021) emphasized that attitudes and beliefs, self-behavior control, and subjective norms significantly affect the purchase intention of green clothing. Tawde et al. (2023) add an important perspective on how the conditioned condition can modify the relationship between psychological variables and real actions that highlight the role of situational self-efficacy in understanding how to respond to behavior. Wang et al. (2022) and Xu et al. (2014) found the mediating role of self-efficacy that illustrates how brand perception and trust level can affect consumer purchase intention. Thus, this literature underlines the complexity of the IMB model in the context of consumer intent on eco-friendly clothing.

Environmental Apparel Knowledge (EAK) on Purchase Intention (PI)

Consumer knowledge related to clothing and accessories made with the environment in mind is commonly referred to as environmental apparel knowledge (Albloushy & Hiller Connell, 2019). People who have a high knowledge of eco-friendly clothing tend to be more concerned about environmental issues and try to consume more environmentally friendly products (Chang & Watchravesringkan, 2018). Copeland and Bhaduri (2020) also stated the importance of consumer knowledge to be able to choose wisely when buying products that have minimal impact on the environment. When consumers get a certain amount of education related to environmental topics,

they will be more and more considering buying eco-friendly products (Byrd & Su, 2020; Chi et al., 2020).

Purchase intent refers to the likelihood that consumers will buy a certain product either immediately or in the future (Blazquez et al., 2020). There are several studies that have found a positive correlation between environmental awareness and the intention to buy green products. Environmental knowledge is very important because it will affect the tendency of consumers to make purchases (Abeysekera et al., 2022; Bielawska & Grebosz-Krawczyk, 2021; La Rosa & Johnson Jorgensen, 2021; Sherwani et al., 2021). Opinions from Shafie et al. (2021) found that there is a positive influence on environmental knowledge and the intention to buy environmentally friendly fashion products. Similar results were also stated by Dangelico et al. (2022) that people who care about the environment can have a positive impact on attitudes and intentions to buy green clothes. Furthermore, Hojnik et al. (2019) broadened their horizons by investigating the correlation between environmental knowledge and the decision to buy eco-friendly clothing by involving perceived value and consumer effectiveness. Jacobs et al. (2018) also argue that the desire to consume green products is due to their comprehensive knowledge that shapes the perception of environmentally friendly products. Some of these findings simply prove that knowledge about green clothing can significantly shape attitudes and intentions to buy environmentally friendly products. Thus, we propose the following hypothesis:

H₁: EAK positively affects PI towards green clothing.

Green Self-Concept (GSC) and Purchase Intention (PI)

Green self-concept generally reflects how consumers describe themselves as consumers of typical environmentally friendly products. According to Dixon and Mikolon (2021), a green self-concept is an individual's commitment to the environment. They feel proud to show green behavior because it aligns with their self-identity. The green self-concept can be defined as an individual's self-perception of things that support pro-environmental activities (Gravelines et al., 2022). The green self-concept is reflected in how his consistency behavior with a group of people who have the same aspirations becomes part of it. This concept will then shape the individual's preferences, so he tends to like products that have an image that suits them (e.g., motivation, consistency, or self-esteem) (Welsch & Kühling, 2018); (Legere & Kang, 2020).

Several studies have concluded that green self-concept will positively and significantly influence purchase intentions. This opinion has been supported by research results in various countries, including South Asia (Abrar et al., 2021), Poland (Bielawska & Grebosz-Krawczyk, 2021), India (Khare, 2023), and Japan (Dhir et al., 2021a). The role of green self-concept is further associated with consumer satisfaction and desire for the products purchased (Dhir et al., 2021a). Bielawska and Grebosz-Krawczyk (2021) found that emotional, conditional, and environmental values significantly influence these choices. The findings show that the perceived effectiveness of green self-concept and knowledge related to Korean green clothing is positive on green clothing purchasing behavior in Indian consumers. Therefore, we propose the following hypothesis:

H₂: GSC has a positive impact on PI's eco-friendly clothing.

Subjective Norm (SN) and Purchase Intention (PI)

Subjective norms relate to an individual's perception of the beliefs of those closest to him that influence the individual's interest in doing something (Carfora et al., 2021). Several studies agree that SN has a positive influence on green clothing purchase intentions. Xu et al. (2022) and Zhuang et al. (2021) saw a significant impact of subjective norms on green purchase intentions, then they also highlighted that perceived behavioral control and perceived consumer effectiveness have a strong influence on purchase intentions. This is also confirmed by research from Kumar et al. (2022), Nguyen et al. (2019), and Sethi (2020), who agreed to conclude that SN can have a beneficial influence on the purchase intention of eco-friendly clothing.

There are several factors that can increase consumers' purchase intention to buy green clothes. As done by Tan (2023) and Roh et al. (2022) both found a positive and significant impact of subjective norms on the purchase intention of eco-friendly clothing. Some of the above findings

indicate that when consumers believe that social norms can influence and place a positive value on sustainable consumption behavior, they are more likely to be willing to buy eco-friendly clothing. Further research from Junarsin et al. (2022) and De Silva (2019) emphasizes the importance of green beliefs and brand preferences in shaping these intentions. Naveed and Shaukat (2022) and Nguyen-Viet (2022) extended the discussion to include the mediating role of green advertising and branding. Therefore, we propose the following hypothesis:

H₃: There is a positive impact between SN and PI towards eco-friendly clothing.

Mediating Role of Green Self-Efficacy (GSE)

Several studies have explored the mediating role of GSE on PI. Arora (2022) found that positive attitudes towards green clothing partially mediated the relationship between perceived value for the environment and intention to purchase sustainable clothing. In a similar context, Chen (2021) identified that perceived value also mediates the relationship between green innovation and green clothing purchase intention. Another study found a negative correlation between people's knowledge of credit cards, social motivation, credit card abuse, and self-efficacy in mediating credit card use (Limbu, 2017). In addition, research results prove that environmental awareness affects self-efficacy and purchase intent (Farliana et al., 2023). Findings from Kumar and Yadav (2021) and Liang (2022) research addresses the mediating role of environmental value and shopping motivation in shaping consumer intentions toward sustainable clothing. Kumar and Yadav (2021) highlighted the influence of shopping motivation, while Liang emphasized the role of environmental values in the mediation process. Joshi et al. (2021) and Khare and Kautish (2022) deepen the understanding by emphasizing the role of customer engagement and online communities as mediating factors in shaping purchase intentions for eco-friendly clothing. They highlight that customer interaction and participation in online communities can play a crucial role in shaping sustainable beliefs and purchase intentions. The determinants influencing the buying patterns of eco-friendly attire explicitly focus on the mediating function of buying intentions (Dangelico et al., 2022; Dhir et al., 2021b). They emphasize that self-efficacy, defined as an individual's confidence in their capability to attain desired outcomes, holds a pivotal position in shaping consumer intention towards green clothing, therefore:

H₄: The effect of EAK on the purchase intention of environmentally friendly clothing is mediated by GSE.

H₅: The effect of GSC on the purchase intention of environmentally friendly clothing is mediated by GSE.

H₆: The effect of social norms on the purchase intention of environmentally friendly clothing is mediated by GSE.

In the context of IMB theory, green clothing self-efficacy acts as a crucial behavioral skill that bridges the gap between knowledge and motivation, enabling individuals to overcome barriers and effectively implement their environmental values and intentions into actual purchasing decisions. Therefore, in Figure 1 of this research, we study the purchase behavior of intention toward green clothing using the IMB framework.

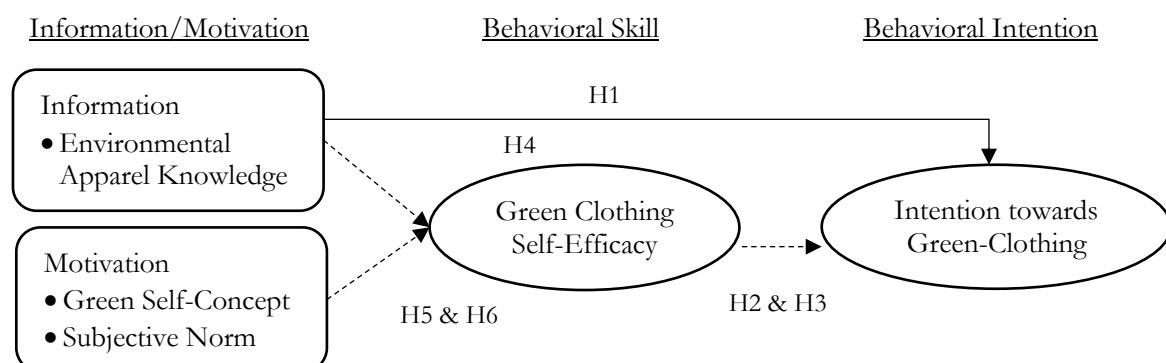


Figure 1. Research Model Framework

Research Methods

This research used a quantitative analysis approach by applying survey techniques to collect quantitative data. The data collection process involved the distribution of questionnaires to a consecutive sampling of generation Z consumers in Indonesia, which involves selecting individuals who meet certain criteria until the required number of subjects is met. The procedure for data collection was using online platforms to individuals who met specific criteria as a sample. The sampling frame targeted only gen Z, aged 17 to 26 years old, who are regularly involved with purchasing apparel products. To increase the clarity and strength of the research, it would be beneficial to provide a more detailed explanation of the criteria used to determine this demographic target. This can include justifications for age ranges, reasons for focusing on apparel buyers, and potential implications for the generalization of the study. The research sample, totaling 201 respondents, was geographically spread across various regions of Indonesia.

Before the survey, a pilot test assessed the questionnaire's presentation, clarity, completeness, and relevance with 30 gen Z Indonesians. Table 2 presents the demographic characteristics of respondents. Regarding the participants' educational background, most (68.2%) are high school students. Regarding the frequency of clothing shopping, the highest percentage (64.7%) were those who had shopping experience 1-5 times a year. Several screening questions are asked to select appropriate and unbiased respondents.

Table 1. Research Operational Variables

Variables	Questionnaire Items
Environmental Apparel Knowledge (EAK) Abrar et al. (2021)	<ol style="list-style-type: none"> 1. I am aware of the environmental impacts of conventional clothing production methods. 2. I understand the benefits of using eco-friendly materials in apparel production. 3. I can identify various types of environmentally friendly fabrics. 4. I know about sustainable clothing production processes' energy and water efficiency. 5. I am familiar with the waste management practices associated with eco-friendly apparel production.
Green Self-Concept (GSC) Sharma et al. (2020)	<ol style="list-style-type: none"> 1. I consider myself an environmentally conscious person. 2. I feel a personal responsibility to protect the environment. 3. I often think about how my actions impact the environment. 4. I strive to make choices that are beneficial for the environment. 5. I identify myself as someone who supports sustainable and eco-friendly practices.
Subjective Norm (SN) Pandey & Yadav (2023)	<ol style="list-style-type: none"> 1. People who are important to me think that I should purchase environmentally friendly-clothing 2. My family expects me to buy eco-friendly clothing products. 3. My close friends believe I should choose environmentally friendly clothing over conventional options. 4. I feel social pressure from my peers to buy green clothing products. 5. People whose opinions I value would approve of my decision to purchase environmentally friendly clothing.
Green Self-Efficacy (GSE) Limbu et al. (2022)	<ol style="list-style-type: none"> 1. I am confident in engaging in environmentally friendly behaviors, such as recycling or using sustainable products. 2. My knowledge about the environmental impact of my choices enables me to make decisions that support sustainability. 3. I can overcome any obstacles to making eco-friendly choices. 4. I am certain that my actions, such as purchasing eco-friendly clothing, contribute positively to the environment.
Purchase Intention towards Green Clothing (PI) Albloushy & Hiller Connell (2019)	<ol style="list-style-type: none"> 1. I intend to purchase eco-friendly clothing shortly. 2. I plan to switch to eco-friendly clothing brands for my future purchases. 3. I recommend environmentally friendly clothing to my friends and family. 4. I am motivated to buy green clothing because of its positive environmental impact. 5. I am positively inclined towards purchasing green clothing.

Measures

This study adapted the measures used from previous studies, with modifications according to the context of environmentally friendly products in our study. We used outer loading, AVE, and CR tests to examine the instruments used in this study's measurements. Each indicator must have a minimum level above 0.6 to be accepted. Each indicator has 5 question items from each variable, except for the green self-efficacy variable which only has 4 question items. Furthermore, we adopted question items from several previous studies to measure the variables of environmental apparel knowledge (Abrar et al., 2021), green self-concept (Sharma et al., 2020), subjective norm (Pandey & Yadav, 2023), green self-efficacy (Limbu et al., 2022), and purchase intention towards green clothing (Albloushy & Hiller Connell, 2019). We also used a 5-point likert scale from (1='strongly disagree' to 5='strongly agree'). Then, the outer loading value, AVE value, and CR value can be seen in Table 3. All instruments must meet a standard validity of above 0.6 of each instrument.

Results and Discussion

Table 2 outlines the demographic characteristics of the survey respondents, including gender, age, education level, monthly average income, expenses average per month, and also intensity of shopping in a year.

Table 2. Demographic of the Respondents

	Subcategory	Frequency (n=201)	Percentage (%)
<i>Gender</i>	Male	79	39.3
	Female	122	60.7
<i>Age (years old)</i>	17 – 26	201	100
<i>Education level</i>	High School/Vocational School	137	68.2
	Diploma and Bachelor's Degree (S1)	50	25.4
	Master's Degree (S2)	13	6.5
<i>Income average per month/ IDR</i>	<1,000,000	69	34.3
	1,000,000 – 2,500,000	62	30.8
	2,500,000 – 5,000,000	45	22.4
	>5,000,000	25	12.4
<i>Expenses average per month/ IDR</i>	<1,000,000	72	35.8
	1,000,000 – 2,500,000	88	43.8
	2,500,000 – 5,000,000	23	11.4
	>5,000,000	18	9
<i>Intensity of shopping in a year</i>	1 – 5 times	130	64.7
	6 – 10 times	41	20.4
	>10 times	30	14.9

Source: Primary data processed, 2024

Measurement Model

Data analysis in this study used structural equation modeling (SEM) with the Smart PLS version 3.0 application. SEM is considered easier, more accurate, and more efficient compared to other multivariate statistical tools (Henseler et al., 2014). According to Chin et al. (2008), there are two methods that are considered accurate, namely covariance-based structural equation modeling (CB-SEM) and variance-based structural equation modeling (VB-SEM). Several stages of the PLS method start from assessing validity and reliability, then conducting PLS predictions and finally testing the hypothesis.

Outer Model Evaluation: Convergent Validity

An indicator can be declared valid if it has a correction value of >0.5 with the appropriate construct (Hair et al., 2019). To evaluate the validity of the convergence, we looked at the correlation between

the indicator score and the constructed being studied. Based on the results of the convergence validity test, it shows that the loading factor value is above 0.50, so all indicators are considered to meet the convergence validity.

Table 3. Indicator Test Result

Variables	Items	Factor Loading	AVE	Cronbach's Alpha	CR
Environmental Apparel Knowledge	EAK1	0.752	0.567	0.809	0.867
	EAK2	0.710			
	EAK3	0.821			
	EAK4	0.792			
	EAK5	0.681			
Green Self-Concept	GSC1	0.833	0.681	0.883	0.914
	GSC2	0.825			
	GSC3	0.803			
	GSC4	0.834			
	GSC5	0.831			
Subjective Norm	SN1	0.765	0.654	0.867	0.904
	SN2	0.843			
	SN3	0.831			
	SN4	0.814			
	SN5	0.787			
Green Self-Efficacy	GSE1	0.838	0.682	0.845	0.896
	GSE2	0.852			
	GSE3	0.789			
	GSE4	0.824			
Purchase Intention	PI1	0.883	0.775	0.927	0.945
	PI2	0.888			
	PI3	0.907			
	PI4	0.868			
	PI5	0.856			

Source: Primary data processed, 2024

Note. Minimum accepted levels: factor loading >0.6; AVE >0.5; Cronbach' alpha >0.7; CR >0.7.

Discriminant Validity

Discriminant validity can also be checked using the AVE, which should surpass the threshold of 0.50 (Hair et al., 2017a; Henseler et al., 2014). As illustrated in Table 3, each variable exhibits a stronger relationship with itself than with other variables, confirming that discriminant validity is achieved. According to the Fornell and Larcker (1981) criterion, the square root of the AVE of each construct must be greater than its highest correlation with any other construct. To assess discriminant validity can also use the HTMT Criterion. Henseler et al. (2015) does not recommend the HTMT Criterion for discriminant validity assessment methods in PLS-SEM because it only assesses inter-construct relationships individually, has controversial cut-off values, and can overestimate or underestimate inter-construct correlations, potentially leading to incorrect interpretations.

Table 4. Fornell-Larcker Criterion

	EAK	GSC	GSE	PI	SN
EAK	0.753				
GSC	0.655	0.825			
GSE	0.558	0.664	0.826		
PI	0.515	0.631	0.676	0.881	
SN	0.584	0.672	0.748	0.722	0.809

Source: Primary data processed, 2024

Note. EAK = Environmental Apparel Knowledge; GSC = Green Self-Concept; GSE = Green Self-Efficacy; PI = Purchase Intention; SN = Subjective Norm.

Composite Reliability

Composite reliability (CR) is used to measure the level of reliability in assessing variable reliability. If the composite reliability value >0.70 , the construct has good reliability. Table 3 illustrates that all composite reliability values exceed 0.70, indicating that all constructs have good reliability.

Goodness-of-Fit Model Evaluation

Hair et al. (2019) state that the Q^2 value is 0 for low, 0.25 for moderate, and 0.50 for high. Q^2 value for purchase intention reaches 0.495, almost reaching 0.50, indicating the rate of high accuracy of predictions. Thus, the predictions for this variable are pretty accurate. SRMR is used as an evaluation method to measure the average difference between observed and expected correlations, an absolute measure of the fit criterion (model). Values below 0.10 are considered an indication of a good fit (Henseler & Sarstedt, 2013). The estimated model result in this study is 0.062, indicating that the model has an acceptable match rate.

According to Girona (2024), the PLS-Predict validation method is used to evaluate the predictive ability of PLS models. This method compares PLS results with basic models, namely linear regression (LM) models; it is essential to assess the RMSE and MAE values of each measurement item if their values are lower than linear regression models (LM) (Henseler & Sarstedt, 2013). In PLS predictive output, most PLS model measurement items have lower RMSE and MAE values, so the prediction power of PLS models is considered moderate.

Table 5. R-Square and Q-Square Test Results

	R-Square	Q-Square
Green Self-Efficacy (GSE)	0.606	0.576
Purchase Intention (PI)	0.563	0.495

Source: Primary data processed, 2024

Bootstrap Testing Method

In the analysis conducted through the partial least squares (PLS) method, the bootstrap method is implemented as a robust statistical technique to estimate and examine the relationship between hypothesized variables. This method involves applying the bootstrap technique on multiple samples of data, contributing to the generation of results that are more accurate and improved in terms of reliability. Thus, using the bootstrap method in PLS analysis provides additional advantages in the face of data complexity and variation, increasing the precision and validity of the analysis results.

Hypothesis Testing

In this study, six cause-and-effect relationships were proposed. Statistical analysis confirmed four of them and rejected the other two. Hypothesis testing is carried out based on statistical t-values and p-values using SmartPLS software through Bootstrapping. The criteria applied are that the t-statistic value must be greater than 1.96 with a p-value less than 0.05 (5%) and have a positive beta coefficient (Hair et al., 2017b). Details of the hypothesis test can be seen in Table 6. The adjusted R-Square value for GSE was found to be 0.606, which proves that the independent variables EAK, GSC, and SN have an influence of 60.6% on green self-efficacy. Furthermore, PI shows an R-Square value of 0.563, which means the green self-efficacy variable influences 56.3% of purchase intention towards green clothing.

Direct Effect

Table 6 presents the six significant relationships proposed in this research. The effect of EAK on PI ($\beta = 0.024$, p-value of 0.736 >0.05) shows that statistically, EAK on PI does not have a significant effect, which means that hypothesis 1 is not supported. Furthermore, for GSC ($\beta = 0.190$, p-value of 0.012 <0.05) and SN ($\beta = 0.404$, p-value of 0.000 <0.05), which shows that GSC

and SN have a positive and significant influence on PI, so hypothesis 2 and the hypothesis 3 are supported statistically. It can be said that gen Z consumers' perceptions of social pressure from other people to wear environmentally friendly clothing and their green self-concept influence their purchasing intentions towards environmentally friendly clothing.

Indirect Effect

The statistical results ($\beta = 0.019$, p-value of $0.312 > 0.05$) show that green self-efficacy as a mediator on the effect of EAK on PI is insignificant, which means that hypothesis 4 is not supported. Then, the statistical results ($\beta = 0.060$, p-value of $0.037 < 0.05$) show that green self-efficacy as a mediator between GSC and PI is significant, which means that hypothesis 5 is supported. Finally, the statistical results ($\beta = 0.123$, p-value of $0.027 < 0.05$) show that GSE as a mediator on the effect of SN on PI is proven to be significant, which means that hypothesis 6 is statistically supported. The effect size (f^2) measures the impact of each independent variable on the dependent variable, with values indicating a small (0.02), medium (0.15), or large (0.35) effect. The 95% Confidence Interval (CI) gives the range within which the true effect size is likely to lie, providing insight into the precision and significance of the relationship. For indirect effects, if the CI does not include zero, it indicates a significant mediating effect, ensuring the robustness of the results.

Table 6. Hypothesis Test Results

Relationship	Original Sample	T-Statistics	P-Value	f ² -Value	95% CI (Lower-Upper)	Conclusion
<i>Direct</i>						
H1. EAK → PI	0.024	0.338	0.736	0.001	-0.080,0.128	Rejected
H2. GSC → PI	0.190	2.518	0.012*	0.036	0.043,0.337	Supported
H3. SN → PI	0.404	4.409	0.000***	0.163	0.224,0.584	Supported
<i>Indirect</i>						
H4. EAK → GSE → PI	0.019	1.011	0.312	0.002	-0.018,0.056	Rejected
H5. GSC → GSE → PI	0.060	2.088	0.037*	0.015	0.003,0.117	Supported
H6. SN → GSE → PI	0.123	2.210	0.027*	0.048	0.014,0.232	Supported

Source: Primary data processed, 2024

Note. * $p < 0.05$; ** $p < 0.01$; *** $p < 0.000$.

EAK = Environmental Apparel Knowledge; GSC = Green Self-Concept; GSE = Green Self-Efficacy; PI = Purchase Intention; SN = Subjective Norm.

After empirically testing the relationship between variables using the IMB model, this study found a positive direct relationship between environmental apparel knowledge, green self-concept, and subjective norm on the purchase intention of eco-friendly clothing. However, of the three direct relationships, there is one insignificant direct relationship, EAK on PI. The results of hypothesis 1 statistically show that knowledge about eco-friendly clothing does not significantly influence the purchase intention of eco-friendly clothing in generation Z. This suggests that while generation Z may be informed about the benefits of eco-friendly apparel, such knowledge alone is insufficient to drive their buying decisions. In addition, psychological factors, such as distrust of the sustainability claims of clothing brands or lack of confidence in applying knowledge in purchasing decisions, may affect the link between knowledge and purchase intention. This finding cannot confirm the study results from (Abrar et al., 2021; Khare, 2023; Shafie et al., 2021) because this findings found the opposite.

Hypothesis 2 and hypothesis 3 in this study are supported. Data analysis shows that green self-concept and subjective norms significantly influence PI of environmentally friendly clothing in generation Z. These results were obtained through various methods, including t-statistical and p-value tests using SmartPLS software with the Bootstrapping method. Statistical assessment shows that both variables, GSC and SN, show significant t-value, exceed the critical threshold of 1.96 with a p-value of less than 0.05 (5%), and have a positive beta coefficient. These results are

findings from (Abrar et al., 2021; Jeong & Ko, 2021; Legere & Kang, 2020), which found a significant relationship between GSC and SN on PI of environmentally friendly clothing. GSC, which reflects self-awareness and identity towards environmental issues, positively motivates individuals with sustainability values (Dhir et al., 2021b). Subjective norms have a significant influence on green buying intentions because individuals are often influenced by their closest people such as friends and family, especially in terms of purchasing decisions (Sobuj et al., 2021). Therefore, it is important for marketers to design effective and sustainable strategies in the green fashion industry, due to the importance of these two factors in influencing consumers' purchase intentions on eco-friendly clothing.

Hypothesis 4 in this study found that green self-efficacy (GSE) did not succeed in mediating the influence of environmental apparel knowledge on green clothing purchase intentions. This is because the knowledge of green clothes cannot be used as a benchmark for generation Z to buy environmentally friendly clothes. That is, they need more self-efficacy in their ability to make decisions, which can reduce the role of green self-efficacy in them. Meanwhile, the direct influence of EAK on PI can also be influenced by external factors such as price sensitivity, brand perception, or social environmental influences that are not taken into account in this model. GSEs can also play a more significant mediating role in other demographic contexts. The results of this finding are inversely proportional to research from Limbu et al. (2022), which considers self-efficacy mediation to play an important role in its relationship to purchase intent. These inappropriate results are caused by other factors such as availability, price, and design preferences that affect the impact of knowledge. In addition, psychological factors such as skepticism about the authenticity of eco-friendly claims and uncertainty about how to apply this knowledge in purchasing decisions can further weaken the relationship.

Hypothesis 5 and hypothesis 6 found results that were consistent with some previous studies. GSE has been shown to significantly mediate the relationship between GSC and SN regarding the intention to buy eco-friendly clothing in generation Z. This finding successfully confirms the results of previous research from (Abrar et al., 2021; Komara & Yuliati, 2023; Lopes et al., 2022; Sharma et al., 2020) who found something similar. This is supported by the results of statistical analysis which shows that individuals who define themselves as people who care about the environment and subjective norms obtained from those closest to them who support them to buy green clothes, tend to increase purchase intentions that can be explained through the level of green self-efficacy, both buying at the moment and in the future, according to the findings from (Limbu et al., 2022). In other words, despite the beneficial effects of the subjective norm of eco-friendly self-concept, people who are able to engage in eco-friendly purchasing behavior are more likely to change their purchasing intentions. These results advance our knowledge of the psychological elements that influence consumers' intentions to buy eco-friendly clothing, especially among generation Z, who are known to have a great tendency to be socially and environmentally responsible. Because they always have access to information, this generation is often referred to as the "digital generation" who is more aware and concerned about global issues, such as environmental sustainability.

Implication and Conclusion

This study tries to explore several factors that can increase consumer purchase intention on environmentally friendly clothing, especially among generation Z. The application of the IMB model in this study adds a new view related to consumer behavior on green clothing. Statistically, the results of this study found a positive and significant relationship between green self-concept (GSC) and subjective norm (SN) on the intention to buy environmentally friendly clothing (PI), but no similar thing was found on the influence of environmental apparel knowledge (EAK) on the intention to buy green clothing. This is due to various psychological factors such as consumer distrust in eco-friendly clothing claims and lack of confidence in applying their knowledge of the environment to purchase decisions. Further results found that green self-efficacy (GSE) played an important role in bridging the relationship between the influence of GSC and SN on PI as the results proved to be positive and statistically significant. This proves the strong effect of GSE

mediation because statistically the results are very strong in mediation. However, the mediating effect of GSE was not found to be significant on the effect of EAK on PI. There are several assumptions underlying this discovery, such as the personal value or perceived benefits of the product when using green clothing, so that its effect on purchase intention is not significant. These results can provide important insights for marketers to be able to balance between social norms and strengthen self-efficacy for generation Z in Indonesia.

This study makes an important theoretical contribution by applying the IMB model to the factors that influence generation Z to buy green clothes in Indonesia. One of the important findings of this study is related to the IMB model that is traditionally used in health behavior studies, it turns out that it can be effectively applied and adjusted in the context of consumer behavior in the field of marketing, especially in the case of consumer behavior in environmentally friendly clothing. Because of this flexibility, marketing efforts for eco-friendly clothing should prioritize the main motivational elements of the IMB model, especially the subjective norms and eco-friendly self-efficacy. By creating campaigns that uphold social norms around sustainability and increase customer confidence in their capacity to make eco-friendly decisions, marketers can leverage these insights. In addition, the finding that subjective norms have a dominant influence in collectivist societies such as Indonesia highlights the importance of marketing strategies that are community-oriented and aligned with cultural values.

Future research needs to take a deeper look at additional psychological or social factors that could fill in existing gaps, such as emotional involvement in sustainability issues or the influence of the social environment. In addition, the limitations of research focusing on only one demographic group in Indonesia may reduce the ability to generalize these findings to other age groups and cultural contexts. Therefore, expanding the research to include various demographic groups from different regions will provide a more thorough understanding of consumer behavior towards eco-friendly products. In addition, longitudinal studies can reveal how these intentions and behaviors evolve over time and respond to changes in social norms and environmental policies. Although this study confirms the role of green mediation and self-efficacy, further exploration is needed to understand how to improve this self-efficacy through specific interventions or carefully designed educational initiatives. Ultimately, the study makes an important contribution to the literature on eco-friendly clothing through the application of the IMB model, as well as offers practical implications for marketers who want to promote sustainable consumer behavior. To maximize the benefits of these findings, it is crucial for future research to address existing limitations and develop effective strategies in promoting eco-friendly products in emerging markets.

References

- Abeyssekera, I., Manalang, L., David, R., & Grace Guiao, B. (2022). Accounting for environmental awareness on green purchase intention and behaviour: evidence from the Philippines. *Sustainability*, 14(19), 12565. <https://doi.org/10.3390/su141912565>
- Abrar, M., Sibtain, M. M., & Shabbir, R. (2021). Understanding purchase intention towards eco-friendly clothing for generation Y & Z. *Cogent Business and Management*, 8(1), 1997247. <https://doi.org/10.1080/23311975.2021.1997247>
- Ainou, F. Z., Ali, M., & Sadiq, M. (2023). Green energy security assessment in Morocco: green finance as a step toward sustainable energy transition. *Environmental Science and Pollution Research*, 30(22), 61411–61429. <https://doi.org/10.1007/s11356-022-19153-7>
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior Human Decision Processes*, 50(2), 179–211.
- Albloushy, H., & Hiller Connell, K. Y. (2019). Purchasing environmentally sustainable apparel: the attitudes and intentions of female Kuwaiti consumers. *International Journal of Consumer Studies*, 43(4), 390–401. <https://doi.org/10.1111/ijcs.12518>
- Alsmadi, A. A., Al-Okaily, M., Alrawashdeh, N., Al-Gasaymeh, A., Moh'd Al-hazimeh, A., &

- Zakari, A. (2023). A bibliometric analysis of green bonds and sustainable green energy: evidence from the last fifteen years (2007–2022). *Sustainability (Switzerland)*, 15(7), 5778. <https://doi.org/10.3390/su15075778>
- Amed, I., & Berg, A. (2022, November 30). The State of Fashion Industry 2023. *The Business of Fashion and McKinsey & Company*, 108. Retrieved from <https://www.businessoffashion.com/reports/news-analysis/the-state-of-fashion-2023-industry-report-bof-mckinsey/>
- Anisah, T. N., Wahyudi, D., & Harnaji, B. (2024). Fashion revolution: unveiling the path to sustainable style in the era of fast fashion. In *The 1st International Conference on Applied Sciences and Smart Technologies* (Vol. 475, pp. 02005). E3S Web of Conferences. <https://doi.org/10.1051/e3sconf/202447502005>
- Aprianingsih, A., Fachira, I., Setiawan, M., Debby, T., Desiana, N., & Lathifan, S. A. N. (2023). Slow fashion purchase intention drivers: an Indonesian study. *Journal of Fashion Marketing and Management: An International Journal*, 27(4), 632–647. <https://doi.org/10.1108/JFMM-07-2021-0176>
- Arora, N., & Manchanda, P. (2022). Green perceived value and intention to purchase sustainable apparel among Gen Z: the moderated mediation of attitudes. *Journal of Global Fashion Marketing*, 13(2), 168–185. <https://doi.org/10.1080/20932685.2021.2021435>
- Bielawska, K., & Grebosz-Krawczyk, M. (2021). Consumers' choice behaviour toward green clothing. *European Research Studies Journal*, 24(2), 238–256. <https://doi.org/10.35808/ersj/2124>
- Blazquez, M., Henninger, C. E., Alexander, B., & Franquesa, C. (2020). Consumers' knowledge and intentions towards sustainability: a Spanish fashion perspective. *Fashion Practice*, 12(1), 34–54. <https://doi.org/10.1080/17569370.2019.1669326>
- Byrd, K., & Su, J. (2020). Investigating consumer behaviour for environmental, sustainable and social apparel. *International Journal of Clothing Science and Technology*, 33(3), 336–352. <https://doi.org/10.1108/IJCST-03-2020-0040>
- Carfora, V., Buscicchio, G., & Catellani, P. (2021). Integrating personal and pro-environmental motives to explain Italian women's purchase of sustainable clothing. *Sustainability (Switzerland)*, 13(19), 10841. <https://doi.org/10.3390/su131910841>
- Chang, H. J., & Watchravesringkan, K. (Tu). (2018). Who are sustainably minded apparel shoppers? an investigation to the influencing factors of sustainable apparel consumption. *International Journal of Retail and Distribution Management*, 46(2), 148–162. <https://doi.org/10.1108/IJRDM-10-2016-0176>
- Chen, L., Qie, K., Memon, H., & Yesuf, H. M. (2021). The empirical analysis of green innovation for fashion brands, perceived value and green purchase intention—mediating and moderating effects. *Sustainability*, 13(8), 4238. <https://doi.org/10.3390/su13084238>
- Chi, T., Frattali, A., Liu, H., & Chen, Y. (2020). Regenerated cellulose fibers (RCF) for future apparel sustainability: insights from the U.S. consumers. In *International Textile and Apparel Association Annual Conference Proceedings* (Vol. 77, No. 1). <https://doi.org/10.31274/itaa.11730>
- Chin, W. W., Peterson, R. A., & Brown, S. P. (2008). Structural equation modeling in marketing: some practical reminders. *Journal of Marketing Theory and Practice*, 16(4), 287–298. <https://doi.org/10.2753/MTP1069-6679160402>
- Copeland, L., & Bhaduri, G. (2020). Consumer relationship with pro-environmental apparel brands: effect of knowledge, skepticism and brand familiarity. *Journal of Product and Brand Management*, 29(1), 1–14. <https://doi.org/10.1108/JPBM-03-2018-1794>

- Dangelico, R. M., Alvino, L., & Fraccascia, L. (2022). Investigating the antecedents of consumer behavioral intention for sustainable fashion products: evidence from a large survey of Italian consumers. *Technological Forecasting and Social Change*, 185(July), 122010. <https://doi.org/10.1016/j.techfore.2022.122010>
- De Silva, A. C., & Herath, H. M. A. (2019). Impact of intrinsic factors and subjective norms that influence purchase intention in Sri lankan online retail apparel industry. *Kelaniya Journal of Human Resource Management*, 14(2), 16. <https://doi.org/10.4038/kjhrm.v14i2.67>
- Dhir, A., Sadiq, M., Talwar, S., Sakashita, M., & Kaur, P. (2021a). Why do retail consumers buy green apparel? A knowledge-attitude-behaviour-context perspective. *Journal of Retailing and Consumer Services*, 59, 102398. <https://doi.org/10.1016/j.jretconser.2020.102398>
- Dhir, A., Talwar, S., Sadiq, M., Sakashita, M., & Kaur, P. (2021b). Green apparel buying behaviour: a stimulus–organism–behaviour–consequence (SOBC) perspective on sustainability-oriented consumption in Japan. *Business Strategy and the Environment*, 30(8), 3589–3605. <https://doi.org/10.1002/bse.2821>
- Dixon, D., & Mikolon, S. (2021). Cents of self: how and when self-signals influence consumer value derived from choices of green products. *International Journal of Research in Marketing*, 38(2), 365–386. <https://doi.org/10.1016/j.ijresmar.2020.08.002>
- Dong, T., Yin, S., & Zhang, N. (2023). The interaction mechanism and dynamic evolution of digital green innovation in the integrated green building supply chain. *Systems*, 11(3), 122. <https://doi.org/10.3390/systems11030122>
- Farliana, N., Setiaji, K., & Feriady, M. (2023, October). Effect of self-efficacy on green consumption behavior in higher education: mediation effect of learning quality and organizational support. In *International Conference On Development And Innovation In Agriculture: Agribusiness-Based Agricultural Development In The Era And Post Covid-19, AIP Conference Proceedings* (Vol. 2765, No. 1). AIP Publishing. <https://doi.org/10.1063/5.0154504>
- Fisher, W. A., Fisher, J. D., & Harman, J. (2003). The information-motivation-behavioral skills model: a general social psychological approach to understanding and promoting health behavior. In Suls, J., & Wallston, K. A. (Eds.), *Social Psychological Foundations of Health and Illness* (pp. 82–106). Oxford, UK: Blackwell Publishing Ltd. <https://doi.org/10.1002/9780470753552.ch4>
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: algebra and statistics. *Journal of Marketing Research*, 18(3), 382–388. <https://doi.org/10.1177/002224378101800313>
- Girona, J. T. (2024). Review of advanced issues in partial least squares structural equation modeling (second edition). *Journal of Marketing Analytics*, 12, 108–109. <https://doi.org/10.1057/s41270-023-00275-x>
- Gomes, S., Lopes, J. M., & Nogueira, S. (2023). Willingness to pay more for green products: a critical challenge for Gen Z. *Journal of Cleaner Production*, 390, 136092. <https://doi.org/https://doi.org/10.1016/j.jclepro.2023.136092>
- Goodstats (2023). *Statistik Impor Pakaian Bekas 5 Tahun Terakhir*. Retrieved from <https://data.goodstats.id/statistic/adelandilaa/statistik-impor-pakaian-bekas-5-tahun-terakhir-RLqTo>
- Gravelines, Ž., Banyte, J., Dovaliene, A., & Gadeikiene, A. (2022). The role of green self-identity and self-congruity in sustainable food consumption behaviour. *Organizations and Markets in Emerging Economies*, 13(2), 336–356. <https://doi.org/10.15388/omee.2022.13.83>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2017a). *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) Using R: A Workbook*. Cham, Switzerland: Springer International Publishing.

- Hair, J. F., Hollingsworth, C. L., Randolph, A. B., & Chong, A. Y. L. (2017b). An updated and expanded assessment of PLS-SEM in information systems research introduction. *Industrial Management & Data Systems*, 117(3), 1–41. <https://doi.org/http://dx.doi.org/10.1108/IMDS-04-2016-0130>
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hein, N. (2022). Factors influencing the purchase intention for recycled products: integrating perceived risk into value-belief-norm theory. *Sustainability*, 14(7), 3877. <https://doi.org/10.3390/su14073877>
- Henseler, J., Dijkstra, T. K., Sarstedt, M., Ringle, C. M., Diamantopoulos, A., Straub, D. W., Ketchen, D. J., Hair, J. F., Hult, G. T. M., & Calantone, R. J. (2014). Common beliefs and reality about PLS: comments on Rönkkö and Evermann (2013). *Organizational Research Methods*, 17(2), 182–209. <https://doi.org/10.1177/1094428114526928>
- Henseler, J., Ringle, C. M., & Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling. *Journal of the Academy of Marketing Science*, 43(1), 115–135. <https://doi.org/10.1007/s11747-014-0403-8>
- Henseler, J., & Sarstedt, M. (2013). Goodness-of-fit indices for partial least squares path modeling. *Computational Statistics*, 28(2), 565–580. <https://doi.org/10.1007/s00180-012-0317-1>
- Hojnik, J., Ruzzier, M., & Konečnik Ruzzier, M. (2019). Transition towards Sustainability: adoption of eco-products among consumers. *Sustainability*, 11(16), 4308. <https://doi.org/10.3390/su11164308>
- Hussain, Z., Kaleem Khan, M., & Xia, Z. (2023). Investigating the role of green transport, environmental taxes and expenditures in mitigating the transport CO2 emissions. *Transportation Letters*, 15(5), 439–449. <https://doi.org/10.1080/19427867.2022.2065592>
- Brocker, M. (2024, August). *Global Apparel Manufacturing - Market Research Report (2014-2029)*. IBIS World. Retrieved from <https://www.ibisworld.com/global/market-research-reports/global-apparel-manufacturing-industry/#IndustryStatisticsAndTrends>
- Jacobs, K., Petersen, L., Hörisch, J., & Battenfeld, D. (2018). Green thinking but thoughtless buying? an empirical extension of the value-attitude-behaviour hierarchy in sustainable clothing. *Journal of Cleaner Production*, 203, 1155–1169. <https://doi.org/10.1016/j.jclepro.2018.07.320>
- Jeong, D., & Ko, E. (2021). The influence of consumers' self-concept and perceived value on sustainable fashion. *Journal of Global Scholars of Marketing Science*, 31(4), 511–525. <https://doi.org/10.1080/21639159.2021.1885303>
- Joshi, Y., Uniyal, D. P., & Sangroya, D. (2021). Investigating consumers' green purchase intention: examining the role of economic value, emotional value and perceived marketplace influence. *Journal of Cleaner Production*, 328, 129638. <https://doi.org/10.1016/j.jclepro.2021.129638>
- Junarsin, E., Pangaribuan, C. H., Wahyuni, M., Hidayat, D., Putra, O. P. B., Maulida, P., & Soedarmono, W. (2022). Analyzing the relationship between consumer trust, awareness, brand preference, and purchase intention in green marketing. *International Journal of Data and Network Science*, 6(3), 915–920. <https://doi.org/10.5267/j.ijdns.2022.2.005>
- Katt, F., & Meixner, O. (2020). Is it all about the price? an analysis of the purchase intention for organic food in a discount setting by means of structural equation modeling. *Foods*, 9(4), 458. <https://doi.org/10.3390/foods9040458>
- Khare, A. (2023). Green apparel buying: role of past behavior, knowledge and peer influence in the

- assessment of green apparel perceived benefits. *Journal of International Consumer Marketing*, 35(1), 109-125. <https://doi.org/10.1080/08961530.2019.1635553>
- Khare, A., & Kautish, P. (2022). Antecedents to green apparel purchase behavior of Indian consumers. *Journal of Global Scholars of Marketing Science: Bridging Asia and the World*, 32(2), 222–251. <https://doi.org/10.1080/21639159.2021.1885301>
- Komara, C. N., & Yuliati, E. (2023). Analysis of factors affecting parents' purchase intention on eco-friendly baby clothing products in Indonesia. *Indonesian Journal of Multidisciplinary Science*, 2(10), 3414-3431. <https://doi.org/10.55324/ijoms.v2i10.606>
- Kumar, N., Garg, P., & Singh, S. (2022). Pro-environmental purchase intention towards eco-friendly apparel: augmenting the theory of planned behavior with perceived consumer effectiveness and environmental concern. *Journal of Global Fashion Marketing*, 13(2), 134–150. <https://doi.org/10.1080/20932685.2021.2016062>
- Kumar, S., & Yadav, R. (2021). The impact of shopping motivation on sustainable consumption: a study in the context of green apparel. *Journal of Cleaner Production*, 295, 126239. <https://doi.org/10.1016/j.jclepro.2021.126239>
- La Rosa, A., & Johnson Jorgensen, J. (2021). Influences on consumer engagement with sustainability and the purchase intention of apparel products. *Sustainability (Switzerland)*, 13(19), 10655. <https://doi.org/10.3390/su131910655>
- Legere, A., & Kang, J. (2020). The role of self-concept in shaping sustainable consumption: a model of slow fashion. *Journal of Cleaner Production*, 258, 120699. <https://doi.org/10.1016/j.jclepro.2020.120699>
- Liang, J., Li, J., & Lei, Q. (2022). Exploring the influence of environmental values on green consumption behavior of apparel: a chain multiple mediation model among Chinese generation Z. *Sustainability*, 14(19), 12850. <https://doi.org/10.3390/su141912850>
- Limbu, Y. B. (2017). Credit card knowledge, social motivation, and credit card misuse among college students. *International Journal of Bank Marketing*, 35(5), 842–856. <https://doi.org/10.1108/IJBM-04-2016-0045>
- Limbu, Y. B., Pham, L., & Nguyen, T. T. T. (2022). Predictors of green cosmetics purchase intentions among young female consumers in Vietnam. *Sustainability (Switzerland)*, 14(19), 1–15. <https://doi.org/10.3390/su141912599>
- Lopes, P., Rodrigues, R., & Varela, M. (2022, May). Social networks clothes shopping and the influence of brand image and perceived benefits on purchase intention. In *ECSM 2022 9th European Conference on Social Media* (pp. 95-102). Academic Conferences International Limited, Reading, UK.
- Mishra, S., Malhotra, G., Chatterjee, R., & Kareem Abdul, W. (2023). Ecological consciousness and sustainable purchase behavior: the mediating role of psychological ownership. *Asia Pacific Journal of Marketing Logistics*, 35(2), 414–431. <https://doi.org/10.1108/APJML-08-2021-0591>
- Nam, C., Dong, H., & Lee, Y. A. (2017). Factors influencing consumers' purchase intention of green sportswear. *Fashion and Textiles*, 4(1), 1-17. <https://doi.org/10.1186/s40691-017-0091-3>
- Naveed, M. A., & Shaukat, R. (2022). Health literacy predicts Covid-19 awareness and protective behaviours of university students. *Health Information & Libraries Journal*, 39(1), 46–58. <https://doi.org/10.1111/hir.12404>
- Nguyen-Viet, B. (2022). Understanding the influence of eco-label, and green advertising on green purchase intention: the mediating role of green brand equity. *Journal of Food Products Marketing*, 28(2), 87–103. <https://doi.org/10.1080/10454446.2022.2043212>

- Nguyen, M. T. T., Nguyen, L. H., & Nguyen, H. V. (2019). Materialistic values and green apparel purchase intention among young Vietnamese consumers. *Young Consumers*, 20(4), 246–263. <https://doi.org/10.1108/YC-10-2018-0859>
- Pandey, M., & Yadav, P. S. (2023). Understanding the role of individual concerns, attitude, and perceived value in green apparel purchase intention: the mediating effect of consumer involvement and moderating role of generation Z&Y. *Cleaner and Responsible Consumption*, 9, 100120. <https://doi.org/10.1016/j.clrc.2023.100120>
- Prados-Peña, M. B., & Gálvez-Sánchez. (2022). Intention to purchase sustainable craft products: a moderated mediation analysis of the adoption of sustainability in the craft sector. *Environment, Development and Sustainability*, 26(1), 775-797. <https://doi.org/10.1007/s10668-022-02732-6>
- Rahman, O., & Koszewska, M. (2020). A study of consumer choice between sustainable and non-sustainable apparel cues in Poland. *Journal of Fashion Marketing and Management*, 24(2), 213–234. <https://doi.org/10.1108/JFMM-11-2019-0258>
- Rausch, T. M., & Kopplin, C. S. (2021). Bridge the gap: consumers' purchase intention and behavior regarding sustainable clothing. *Journal of Cleaner Production*, 278(January), 123882. <https://doi.org/10.1016/j.jclepro.2020.123882>
- Roh, T., Seok, J., & Kim, Y. (2022). Unveiling ways to reach organic purchase: green perceived value, perceived knowledge, attitude, subjective norm, and trust. *Journal of Retailing Consumer Services*, 67, 102988. <https://doi.org/10.1016/j.jretconser.2022.102988>
- Sadiq, M., Bharti, K., Adil, M., & Singh, R. (2021). Why do consumers buy green apparel? The role of dispositional traits, environmental orientation, environmental knowledge, and monetary incentive. *Journal of Retailing and Consumer Services*, 62(May), 102643. <https://doi.org/10.1016/j.jretconser.2021.102643>
- Sethi, V., & Jain, A. (2020). The role of subjective norms in purchase behaviour of green FMCG products. *International Journal of Technology Transfer and Commercialisation*, 17(2-3), 219-241. <https://doi.org/10.1504/IJTTC.2020.109407>
- Shafie, S. B., Kamis, A., & Ramli, M. F. (2021). Sustainability of fashion apparel toward environmental well-being and sustainable development. *Journal of Vocational Education Studies*, 4(1), 60-78. <https://doi.org/DOI: 10.12928/joves.v4i1.3638>
- Sharma, N., Saha, R., Sreedharan, V. R., & Paul, J. (2020). Relating the role of green self-concepts and identity on green purchasing behaviour: an empirical analysis. *Business Strategy and the Environment*, 29(8), 3203–3219. <https://doi.org/10.1002/bse.2567>
- Sherwani, M. M. K., Khan, M. A., Amanullah, M., & Khaled, A. S. D. (2021). An empirical investigation of factors influencing green product purchase intention of millennials. *Studies in Economics and Business Relations*, 2(1), 45–59. <https://doi.org/10.48185/sebr.v2i1.307>
- Singha, K., Pandit, P., Maity, S., & Sharma, S. R. (2021). Chapter 11 - Harmful environmental effects for textile chemical dyeing practice. In Ibrahim, N. & Hussain, C. M. (Eds.), *Green Chemistry for Sustainable Textiles: Modern Design and Approaches* (pp. 153–164). Duxford, UK: Woodhead Publishing. <https://doi.org/https://doi.org/10.1016/B978-0-323-85204-3.00005-1>
- Sobuj, M., Khan, A. M., Habib, M. A., & Islam, M. M. (2021). Factors influencing eco-friendly apparel purchase behavior of Bangladeshi young consumers: case study. *Research Journal of Textile and Apparel*, 25(2), 139–157. <https://doi.org/10.1108/RJTA-10-2019-0052>
- Tan, T. Le, & Quang, N. D. (2023). Influences of environment perception and social media communication via brand loyalty on the intention to buy green products among Vietnamese youth. *International Journal of Applied Economics, Finance and Accounting*, 16(2), 158–172. <https://doi.org/10.33094/ijaefa.v16i2.942>

- Tawde, S., Kamath, R., & ShabbirHusain, R. V. (2023). 'Mind will not mind'—Decoding consumers' green intention-green purchase behavior gap via moderated mediation effects of implementation intentions and self-efficacy. *Journal of Cleaner Production*, *383*, 135506. <https://doi.org/10.1016/j.jclepro.2022.135506>
- Uddin, S. M. F., Khan, M. N., Faisal, M. N., & Kirmani, M. D. (2023). Demystifying the green purchasing behavior of young consumers: moderating role of green skepticism. *Journal of Global Scholars of Marketing Science*, *33*(2), 264–284. <https://doi.org/10.1080/21639159.2022.2163415>
- Varah, F., Mahongnao, M., Pani, B., & Khamrang, S. (2021). Exploring young consumers' intention toward green products: applying an extended theory of planned behavior. *Environment, Development and Sustainability*, *23*(6), 9181–9195. <https://doi.org/10.1007/s10668-020-01018-z>
- Walters, P. (2021). Are generation Z ethical consumers? In Stylos, N., Rahimi, R., Okumus, B., & Williams, S. (Eds.), *Generation Z Marketing and Management in Tourism and Hospitality* (pp. 303–325). Cham: Palgrave Macmillan. https://doi.org/10.1007/978-3-030-70695-1_12
- Wang, Y. M., Zaman, H. M. F., & Alvi, A. K. (2022). Linkage of green brand positioning and green customer value with green purchase intention: the mediating and moderating role of attitude toward green brand and green trust. *SAGE Open*, *12*(2), 215824402211024. <https://doi.org/10.1177/21582440221102441>
- Welsch, H., & Kühling, J. (2018). How green self image is related to subjective well-being: pro-environmental values as a social norm. *Ecological Economics*, *149*(October 2017), 105–119. <https://doi.org/10.1016/j.ecolecon.2018.03.002>
- Witek, L., & Kuźniar, W. (2021). Green purchase behavior: the effectiveness of sociodemographic variables for explaining green purchases in emerging market. *Sustainability (Switzerland)*, *13*(1), 1–18. <https://doi.org/10.3390/su13010209>
- Xie, X., Huo, J., & Zou, H. (2019). Green process innovation, green product innovation, and corporate financial performance: a content analysis method. *Journal of Business Research*, *101*, 697–706. <https://doi.org/10.1016/j.jbusres.2019.01.010>
- Xu, Y., Chen, Y., Burman, R., & Zhao. (2014). Second-hand clothing consumption: a cross-cultural comparison between American and Chinese young consumers. *International Journal of Consumer Studies*, *38*(6), 670–677. <https://doi.org/10.1111/ijcs.12139>
- Xu, Y., Du, J., Khan, M. A. S., Jin, S., Altaf, M., Anwar, F., & Sharif, I. (2022). Effects of subjective norms and environmental mechanism on green purchase behavior: an extended model of theory of planned behavior. *Frontiers in Environmental Science*, *10*(February), 1–13. <https://doi.org/10.3389/fenvs.2022.779629>
- Zameer, H. Y. (2022). Green innovation and environmental awareness driven green purchase intentions. *Marketing Intelligence & Planning*, *40*(5), 624–638. <https://doi.org/10.1108/MIP-12-2021-0457>
- Zheng, Y., & Chi, T. (2015). Factors influencing purchase intention towards environmentally friendly apparel: an empirical study of US consumers. *International Journal of Fashion Design, Technology and Education*, *8*(2), 68–77. <https://doi.org/10.1080/17543266.2014.990059>
- Zhuang, W., Luo, X., & Riaz, M. U. (2021). On the factors influencing green purchase intention: a meta-analysis approach. *Frontiers in Psychology*, *12*(April), 1–15. <https://doi.org/10.3389/fpsyg.2021.644020>