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Strategic Design to Increase Consumer Purchase Intentions for Sustainable Fashion Products Using Theory of Planned Behavior

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Abstract: The fashion industry has seen a rise in interest in sustainable fashion, despite criticism for its negative impact on the environment, economy, and society. Shoes are a popular sustainable fashion product, but public opinion is often influenced by high prices. This study investigates the factors that affect purchase intentions for sustainable fashion shoes in Indonesia, using the Theory of Planned Behavior framework and Covariance-Based Structural Equation Modeling. The aim is to identify factors that influence consumer purchase intentions for sustainable fashion shoes from a local shoe business and provide strategy recommendations for increasing purchase intentions among Indonesian consumers. This study proposes 14 strategy recommendations, prioritizing three using the strategy-to-mission matrix and Ansoff matrix.

Keywords: sustainable fashion; purchase intention; Theory of Planned Behavior; Covariance-Based Structural Equation Modeling; Ansoff matrix; Strategy to Mission matrix

1. Introduction

Technology that is getting advanced and developing from time to time has led to continuous changes. Data from the Creative Economy Agency in early 2021 shows that the creative economy sector has contributed 7.38% to the national economy[1]. One of the 17 sub-sectors of Indonesia's creative economy is the fashion sector which continues to grow and become a very profitable business opportunity. The fashion sector contributes around 18.15% to the Gross Domestic Product (GDP) of the Creative Economy, which shows that the fashion industry in Indonesia has enormous potential[1].

The fashion industry comprises various processes, such as designing, producing, marketing, and delivering products to meet the requirements of end users. For the smooth running of these processes, the fashion industry cooperates with several parties, such as textile manufacturers, apparel manufacturers, distributors, and distribution channels[2]. The fashion industry accounts for nearly 10% of global carbon emissions and is the second largest pollutant producer which is due to the long end-to-end production process[3]. It is shown that unsustainable production processes and practices generated up to 1.2 billion tonnes of CO2 in 2015[4].

The fashion industry depends on water. With water as a raw material in the industrial process chain, this industry is the second most polluting environment after the oil industry. It takes 2,700 liters of water to make one t-shirt which is equivalent to 715 gallons of water; the manufacture of one piece of jeans can consume 10,000 liters of water, and a textile factory can spend 200 tons of fresh water for fabric dyeing[5].

The fashion industry can also lead to an increase in toxic solid waste[6] . According to the Pulse Report Sustainable Fashion[7], only 10% of waste fashion is successfully recycled worldwide through waste prevention, reuse, material recycling, biological treatment, and other types of recycling – for example, incineration for energy production and landfill disposal[8]. Aside from these examples, one of the most commonly used ways to deal with waste fashion is by burning it, which indirectly impacts the world economy because it suffers a loss of USD 500 billion per year from clothes that are rarely worn and not recycled[9]. In addition to the environmental and economic aspects, Kata Data (2019) stated that the fashion industry also has a social impact where out of 34% of workers are in Asia[9], more than 50% of workers are not paid according to the minimum wage, an average of 56 get injured per 100 workers each year[10], workers in factories and sweatshops may face health and safety risks, such as exposure to hazardous chemicals, inadequate safety measure, and repetitive strain injuries which may lead to musculoskeletal disorders[11], and inadequate safety measures and that most of the workers are underage.

Sustainable fashion is a trend in the fashion industry which prioritizes the values of the various parties

involved, especially the environment and humanity, so that the business runs sustainably and minimizes loss. Sustainability in the fashion industry has three main aspects consisting of environmental, social, and economic. However, apart from these three aspects, sustainable fashion can still be expanded with two additional aspects; aesthetic and cultural.

One sustainable fashion product currently feeling the increase in demand is shoes. In the fashion industry, shoes are known as one that pollutes the environment. Indonesia's shoe production ranks 4th in the world after China, India, and Vietnam, contributing 4.6 percent of the total shoe production in the world[12]. However, as the shoe industry develops, problems arise related to the processing of leather raw material, chromium (Cr), which has a harmful impact on the water eco-system and indirectly affecting human health when released in big bodies of water such as rivers continuously[13].

There has been a small local Indonesian business that supports the eco-friendly movement by creating and producing well-designed and environmentally friendly shoes to provide sustainable value to society. They use materials that are processed naturally without waste that is harmful to the environment. Their products have a price range of Rp. 375 thousand to Rp. 2,799 million. This small business will be used as the research object.

However, public opinion about sustainable products is considered a gimmick simply because they have the same function as conventional products, while the price offered is higher than products made from non-environmentally friendly raw materials. This research aims to identify the factors influencing the intention to purchase sustainable fashion products in Indonesia using Theory of Planned Behaviour, specifically focusing on sustainable fashion shoe products to better understand how to encourage consumer purchase intention. The objective is to provide strategy recommendations for small local businesses to increase the purchase intention of Indonesian consumers towards sustainable fashion products.

The unique aspect of this study is to understand how sustainable shoes affect people's decision to buy them in Indonesia. This research looks at different aspects like product transparency, consumers' product knowledge, pricing, and social trends to see what influences people's preferences and buying habits. This research shows that there are subtle differences in how Indonesian consumers adopt sustainable shoes, and this is influenced by socio-cultural, psychological, and ethical factors. This study fills a gap in the existing research by providing practical insights and strategy recommendations for marketers and business owners, which previous studies haven't done. It suggests strategies such as investing in product innovation, emphasizing product knowledge using educational campaign and collaborating with influencers, and promoting certification to encourage eco-friendly fashion choices globally.

2. Literature Review

2.1 Sustainable Fashion

Sustainable fashion emerged in the 1960s as a trend started by environmentally conscious consumers demanding reforms in fashion industry practices[14]. This trend focuses on reducing the negative environmental and social impacts of the fashion industry while also promoting a more responsible approach to clothing production and consumption. Key aspects include using eco-friendly materials such as organic cotton, hemp, and recycled fabrics, which require less resources and energy, and minimizing the carbon footprint. Sustainable fashion also emphasizes fair employment practices and ethical working conditions throughout the supply chain, challenging the exploitative practices prevalent in the industry. Additionally, this trend advocates a shift towards a circular economy in which clothing is designed to be reused, repaired, or recycled, fighting the waste of fast fashion. Consumer support and brand transparency are critical to creating a more sustainable future that respects the planet and the people involved in the production process[15, 16].

2.2 Purchase Intention

Purchase intention is a stage in purchasing decisions where consumers begin to have an interest and desire to buy a product with a preference for certain brands[17]. Factors influencing purchase intention include motivation, perception, knowledge, and consumer beliefs[18]. The buying process itself involves several steps, such as problem recognition, information search, brand evaluation, decision-making, and consumer satisfaction. Purchase intention is part of the decision-making process in which consumers choose products that are expected to provide satisfaction and meet their needs. Thus, purchase intention can be influenced by attitudes, subjective norms, and perceptions of internal behavioral control.

2.3 Theory of Planned Behavior

The Theory of Planned Behavior (TPB) is a socio-psychological theory that explains the decision-making process and individual behavior. Theory of Planned Behavior is built from the Theory of Reasoned Action (TRA) by adding a behavioral control construct to the model[19]. TPB shows that human behavior is influenced by external factors and objective circumstances rather than solely determined by the individual will. TPB consists of three main variables: attitudes toward behavior, subjective norms, and perceived behavioral control. Attitude refers to an individual's evaluation or comfort level regarding a particular behavior. In sustainable shoe contexts, attitude denotes how people perceive eco-friendly footwear, considering factors like environmental benefits, quality, comfort, and style. Subjective norms

represent social pressure and influence from significant others to engage in certain actions such as how individuals perceive social expectations and support for sustainable shoes, influenced by family, friends, peers, and social networks, shaping their attitudes and behaviors towards eco-friendly footwear. Perceived behavioral control reflects an individual's perception of their ability to perform the behavior based on several factors such as abilities, resources, and opportunities. In the context of sustainable shoes, reflects individuals' beliefs in their ability to purchase and adopt sustainable shoes, considering factors like accessibility, availability, affordability, and familiarity with eco-friendly footwear options. These variables collectively affect behavioral intention, an individual's tendency to perform certain actions[19]. TPB has been applied in various fields, including technology, health, environmental research, and politics, to understand and predict human behavior[20, 21]

2.4 Structural Equation Modeling

Structural Equation Modeling (SEM) is a multivariate statistical method used to model and examine complex relationships between directly and indirectly observed variables[22]. SEM provides an appropriate and most efficient estimation technique for multiple regression equations, estimated simultaneously through factor analysis, path analysis, and regression. This method aims to examine the relationship between latent variables, the relationship between latent variables and their indicators, and measurement errors on the independent and dependent variables in a model[23].

Two types of research are commonly carried out; exploratory research and confirmation research. Confirmation research aims to test hypotheses from existing concepts or theories, while exploratory research aims to find patterns in the data[24]. Both types of research can be carried out using the SEM method, namely partial least squares or PLS-SEM used for exploratory research and covariance-based or CB-SEM used in confirmation studies. In this study, CB-SEM is considered an appropriate method to describe the influence of factors that influence product purchase intentions of small businesses in Indonesia for adopting existing theories and concepts carried out by M, Bhutto., X, Liu., Y. Soomro., M, Ertz., and Y, Baeshen (2020)[24].

CB-SEM is a statistical method used to analyze the relationship between observed variables and latent constructs in a research model. The method provides a comprehensive framework for investigating theoretical concepts and hypotheses by analyzing the underlying relationships between variables. The CB-SEM method consists of five stages; model specification stage, identification stage, estimation stage, model compatibility testing stage, and respecification or modification stage.

2.5 Ansoff Matrix

Matrix is a conceptual framework used by companies to plan business growth strategies[25]. In this conceptual framework, Ansoff defines four alternatives used in the framework[26]. Firstly, the market penetration uses to increase sales in existing markets. Secondly, the market development use to make changes from existing markets by creating new markets. Thirdly, product development use to make improvements to existing products or services. Lastly, diversification use to make a thorough change in terms of products and markets.

2.6 Strategy to Mission Matrix

Strategy-to-mission matrix aims to determine the correlation and compatibility between strategy and the organization's mission[27]. This approach is taken when formulating a strategy at the management level. Every strategic decision will be evaluated based on mission considerations and potential conflicts. With limited resources, it is impossible for an organization to carry out all activities properly because organizational leaders must carry out risk acceptance and management. The risk categorization scale used to evaluate the desired outcome for each scenario includes the following:

- Low (black): high mission relevance
- Medium (dark gray): moderate relevance to the mission
- High (light gray): low mission relevance
- Not applicable (white): no mission relevance

In the mission and strategy matrix, the row sections are filled with elements of the mission, the column sections are filled with the strategies to be evaluated, and the meeting between the two sections is said to be the matrix. Each element of the mission has weight indicating the relative importance of the elements. Then, the matrix section is categorized according to relevance, risk, and resources between the mission and strategy to be evaluated[28].

3. Research Methodology

3.1 Model Conceptualization

The conceptual model adapted as a research model in this study was used to investigate consumers' intention to purchase energy-efficient appliances[29]. This model consists of 8 variables, of which 4 are adaptations of the Theory of Planned Behaviour approach and 5 additional variables to better understand consumers' purchasing intentions for sustainable fashion shoe products in a comprehensive manner. While energy-efficient appliances and sustainable fashion shoe products may seem distinct, there are indeed some similarities in terms of consumer behaviour and purchasing intentions. Both categories of products involve environmental considerations in

minimizing carbon footprints.

With environmental consideration from both products, social influence also play a role in consumer behaviour and purchasing intentions in the adaptation of sustainability, especially in developing countries like Indonesia and Pakistan where consumers are just starting to become environmentally aware. Furthermore, energy-saving home appliance products and sustainable fashion shoe products have their own perceived value such as high quality material, cleaner production process, and comfort. With these attributes, consumers may or may not be willing to pay a premium for products despite their long-term benefits and values regarding sustainability and environmental responsibility. Recognizing these similarities between the two products allowed us to utilize the conceptual model by Muhammad Yaseen Bhutto in order to analyse consumer intentions towards sustainable fashion shoe products.

Most research into green behaviors only focused on the roles of attitude, perceived behavioral control, and subjective norms in shaping consumer purchase behaviors. These three roles are rooted as the three main variables in the Theory of Planned Behavior (TPB). However, other variables need to be included in the TPB model to examine further consumers' purchase intention in developing economies towards green products.

Psychological benefits such as utilitarian environmental benefits and warm glow benefits can be fundamental determinants of environmentally friendly purchasing as consumers tend to be more inclined to pay more for environmentally and sustainable products that allow them to feel positive about helping others and protecting the environment. Consumers recognize that using environmentally friendly products offers more benefits than conventional ones. Sustainable shoes provide various environmental benefits, such as reducing resource consumption, minimizing waste generation, conserving ecosystems, and protecting biodiversity. Additionally, sustainable shoe production focuses on water efficiency and pollution prevention to reduce water consumption, minimize contamination, and mitigate negative impacts on freshwater ecosystems and communities[30]. These few advantages are seen as utilitarian environmental benefits that strongly influence consumer attitudes and motivate them to buy eco-friendly shoes. Understanding that their purchase supports environmental conservation and sustainability enhances consumers' perception of the value proposition of sustainable shoes.

Warm-glow describes the emotional reward that an individual may experience when enacting pure altruistic behavior—typically in the form of giving. In exchange for doing good, a hedonic reward is received[31]. Past research suggests that consumers may experience personal satisfaction when engaging in altruistic and environmentally conscious behaviors[32]. This can include using environmentally friendly products or services, which leads to individual motivation driven by a sense of commitment and generosity towards the environment and human resource. With an increase in sense of commitment and generosity towards the environment and human resource, this could impact consumer attitudes towards environmentally friendly shoes, despite their high prices.

Past findings have shown that such positive emotions can influence consumers' attitudes directly or indirectly[24]. Hence, these normative beliefs and moral obligations are added to the TPB conceptual model as determinants of consumers' environmental intention. Moral obligations influence behavior in social and environmental situations. Previous study has found a strong connection between moral obligation and intention to engage in environmentally friendly actions[33]. In the case of sustainable shoes, individuals who feel morally responsible to protect the environment tend to follow their own ethical standards and avoid conventional shoes that have negative environmental and unethical impacts.

In contrast, normative beliefs are the expectations others have for your behavior in social pressure and moral situations. Previous studies have examined the relationship between normative beliefs and subjective norms. In the context of sustainable shoes, normative beliefs about subjective norms for sustainable shoe products reflect people's perceptions of societal expectations, peer influence, cultural contexts, media and marketing, regulations, and the role of opinion leaders and influencers in shaping attitudes and behaviors towards environmentally responsible footwear choices. Understanding these normative beliefs is crucial for promoting sustainable consumption and fostering a culture of sustainability in small local businesses in Indonesia. Hence, these two variables are said to influence consumers' subjective norms.

Eco-literacy is also added as a moderator variable to examine the moderating role of eco-literacy in the relationships between attitude, subjective norms, perceived behavioral control, and intentions to purchase. Past study has mentioned that with eco-literacy, consumers are more likely to base their purchasing decisions on logic rather than emotion if they are knowledgeable about environmental issues[34].

As a developing country, Indonesia is making strides towards incorporating sustainability into its fashion sector, which can be seen through an increase in sustainable fashion local brands in the country. There has been a growing recognition among consumers, fashion businesses, and policymakers in the country about the environmental and social benefits of sustainability and their obligation to play a role in it. However, despite the growing awareness, Indonesian consumers' purchase intention toward sustainable fashion products is still low. Based on the pilot survey results, only 10.5% of 143 respondents in Indonesia consider environmental impacts and production ethics when shopping for fashion products. Then, only 21% of the respondents are ready to

buy sustainable fashion products rather than regular fashion products if they are more expensive. Hence, additional research is needed to examine the low purchase intention with the current consumer's attitude, behaviors, and awareness towards sustainable fashion product consumption in developing countries like Indonesia, with the conceptual model as shown in Fig. 1.

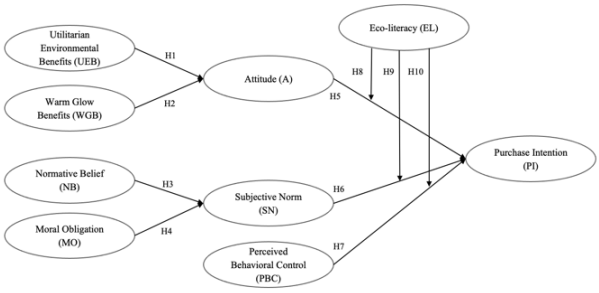

Fig. 1: Conceptual Model

3.2 Questionnaire Design

A questionnaire was designed based on the theoretical models and definitions by M, Bhutto., X, Liu., Y. Soomro., M, Ertz., and Y, Baeshen (2020)[24]. The research has 28 indicators as observed variables to measure eight latent variables, so there are a total of 28 questions asked of respondents. Respondents must answer questions using a 5-point Likert scale: (1) Strongly Disagree; (2) Disagree; (3) Neutral or Disagree; (4) Agree; (5) Strongly Agree. The list of questions formulated is shown in Table 1.

Table 1. List of Questionnaire Questions

Variable	Indicator	Question
Attitude (A)	A1	I feel that buying sustainable shoe products is a good idea
	A2	Environmental protection is important to me when purchasing shoes
	A3	If I can choose between sustainable and unsustainable shoe products, I prefer sustainable shoe products.
Subjective Norms (SN)	SN1	Most of the people who are important to me think that I should buy shoes that are sustainable.
	SN2	Using sustainable shoes is a social trend.
	SN3	People whose opinions I respect would buy sustainable shoes instead of unsustainable ones.
Perceived Behavioural Control (PBC)	PBC1	I am confident that I would use sustainable shoes even if it is slightly more expensive.
	PBC2	I have the resources, knowledge, and ability to use shoe products that are sustainable.
	PBC3	I am confident that I would use sustainable shows even if another person advises me to use non-sustainable ones.
Utilitarian Environmental Benefits (UEB)	UEB1	Sustainable shoe products respect the environment
	UEB2	Sustainable shoe products help prevent global warming
	UEB3	Sustainable shoe products do not pollute the environment
Warm Glow Benefits (WGB)	WGB1	I like to contribute to environmental protection by buying shoes that are sustainable.
	WGB2	I have the feeling of contributing to the well-being of humanity when buying sustainable shoes
	WGB3	I admire individuals who voluntarily buy shoe products that are sustainable.
Moral Obligations (MO)	MO1	I feel it is a moral obligation to purchase sustainable shoes in fulfilling my responsibility to the environment.
	MO2	I feel it is a moral obligation to purchase sustainable shoes, although they are expensive.
	MO3	I feel it is a moral obligation to purchase sustainable shoes for environmental protection.
Normative Belief (NB)	NB1	My family thinks I should purchase sustainable shoes in place of unsustainable ones.
	NB2	My friends think I should purchase sustainable shoes in place of unsustainable ones.
	NB3	I value the opinions and feelings of my family and friends about my environmentally friendly behavior.
Eco-Literacy (EL)	EL1	I prefer to check the eco-labels and certifications on sustainable shoes before I purchase
	EL2	I want to have a deeper insight into the inputs, processes, and impacts of shoes before I purchase
	EL3	I understand the environmental phrases and symbols on product packages.

Purchase Intention (PI)	P1	I prefer to buy products that are sustainable
	PI2	When buying shoe products, I prefer shoes that are sustainable
	PI3	I will buy shoe products that are more environmentally friendly.
	PI4	I will choose sustainable shoes when buying shoes

3.3 Pilot Testing

Pilot testing is tested on a smaller scale of respondents with a minimum of 30 people[35]. However, the pilot testing in this study was conducted on 50 respondents to check the validity and reliability of the questionnaire. If the results show invalidity and unreliability, it is mandatory to improve the questionnaire before collecting data.

The validity test was carried out to check the suitability and accuracy of the research questionnaire in carrying out its function as a measuring tool. In this study, testing was carried out using Pearson Correlation Coefficient, namely comparing the r value obtained with the r table value for each indicator. By using the IBM SPSS Statistics 20 software, the r value for all indicators is greater than the r table value of 0.279. Thus, the questionnaire can be considered valid.

The reliability test was carried out because reliability aims to find out that the measuring instrument used in this study is proven to be reliable. The test used to measure reliability is carried out by checking the Cronbach alpha value obtained. The Cronbach's Alpha value obtained for 28 points is 0.879 which can be considered reliable as it is greater than 0.6.

3.4 Data Processing

For the estimation of the sample size, the estimation technique used for this research will be Maximum Likelihood Estimation. Based on the Maximum Likelihood Estimation method, the sample size required will be at least 5 times, or ideally 10 times, the number of indicators or the number of observed variables from the all the latent variables[35]. Since there is a total of 28 indicators in this research, thus based on the theory of Maximum Likelihood Estimation, the minimum number of respondents required, or minimum sample size is at least 140 respondents but ideally 280 respondents. Data processing can be done after fulfilling the required number of respondents.

Processing of data that has been collected will be carried out using IBM SPSS AMOS 26 software using the CB-SEM method. Data processing includes measurement model testing, structural model testing, and model specification. Hypothesis testing will be carried out at the end of data processing to obtain a significant or insignificant relationship between variables to determine which variables affect other variables.

3.5 Strategic Planning

The analysis was carried out based on the results of data processing. After conducting an analysis, a literature review was carried out with the assistance of Ansoff Matrix to generate a list of recommended strategies. The recommended strategies are then linked to the results of the analysis. In order to get a prioritized list of strategies, experts will validate strategies using Strategy to Mission Matrix

4. Result

Questionnaires for small business consumers were distributed via social media, with 310 respondents received. The number of respondents obtained exceeds the minimum required, 140 respondents, so that it can be processed using the CB-SEM method. The table below shows the demographic variables of the respondents.

Table 2. Respondent Demographics

	Frequency	Percentage
Gender		
Female	205	65.8%
Male	105	34.2%
Age		
17-25	146	47%
26-42	131	42%
43-58	33	11%
Education		
High School	72	23.2%
Diploma	42	13.5%
Undergraduate	150	48.4%
Master's Degree	38	12.3%
PhD	8	2.6%

The conceptual model consists of a total of 9 latent variables and 27 observational variables or indicators. The nine variables are Utilitarian Environmental Benefits (UEB), Warm-glow Benefits (WGB), Normative Beliefs (NB), Moral Obligations (MO), Attitudes (A), Subjective Norms (SN), Perceived Behavioral Control (PBC), Eco-literacy (EL), and Purchase Intention (PI). Table 2 shows a total of 10 hypotheses to be tested in this study based on this conceptual model, that has been modified according to the research subject[36].

Table 3. Research Hypothesis

Hypothesis	Description
H1	Utilitarian environmental benefits positively influence consumer attitudes toward sustainable shoes
H2	Warm glow benefits positively influence consumer attitudes toward sustainable shoes
H3	Normative Beliefs have a positive influence

	on subjective norms
H4	Moral obligations have a positive influence on subjective norms
H5	Attitudes positively influence the intention to purchase sustainable shoes
H6	Subjective Norms positively influence the intention to purchase sustainable shoes
H7	Perceived behavioral control positively influence the intention to purchase sustainable shoes
H8	Eco-literacy moderates the relationship between attitude and purchase intention toward sustainable shoes
H9	Eco-literacy moderates the relationship between subjective norms and purchase intention toward sustainable shoes
H10	Eco-literacy moderates the relationship between perceived behavioral control and purchase intention toward sustainable shoes

The model is identified by calculating the degree of freedom (df) of the model to ensure that the information obtained is sufficient to obtain a solution to the structural equation [23]. A structural equation model can estimate the value of each variable if the *degree of freedom* (df) of the model is positive. The df value of the research model is 342, which indicates that the research model is classified as overidentified because of the value degree of freedom (df) > 0 so that data processing can be continued.

4.1 Measurement Model Testing

The two-step approach is used to verify the model's validity and reliability in order to test the measurement mode. *Confirmatory Factor Analysis* (CFA), a method used to measure the ability of observed variables or indicators to measure latent variables in a measurement model, is used to test validity. An observed variable can pass the validity test if the critical ratio is > 1.96 with probability (p) < 0.05. The data processing results showed that each observed variable has CR > 1.96 and all (p) < 0.05. Therefore, the measurement model can be considered valid, and all indicator variables are able to measure latent variables.

The reliability test of the measurement model is done by calculating the value of Construct Reliability (CR) and the value of Average Variance Extracted (AVE). Reliability is closely related to the consistency of indicators or observed variables in measuring their latent variables. Therefore, a construct can have good reliability if the CR value is > 0.7 and the AVE value is > 0.5. The construct reliability (CR) and average variance extract (AVE) values obtained from data processing showed that the CR values obtained for all variables are greater than 0.,6, and the AVE values are all greater than 0.5. Therefore, all latent variables meet the criteria and are considered reliable.

4.2 Structural Model Testing

The structural model is tested for its fitness using the Model Fitness Test, which looks at the Goodness of Fit Indices or the degree of fit between the research model and the sample data used. Index Goodness of fit used for measurement are GFI, AGFI, CFI, RMSEA, CMIN/DF, Chi-Square, and Probability. Table 4 shows the value condition for Goodness of Fit Indices and the results of the research model fit test, which has several fit sizes in the value marginal *fit* and *bad fit*.

Table 4. Model Fit Test Results

Index	Value Condition	Results Obtained
CMIN/DF	<2.00	3.304
GFI	>0.9	0.759
AGFI	>0.9	0.714
CFI	>0.9	0.852
RMSEA	<0.08	0.086
Probability	>0.05	0.000
Chi-Square	small	1129.935

Thus, it is necessary to re-specify the research conceptual model so that the level of compatibility can be increased. Respecification of the model was done by looking at the value modification *indices* obtained from this model on IBM SPSS AMOS 26.

4.3 Model Respecifications

The research model respecification stage resulted in a change in the degree of freedom value to 251. This degree of freedom value indicates that the model is still classified as an overidentified category. The overidentified model means that the research model can be tested again for the suitability of the model. Respecification of the model is done by connecting the covariance relationships that are connected based on the value of modification *indices* produced by IBM SPSS AMOS 26. This study carried out respecification 91 times based on the modification *indices* as shown in Fig. 2. The large value of respecification in the model can occur because of the moderator variable, eco-literacy, which increases the complexity of the model so that a more detailed analysis is needed on how the moderator interacts with other variables[33].

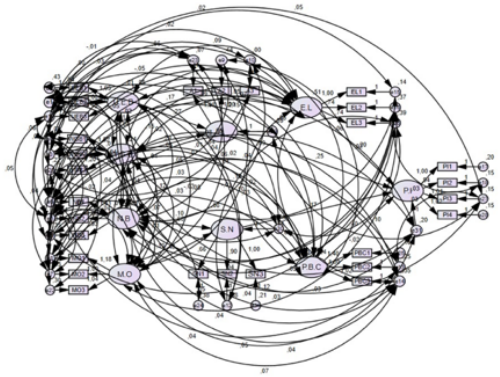

Fig. 2: Respecification Model Result

The model fit test is considered valid when three to four indexes of *goodness of fit* meet the requirements[23]. Table 4 shows the index value *goodness of fit* obtained after respecification. Based on the table below, the results show that for all match sizes, the value condition is met for the specified model except for Chi-Square. A large sample of data, or more than 200, can cause a decrease in the sensitivity of the Chi-square value[38]. However, model fit tests are generally accepted and considered good when three to four match indices are qualified[23]. Thus, the research model is considered a good fit model and can be continued for further process and analysis in research.

Table 5. Model Fit Test Results After Respecification

Index	Value Condition	Results Obtained
CMIN/DF	<2.00	1.147
GFI	>0.9	0.941
AGFI	>0.9	0.904
CFI	>0.9	0.003
RMSEA	<0.08	0.022
Probability	>0.05	0.054
Chi-Square	small	1129.935

4.4 Moderating Effects Testing

Moderating effects testing of eco-literacy and attitude to purchase intention is conducted to evaluate whether the interaction between the moderator variables eco-literacy and independent variables affect the strength of the relationship of the independent variable attitude, subjective norms, and perceived behavioral control, to the dependent variable purchase intention. The interaction term method is used to undergo moderating effects testing with IBM SPSS AMOS 26. A moderator variable can be said to have moderating effects when p-value < 0.05[39]. The results of the analysis will be continued in the hypothesis test.

4.5 Hypothesis Testing

By using the structural equation model (SEM) method, the relationship between latent variables and the relationship between latent variables and indicators was tested. Analysis of the causal relationship in this study was carried out by considering the p-value, direct effect, indirect effect, and total effect. P-value analysis was performed to determine the influence of a relationship between two latent variables. A latent variable has a significant influence on another variable if the p-value< 0.05. Table 6 shows the values p-value and the results of each hypothesis by bootstrapping method in the research. This research requires the use of the bootstrap method because the data obtained is not normally distributed, hence requires the use of a non-parametric approach.

Table 6. P-Value Analysis for Hypothesis Testing

Label	Hypothesis	p-value	Significance
H1	Utilitarian environmental benefits positively influence consumer attitudes toward sustainable shoes	***	Significant
H2	Warm glow benefits positively influence consumer attitudes toward sustainable shoes	***	Significant
H3	Normative Beliefs have a positive influence on subjective norms	***	Significant
H4	Moral obligations have a positive influence on subjective norms	0.001	Significant
H5	Attitudes positively influence the intention to purchase sustainable shoes	0.002	Significant
H6	Subjective Norms positively influence the intention to purchase sustainable shoes	0.001	Significant
H7	Perceived behavioral control positively influence the intention to purchase sustainable shoes	***	Insignificant
H8	Eco-literacy moderates the relationship between attitude and purchase intention toward sustainable shoes	0.701	Significant
H9	Eco-literacy moderates the relationship between subjective	0.009	Significant

	norms and purchase intention toward sustainable shoes		
H10	Eco-literacy moderates the relationship between perceived behavioral control and purchase intention toward sustainable shoes	0.006	Significant

Table 6 shows nine accepted research hypotheses, namely H1, H2, H3, H4, H5, H6, H7, H9, and H10. The nine hypotheses are accepted because they meet the requirements *p*-value < 0.05. The hypothesis with values *p*-value *** shows that the confidence level is more than 95% or less than 0.001. However, one hypothesis is rejected, namely H8, as it did not meet the value requirements *p*-value < 0.05. It is stated in H8 that eco-literacy does not moderate the relationship between attitude and purchase intention for sustainable shoes.

This study finds that utilitarian environmental benefits positively influence consumer attitudes toward sustainable shoes because the relationship between utilitarian environmental benefits and consumer attitudes had a *p*-value of ***, indicating that the *p*-value obtained was less than 0.001. This indicates that the relationship between the two variables is significant, and thus the hypothesis is accepted. This finding is in line with previous studies conducted by L, Zhang., Y, Fan., W, Zhang., S, Zhang (2019) and E, Muraguri., S, Jin., A, Samake (2020) which stated that when purchasing sustainable or eco-friendly products, consumers are not only considering product's functionality but also their overall experience which in this case the environmental experience[40,41]. This can be equated with consumers' attitudes when purchasing sustainable shoes.

The hypothesis testing for H2 shows that the relationship between warm-glow benefits and attitude had a *p*-value of ***, which indicate that the relationship between the two variables was significant, and thus the hypothesis is accepted. These results are consistent with the findings by K, Boobalan., N, Nawaz., H, RM and V, Gajenderan (2021), which mentioned that warm-glow benefits resulting from involvement in prosocial activities such as buying organic food products significantly affect consumers' attitudes because they believe it to be morally superior and socially responsible behavior[42]. They may feel good about themselves and achieve a sense of success. Their willingness to engage in the conduct improves as a result of this positive mindset.

For the research hypothesis H3, the relationship between normative beliefs and subjective norms had a *p*-value of ***. The relationship between the two variables can be considered significant. Thus, the hypothesis was accepted. According to S.I, Wu and J.Y, Chen (2014), a strong belief in social norms carried out by social groups, such as family or friends, who have strong ties generally guarantees behavior that aligns with social expectations[39].

This study finds that moral obligations positively influence subjective norms because the relationship had a *p*-value of 0.001. This indicates that the relationship between the two variables is significant, and thus the hypothesis is accepted. This finding is in line with the studies by S.I, Wu and J.Y, Chen (2014), which stated that subjective norms are influenced by moral obligations because in order to carry out a certain intention, the factors that influence are not only personal moral obligations but also social pressure[43]. Even if it goes against their own moral convictions, people may feel more pressure to conform if they believe that their social environment values or expects them to act in a certain way, including purchasing sustainable products.

The hypothesis testing result of H5 was deemed significant as the relationship between attitude and purchase intention had a *p*-value of 0.002,; thus, the hypothesis is accepted. This finding is aligned with the previous studies by C, Saricam., N, Okur (2019) and K.N, Dewanto., P.F, Belgiawan (2020) regarding the relationship between attitude and intention to buy sustainable fashion products, which consistently shows a positive relationship[44,45]. C, Saricam., N, Okur (2019) and K.N, Dewanto., P.F, Belgiawan (2020) show that a positive attitude drives consumers' intentions to buy sustainable fashion products, which occurs because a positive attitude tends to be followed by the intention to make it happen.

The relationship between SN with PI has a *p*-value of 0.001. This value indicates that SN has a positive influence on PI consumers for sustainable shoes. Thus, the H6 is accepted. Subjective norms of a person are created based on how others see them. Social pressure from an individual's reference group shapes consumer purchase intentions for sustainable fashion products. These results are reasonable because Asians tend to value collectivism. According to E, Sivadas., N.T, Bruvold, and M.R, Nelson (2008), in the Indonesian context, consumers tend to have high collectivism values, which means that the beliefs and behavior of those closest to them, such as family members, friends, and colleagues, will influence their purchasing decision[46].

From the hypothesis testing of H7, the relationship between perceived behavioral control toward purchase intention has a *p*-value below 0.001, denoted by ***. This value indicates that perceived behavioral control (has a positive influence on the purchase intention of consumers for sustainable shoes. This result is consistent with studies by W.C, Tseng and C.H, Chang (2015), S, Ko and B, Jin (2017), and M, Abrar., M.M, Sibtain and R, Shabbir (2021) which demonstrate that perceived behavioral control leads to a more positive purchase intention of green clothing products[47, 48, 49]

The study results for the hypothesis testing of H8 are

rejected due to a *p*-value obtained higher than 0.05. This indicates that eco-literacy does not moderate the relationship between attitude and purchase intention for sustainable shoes. This finding opposes the assumption made by the previous author's findings. *Eco-literacy* encourages consumers to look for products that do not harm the environment, and consumer knowledge about the environment helps their thought processes become beliefs that shape their attitudes towards the environment. However, according to S.K, Goh and M.S, Balaji (2016), M.I, Hamzah and N.S, Tanwir (2021), and M.N, Syadzwina and R.D, Astuti (2021), eco-literacy raises skepticism from consumers' anxiety of potential exaggerated and misleading claims[50,51,52]. Thus, differences in the hypothesized results can occur because the information provided to the organization has not been sufficiently confusing, and consumers have difficulty distinguishing accurate from inaccurate information.

The relationship between eco-literacy and subjective norms with purchase intention has a *p*-value below 0.05. The value shows eco-literacy moderates the relationship between subjective norms and purchase intention for sustainable shoes; thus, hypothesis is accepted. As previously stated by E, Sivadas., N.T, Bruvold, and M.R, Nelson (2008), asian countries, like Indonesia, tends to value collectivism which has strong social group values and beliefs to emphasize collective interests rather than individual interests[50]. Individuals with higher eco-literacy often advocate for sustainable practices and may act as role models within their social networks. In this role, they may amplify the effect of subjective norms on others in their social circle, encouraging them to adopt sustainable shoe purchases as well.

Lastly, the relationship between eco-literacy and perceived behavioral control with purchase intention has a *p*-value below 0.05, indicating Eco-literacy moderate the relationship between perceived behavioral control and purchase intention for sustainable shoes. According to R, Barkhi., F, Belanger and J, Hicks (2008), a higher level of knowledge affects the level of self-efficacy of individuals that positively relates to perceived behavioral control to achieve certain behaviors[53]. As a result, consumers who are well-informed about environmental issues and green products will believe they can purchase green clothing.

4.6 Strategic Planning

Ansoff matrix is used as a conceptual framework in this research to help small businesses plan strategies to improve business performance and the level of consumer buying interest for business growth. The strategy design is based on a literature review using the Ansoff Matrix framework, which consists of four alternatives, and the SEM hypothesis testing results between each variable in the processing section. Based on the results of a literature study and four alternatives in the conceptual framework, 14 strategic recommendations will be validated and prioritized together with small business experts. Table 7 shows the conceptual framework of the Ansoff Matrix analysis.

Table 7. Ansoff Matrix

Category	Strategy
Market penetration	Conduct social campaigns by donating a portion of the sales of its products to organizations that support the same goals as through social campaigns
	Collaborate with sustainable fashion influencers who are aligned with their values and messages
	Developing a brand community
	Share content that is informative, educational, and relevant to the target audience
	Offer loyalty programs or discounts for consumers who purchase the small business' products
	Collaborating with retail shops that have a focus on sustainable fashion products
Product Development	Innovate on the diversity of models and designs such as loafers and slip-on
	Develop affordable shoe products with high quality
	Obtaining environmental certification, such as an organic label or carbon neutral certification
Market Development	Creating marketing content through social media in the form of stories or testimonials from consumers
	Open or offline retail shops that are more accessible to consumers in various regions
	Organize an event sustainable fashion like pop-up events and eco-fashion runway show
Diversification	Launching a new sustainable product line, such as clothing made from leftover or eco-friendly materials with the small business logo
	Launching a new product line, such as sustainable shoe care

After developing the strategy recommendations formulated using Ansoff Matrix and literature studies, validation and assessment of the recommended strategies are carried out using the strategy to mission matrix. Strategy to mission matrix is used in this study as the research object has a mission and goals related to sustainability values, so the selected strategy recommendations must have relevance to these values. Validation and assessment were carried out by researchers

together with three experts, including the Chief Executive Officer with 12 years of experience, the Chief Operating Officer, as well as the Product Design and R&D of the small business with more than five years of experience.

In the first stage, the experts gave weight to three assessment factors:

- Relevance to the goals set by the small business
- The level of resources needed to implement the strategy recommendations
- The level of risk associated with the strategy

In the assessment, the highest level of importance is given to relevance to their goals or mission, followed by the availability of resources and risk as the last. Therefore, the selection of strategies is first focused on strategies with high mission relevance, high resource availability, and low risk, with the aim of increasing the chances of successful implementation of the strategy and achieving the set goals. Based on this assessment, three strategies were chosen as the focus or priority because these strategies correspond to the relevant key factors. According to B, Vegada., A, Shukla., A, Khilnani., J, Charan., and C, Desai (2016) using three alternative choices as a final strategy recommendation is that the level of effectiveness is more optimal compared to four or five choices[54]. The recommended strategies chosen include sharing content that is informative, educational, and relevant to the target audience, creating marketing content through social media in the form of interactive stories or testimonials from consumers, and launching a new sustainable product line, such as clothing made from leftover or eco-friendly materials with the small business logo.

The strategies prioritized above have high relevance to all the missions or goals set by the school. "Sharing content that is informative, educational, and relevant to the target audience" is the first strategy because it produces a total calculated value in the matrix of 62. This strategy has high resources and low risk because businesses committed to sustainability have a solid understanding of environmental concerns. They are able to provide dependable material as a result of their subject matter experience. They invest resources in research, content creation, and marketing since sustainability is essential to their business operations. Through this strategy, the target audience's knowledge of issues and consequences related to sustainable fashion to change their perceptions about the importance of changing behavior can increase.

The second priority strategy is "Creating marketing content through social media in the form of interactive stories or testimonials from consumers," with a total matrix calculation of 58. This strategy also has a low level of risk with moderate resources. This is because interactive stories and consumer testimonials have the potential to influence how customers perceive the brand, which can inspire and influence the attitudes of other consumers towards the product. Marketing content through social media can strengthen consumer perceptions of the utilitarian benefits derived from sustainable products. However, not all customers are eager to make their reviews and testimonials public for privacy reasons.

The third priority strategy is "Launching a new sustainable product line such as clothing made from leftover or eco-friendly materials with the small business logo", also considered to have moderate resources but a high level of risk so that it can affect the chances of success of the strategy with a total calculation value of 53 on the matrix. This is because launching a new sustainable product line requires a large up-front investment in production, research, development, and the sourcing of sustainable resources. It might be risky for small businesses with little resources to make this financial investment. Despite the risk, this strategy is prioritized because by offering various sustainable products, sustainable fashion brands can provide consumers with more choices and make it easier for them to adopt sustainable behaviors in their daily lives.

5. Conclusion

This research represents the importance of utilitarian environmental benefits, warm-glow benefits, moral obligations, normative beliefs, attitude, subjective norms, perceived behavioral control, and eco-literacy in the realm of sustainable fashion product, specifically shoes, purchase intention in Indonesia. Based on the hypothesis testing conducted, most hypotheses showed a significant relationship and were accepted, except for hypothesis H8. This might be due to eco-literacy raises scepticism from consumers' anxiety of potential exaggerated and misleading claims. Based on this results, three main strategies are recommended to be used by marketers and small business owners, which are sharing content that is informative, educational, and relevant to the target audience, creating marketing content through social media in the form of interactive stories or testimonials from consumers, and launching a new sustainable product line, such as clothing made from leftover or eco-friendly materials with the small business logo. It is important to create this exposure with transparency.

6. Recommendation

The following are suggestions that can be given for further research on a similar topic:

1. Research can be done by identifying other variables that are considered necessary in sustainable *fashion* and can affect consumer purchase intentions.
2. The majority of respondents came from the younger generation. A different group of respondents with more even demographics will produce better results.

3. Observation techniques should be used in future studies. The use of observation techniques such as interviews can further enhance the understanding of pro-environmental behavior, where more rational and astute behavior can be examined.

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