

## Determining Factors that Influence Indonesian Consumers' Sustainable Purchase Behavior

Glenito Yusuf Bagaskoro<sup>1</sup>, Annisa Rahmani Qastharin<sup>2</sup>

Institut Teknologi Bandung<sup>1,2</sup>

Jl. Ganesa No.10, Lb. Siliwangi, Kecamatan Coblong, Kota Bandung, Jawa Barat  
40132, Indonesia

Correspondence Email: [glenito\\_yusuf@sbm-itb.ac.id](mailto:glenito_yusuf@sbm-itb.ac.id)

ORCID ID: <https://orcid.org/0000-0001-6311-0408>

### ARTICLE INFORMATION

#### Publication Information

#### Research Article

#### HOW TO CITE

Amran, Y., & Nisa. (2021). CSR in the Covid-19 situation in Indonesia. *Journal of International Conference Proceedings*, 9(1), 23-31.

#### DOI:

<https://doi.org/10.32535/jicp.v4i2.1250>

Copyright@ year owned by Author(s).  
Published by JICP



This is an open-access article.  
License: Attribution-Noncommercial-  
Share Alike (CC BY-NC-SA)

Received: 3 September 2021

Accepted: 26 October 2021

Published: 16 November 2021

### ABSTRACT

Previous research has found a poor correlation between consumers' positive attitudes on sustainable purchasing and their actual purchasing behavior; this term can be referred to as an attitude-behavior gap. This study aims to identify factors that influence consumers' sustainable purchase behaviors and generate recommendations for a marketing approach. A survey has been done on 150 respondents, consisting of Millennials and Generation Z in Jabodetabek, Yogyakarta, and Bandung, with the utilization of Social Cognitive Theory (SCT). The study uses SEM-PLS Confirmatory Factor Analysis (CFA) to examine the results. The hypothesis test shows that Supportive Behavior for Environmental Organizations and Perceived knowledge about sustainability issues are the two most significant factors influencing consumers' sustainable behavior; besides that, Perceived Marketplace Influence is the only variable proven not positively to influence consumer sustainable behavior. These findings can be utilized to generate marketing approach recommendations for SMEs in Indonesia that apply sustainability value by paying more attention and make it more relatable to the variables that have proven to influence consumers' sustainable purchase behavior significantly.

**Keywords:** Attitude–Behavior Gap, Marketing Approach, Perceived Marketplace Influence, Supportive Behaviors for Environmental Organizations, Sustainable Purchase Behavior

**JEL Classification:** M300, M310, Q560

## **INTRODUCTION**

Consumer demand for goods and services has expanded dramatically over the world in the previous decade, resulting in natural resource depletion and severe environmental harm (Chen & Chai, 2010). It is already widely known that extravagant consumption by society can cause many problems to the environment and society, such as pollution, environmental destruction, global warming, and increasing social disparity and poverty (Menon and Menon, 1997). These potential problems show the importance of recognizing the issues and trying to run the business in a sustainable way as their effort to prevent worse conditions. The sustainability value can be applied by companies in all industries, not to mention FMCG, fashion, F&B, and Tourism.

Pushing society to adopt sustainability values in their life, especially in terms of buying, is crucial to build a sustainable environment successfully. It can be seen that consumers' sustainable behavior is the key to building up a sustainable consumption environment. As a business typically follows its consumers' demand, logically, if the consumers' application on sustainable purchase behavior is non-existent, then there is no point for companies to provide more sustainable products that will cost more than non-sustainable products. Moreover, many companies offer similar products (Aryani et al., 2021); therefore, sustainability value can also help differentiate from other companies. With the incorporation of critical indicators that link a community's social, economic, and environment, the concept of sustainability is becoming increasingly significant worldwide (Alli et al., 2019).

To encourage consumers to buy sustainable products, a study of their behavior will be needed to generate a good marketing approach. The study of customer behavior is an essential part of the production and marketing of many goods. Their success depends on the decision of the customer's desire to purchase, including in the case of sustainable goods. The perceived market efficacy, or the perceived degree of influence that one's behaviors have on a particular situation, is one potential principle to consider when discussing this problem and will be the theoretical basis for the current research (Rubright, 2014). Understanding consumer behavior patterns and the variables that affect their purchase, business entities should completely understand when they should be involved in the process to achieve the results they want (Alexandra, 2013).

As time goes by, people tend to care more about what they are purchasing and feel responsible for what they did. According to the Nielsen Global Report (2015), 75% of Millennials, 72% of Generation Z, and 51% of Baby Boomers are willing to spend more on environmentally friendly products. Furthermore, 66% of all survey respondents stated they would be willing to pay more for products made by companies that have shown a commitment to having a beneficial impact on the environment. An increasing number of people intend to adopt sustainable consumerism (Tanner and WölflingKast, 2003; Young et al., 2009). However, it has been discovered that this increased intention to buy has not transformed into actual, long-term purchases (Young et al., 2009). Much previous research has found a poor link between customers' positive attitudes regarding sustainable purchasing activities and their actual purchasing behavior (Benson and Hiller Connell, 2014; Tanner and WölflingKast, 2003; Vermeir and Verbeke, 2006). The term "sustainable purchasing inconsistency" or "sustainable attitude-behavior gap" refers to this disparity or gap (Tanner and WölflingKast, 2003; Vermeir and Verbeke, 2006).

This study was inspired to discover factors that positively affect customers' sustainable purchasing behavior because of the current attitude-behavior gap and the lack of sufficient explanation, as well as the lack of studies on sustainable purchasing, especially in Indonesia. By doing this research, it is expected that the result of the study can give

accurate information about Indonesian Generation Z and millennials' sustainable purchase behavior and help Small and Medium Enterprises (SME) which applied sustainability value to determine the right marketing approach. By adjusting it to what best suits the market to transform people's intention to apply sustainable purchase behavior into actual activities, and higher conversion buying rate is expected to increase from these recommendations. A survey will be distributed to people (men and women) who are interested, aware, or even involved in the sustainability movement, ranging from 18 to 35 years old. This study does not include the detailed differentiation of behavior among respondents' gender, generations, location, and education level; this data is only used as respondents' identity verification so that it can assure all respondents fulfill the questionnaire requirements.

## **LITERATURE REVIEW**

The purpose of this study is to identify and examine the influence of customer support for environmental institutions, subjective norms, environmental concern, perceived sustainability knowledge, consumer attitude toward sustainable purchasing, and personal characteristics on consumer sustainable purchase behavior. The Author will present the foundations of previous studies' theories in order to develop a conceptual structure that will serve as a guideline for this research.

### **Sustainable Purchase Behavior**

Sustainable purchasing refers to consumers' consumption practices that are motivated by their sustainability concerns; sustainable purchasing involves the purchase of sustainability, environmentally supportive, and fair-trade goods. (De Pelsmacker et al., 2005). The term "Sustainable purchase behavior" can be applied generally and not bound with specific products or services in a particular industry as none of the previous studies mentioned the usage limitation of this term.

### **Social Cognitive Theory**

The proposed model considered social cognitive theory (SCT) and looked at behavior as both a result and a predictor variable. Individuals' distinctive ways of acquiring and maintaining behavior are taken into account in SCT. The idea considers a person's past experiences, which influence whether or not they will engage in behavioral action. These prior experiences have an impact on reinforcements, expectations, and projections, all of which affect whether or not a person will engage in particular action and why they do so (LaMorte, 2019). Through this framework, Phipps et al. (2013) affirm that sustainable behavior in one field has the possibility to spread over into another.

### **Environmental Behavior**

#### *Past supportive behaviors towards environmental organizations*

Consumer involvement in environmental organizations, not to mention by being a volunteer, giving donations, and becoming part of it, is referred to as supportive behavior for environmental organizations. In other words, supportive behavior for environmental organizations can be described as consumer behavior that supports an environmental organization in many ways and forms. Just one study (Lee, 2014) mentions that this variable positively impacts consumer sustainable consumption behavior.

H1: Supportive behaviors for environmental organizations will positively influence the sustainable purchase behavior of consumers.

### **Personal Factors**

#### *Attitude towards sustainable purchasing*

The attitude toward sustainable purchasing refers to a consumer's cognitive assessment of sustainable purchasing action. Sustainable purchasing attitudes include market

attitudes toward green and fair-trade purchases. According to a few studies on fair-trade shopping, there is a positive relationship between customer attitude and actions when it comes to buying balance-of-trade products. (Jin Ma et al., 2012; Ozcaglar-Toulouse et al., 2006). While some research shows a correlation between this variable with people's consumer behavior (Kozar and Hiller Connell, 2013; Tanner and WölflingKast, 2003), some of the others reveal a shaky or non-existent connection between the two variables. (Tanner and WölflingKast, 2003; Vermeir and Verbeke, 2006).

H2: Consumers' attitude towards sustainable purchasing will positively influence their sustainable purchase behavior.

#### *Perceived knowledge about sustainability issues*

Perceived knowledge can be defined as consumers' knowledge and awareness of the current sustainability issues around them and solutions to these problems. Previous studies on ecological comprehension have shown contradictory findings. Some studies have discovered a weak connection between environmental knowledge and behavior, while others have found a more robust link (Bang et al., 2000; Wolsink, 2007). Some other researchers have shown that a significant understanding of the environment is required to take effective environmental activity, and people who have a better understanding of the environment will tend to participate in sustainable purchasing actions (deCarvalho et al., 2015; Mostafa, 2006; Young et al., 2009).

H3: Perceived knowledge about sustainability issues will positively influence sustainable purchase behavior among consumers.

#### *Perceived marketplace influence*

The utilization of Perceived Marketplace Influence (PMI) constructs by Leary et al. (2014) is used in this research. The concept states that on various levels, some people believe that their desire to apply sustainable purchase behavior can affect other consumers and related organizations to adopt the sustainability value. This concept is similar to perceived consumer efficacy (PCE) in terms that people evaluate their potential to influence a situation through their actions (Bandura et al., 1999; Ellen et al., 1991). There is one study (Leary et al., 2014) that shows the positive effect of PMI on consumer environmental behavior.

H4: Perceived marketplace influence will positively affect the sustainable purchase behavior of consumers.

#### *Environmental concern*

Environmental concern can be defined as people's worries about the ecological condition (Yeung, 2004). It is shown that this variable is a significant factor in people's motivation to purchase organic food (Grunert, 1993). Bang et al. (2000) state that people who have psychological engagement with environmental concerns have a high willingness to pay for renewable energy and found it to be a good predictor of consumers' sustainable behavior (Lee, 2008).

H5: Environmental concerns will positively anticipate the sustainable purchase behavior of buyers.

### **Sociocultural factors**

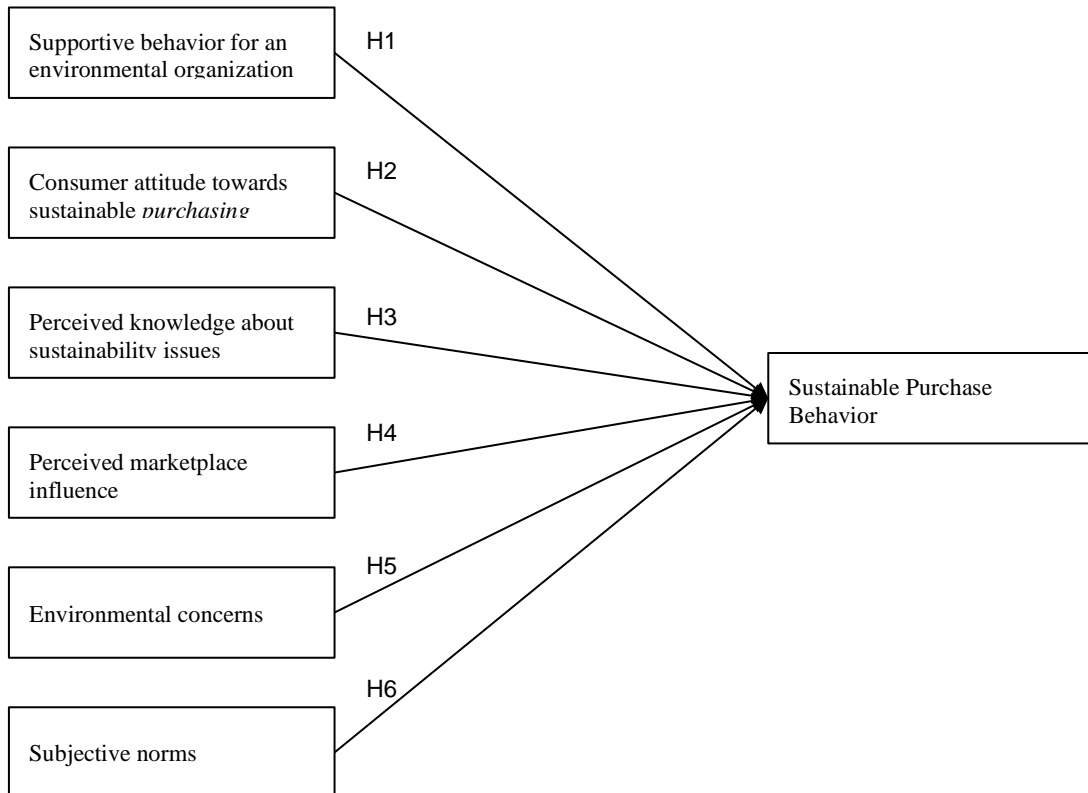
#### *Subjective norms*

Subjective norms can be referred to as perceived social force by people to perform certain behaviors (Ajzen, 1991). It is described as a person's view of the social responsibility to activities that they have taken. In other words, it refers to how significant people can do something by having social force given by people around them. This variable provides details about the perceived appropriateness of a particular behavior (Jager, 2000) and has proven to have an influence on people's purchase intention

(Robinson and Smith, 2002). People also have the tendency to buy products based on feedback from their surroundings (Singh et al., 2021).

H6: Subjective norms will positively influence the sustainable purchase behavior of consumers.

**Figure 1.** Conceptual Framework



## RESEARCH METHOD

The study used convenience sampling and distributed the survey to people (men and women) who are interested, aware, or even involved in the sustainability movement ranging from 18-35 years old, located in Jabodetabek, Bandung, and Yogyakarta. The population was chosen because, according to Forbes (2021), most Gen Z shoppers prefer to purchase sustainable brands, and 75% of millennials are willing to pay more for environmental products (GreenPrint, 2021). The purpose is so that the data population is more relevant to the topic that the Author will ask them. Primary data collection was done by adopting constructs and items from the previous studies as part of the questions. The questions are adjusted to be easier to understand and suit the respondents' language without changing the statement's meaning. A Pilot Test was conducted on 42 respondents to know the questionnaire's early reliability and validity test results before distributing the finalized questionnaire to 150 respondents. The socio-demographic profile of the whole respondents is given in table 1.

**Table 1.** Respondents' Socio-demographic Profile

Details of respondents (N=150)		Frequency	Percentage (%)
Gender	Male	57	38%
	Female	93	62%

Age	18-24	117	78%
	25-35	33	22%
Domicile	Jabodetabek	99	66%
	Bandung	42	28%
	Yogyakarta	9	6%
Education Level	Undergraduate	60	40%
	Post Graduate	15	10%
	Highschool	75	50%

CFA (Confirmatory Factor Analysis) is a multivariate technique for confirming a correlation and assessing several hypotheses that make up a measurement model simultaneously. Researchers can use CFA to test current ideas and evaluate how one variable interacts with other factors that the study will observe as well as latent extract, and help researchers specify a variable by discussing each construct (Hair et al., 2014). This study uses CFA to confirm and evaluate the existing constructs and items (measurement model). In contrast, Structural Equation Modeling (SEM) is used to see whether there are any existing correlations between the structural model.

All of the indicators in a variable are measured with a 7-point Likert scale (1 = strongly disagree, and 7 = strongly agree) or (1 = never, and 7 = always). The Author chose general measures and indicators because they are better predictors of environmental behavior than context-specific items. After all, situational variables are not significantly affected (Kaiser et al., 1999). The indicators used to examine respondents' behavior throughout the questionnaire are adopted from previous researchers, Yatish Joshi and Zillur Rahman (2017), who also adopted the items from the past studies. Perceived knowledge about sustainability has five indicators adopted from Ellen et al. (1997), with a reliability scale of  $\alpha = 0.77$ . Attitude towards sustainable purchasing is measured with four items from Do Valle et al., (2005). The reliability scale is  $\alpha = 0.925$ . Consumers' sustainable purchase behavior was measured with four items taken from Lee (2009), with a reliability scale of  $\alpha = 0.895$ . Four indicators from Leary et al. (2014) are used to measure consumers' environmental concerns. The reliability scale is  $\alpha = 0.753$ . Subjective norms have four items taken from Vermeir and Verbeke (2008), with  $\alpha = 0.831$ . Respondents' supportive behavior for environmental organizations is measured by three items from Lee (2014), with a reliability value of  $\alpha = 0.853$ . Last, perceived marketplace influence has three items from Leary et al. (2014) as the measurements for the construct. The reliability scale is  $\alpha = 0.804$ .

## RESULTS

The degree to which the new scale is associated with other variables and measures of the same construct is referred to as convergent validity. Factor Loading and Average Variance Extracted (AVE) are the indicators used in CFA to confirm convergent validity (Hair et al., 1998). Convergent validity is achieved when the factor loading value of each item is more significant than 0.5 and greater than 0.7 is the ideal value (Hair et al., 1998). The composite reliability value must be higher than 0.7, the Cronbach Alpha value must be greater than 0.6, and the AVE value must be equal to or greater than 0.5 in order to attain satisfaction, reliability, and validity (Wong, 2013). As shown in Table 2, all of the items and constructs fulfill the score requirement of the convergent validity. In conclusion, this study met the criteria for reliability and validity and can proceed to the next testing.

**Table 2.** Convergent Validity Results

Construct	Item	Factor Loadings	Cronbach's Alpha	Composite Reliability	AVE
Perceived knowledge about sustainability issues	PK01	0.794	0.77	0.842	0.519
	PK02	0.663			
	PK03	0.6			
	PK04	0.724			
	PK05	0.799			
Attitude towards sustainable purchasing	AT01	0.914	0.925	0.947	0.819
	AT02	0.949			
	AT03	0.946			
	AT04	0.803			
Sustainable Purchase Behavior	SPB01	0.867	0.895	0.927	0.761
	SPB02	0.918			
	SPB03	0.818			
	SPB04	0.883			
Environmental Concern	EC01	0.758	0.753	0.839	0.568
	EC02	0.655			
	EC03	0.788			
	EC04	0.804			
Subjective Norm	SN01	0.771	0.831	0.884	0.656
	SN02	0.804			
	SN03	0.819			
	SN04	0.844			
Supportive Behavior for Environmental Organizations	SB01	0.894	0.853	0.911	0.774
	SB02	0.833			
	SB03	0.91			
Perceived marketplace influence	PMI01	0.887	0.804	0.867	0.687
	PMI02	0.76			
	PMI03	0.834			

Table 3 shows the results of discriminant validity. Discriminant validity emerges to demonstrate that one construction is distinct from the others and determined by a correlation between constructs (Fornell & Larcker, 1981). Each construct's square root value is greater than the other correlation value in Table 3, demonstrating that each construct is distinct from the others in this study.

**Table 3.** Discriminant Validity Results

	AT	EC	PK	PMI	SB	SN	SPB
AT	<b>0.905</b>						
EC	0.332	<b>0.754</b>					
PK	0.271	0.268	<b>0.72</b>				
PMI	0.34	0.565	0.327	<b>0.829</b>			
SB	0.222	0.238	0.49	0.299	<b>0.88</b>		
SN	0.304	0.443	0.527	0.394	0.443	<b>0.81</b>	
SPB	0.394	0.402	0.573	0.298	0.55	0.539	<b>0.872</b>

Furthermore, the framework's goodness of fit in this study is examined with Standardized Root Mean Square Residual (SRMR). The results showed that the SRMR value is 0.069, which represents a good fit of the model because the value is less than 0.08, which is the required limit, meaning the study can be continued with the existing model.

Hypothesis testing is done by ensuring that each item's P-value is less than 0.05. Additionally, the path coefficient will be significant if the t-statistic is equal to or greater than 1.96. (Wong, 2013). The study will reject H0 If the considerable value is less than 0.05, indicating substantial proof against the H0 and accepting the proposed alternative hypothesis, and so the other way around.

**Table 4.** Hypothesis Test Results

Hypothesis	T-Statistics ( O/STDEV )	P Values	Result
H1: Supportive behaviors for environmental organizations will positively predict the sustainable purchase behavior of consumers. (SB)	4.414	0	<b>Accepted</b>
H2: Consumers' attitude towards sustainable purchasing will positively influence their sustainable purchase behavior. (AT)	2.993	0.001	<b>Accepted</b>
H3: Perceived knowledge about sustainability issues will positively influence sustainable purchase behavior among consumers. (PK)	3.666	0	<b>Accepted</b>
H4: Perceived marketplace influence will positively affect the sustainable purchase behavior of consumers. (PMI)	1.269	0.103	<b>Rejected</b>
H5: Environmental concerns will positively anticipate the sustainable purchase behavior of buyers. (EC)	2.533	0.006	<b>Accepted</b>
H6: Subjective norms will positively influence the sustainable purchase behavior of consumers. (SN)	2.402	0.008	<b>Accepted</b>



The significance level of each construct is shown in Table 3; as a result, H1, H2, H3, H5, and H6 have p-values less than 0.05 and t-values greater than 1.96. Then it can be stated that H1, H2, H3, H5, and H6 were accepted. It means the accepted variables have a positive influence on consumer sustainable purchase behavior. Meanwhile, H4 has a p-value above 0.05 and a T-statistic below 1.96; therefore, it fails to meet the significant value, and the results reject the hypothesis. It means the Perceived marketplace influence (PMI) does not significantly influence consumer sustainable purchase behavior.

## **DISCUSSION**

From the hypothesis test results, H1 is proven to influence consumers' sustainable purchase behavior positively. According to (Lee, 2014), one previous study shows a positive impact on consumers' sustainable behavior. In this study, the hypothesis is accepted with a t-value of 4.414 and 0 p-value; this number represents the fulfillment of the requirement for this hypothesis to be accepted. The outcome means consumers' that have experience involved, engaged, donated, and supported an environmental organization are proven to apply sustainable purchase behavior. The t-value also shows that this factor is the most significant factor among the others. Compared to the Author's reference paper, people's activity, contribution, and engagement with environmental organizations, which are explained by this factor's indicators, also comes up to have the highest impact on encouraging them to have sustainable purchase behavior (Joshi and Rahman, 2017). Results indicate that people who have experience involved in environmental organizations tend to be more responsible with their consumption and what they are buying.

Looking at H2, the statement is accepted through the hypothesis test results. A 2.993 t-value and 0.001 p-values show that the hypothesis fulfills the requirement to be accepted. So, it can be said that consumer's cognitive assessment of sustainable purchasing action, including market attitudes toward green and fair-trade purchases, positively influenced the sustainable purchase behavior of consumers. According to a few studies, attitude towards sustainability was the third most significant factor. The results also align with some of the previous research that stated there is a positive relationship between customer attitude and actions when buying fair-trade products fair-trade shopping. (Jin Ma et al., 2012; Ozcaglar-Toulouse et al., 2006).

Perceived knowledge of sustainability or can be referred to as consumers' perceptions of environmental and social challenges, as well as solutions to these problems, is proven to have a positive influence on sustainable purchase behavior. The hypothesis test results show that H3 has a 3.666 t-value with 0 p-values, which means that the outcome accepts the hypothesis according to the requirements. The results are opposed to some of the previous studies that discovered a weak connection between environmental knowledge and behavior (Bang et al., 2000; Wolsink, 2007). Moreover, the result from the Author's reference paper also shows that consumers' knowledge about sustainability does not significantly influence their purchase behavior (Joshi and Rahman, 2017). While in this study, the hypothesis comes up to be the second most influential factor on consumers' sustainability behavior; from this result, it can be concluded that Indonesian consumers tend to apply the knowledge that they already learned and adopt it as part of their behavior.

Unlike the other variables, perceived marketplace influence is proven not positively to impact sustainable purchase behavior. H4 hypothesis test result shows a t-value of 1.269 with p-values of 0.103, which indicates that the numbers didn't fulfill the requirement for the hypothesis to be accepted; therefore, H4 is rejected. The result in this study does not

align with the previous research that PMI comes up as the fourth most influential factor on consumer sustainable consumption behavior (Joshi and Rahman, 2017). Therefore, there is a significantly different result based on the test, as the sample populations are also totally different. Based on the outcome, the Author can state that even though Indonesian consumers know that they have the potential to make an impact and influence other people if they act in a sustainable way, it does not make them want to apply sustainable consumption behavior for that reason. There are possibilities behind the result, but the Author comes up with assumptions of 2 possibilities based on the indicators, which are Indonesian consumers' do not have the urgency to make an influence so that the society lives in a sustainable manner or Indonesian consumers are not sure whether they can influence the community by applying the sustainability value.

Based on the hypothesis test result, environmental concerns proved to anticipate consumers' sustainable purchase behavior positively. H5 has 2.533 t-values and p-values of 0.006, which means that the hypothesis is accepted. The result aligns with the previous studies that stated people's worries about the environment (Yeung, 2004) could influence consumers' sustainable purchase behavior (Lee, 2008). Although EC positively influences Indonesian consumer's sustainable behavior, it happens to be the second less significant factor compared to the others. This result aligns with the Author's reference paper result that shows EC is the most minor considerable factor that influences consumers' sustainability. This proves that even though Indonesian consumers worry about their environment, it does not significantly make them change their behavior and turn their concerns into an effort to make a better environment, but overall, it's still proven to influence them.

H6 stated that subjective norms would positively influence consumers' sustainable purchase behavior. In this study, the statement is proven since the hypothesis t-value is 2.402 and has a p-value of 0.008. Subjective norm itself can be referred to as a "perceived social force to carry out a particular behavior" (Ajzen, 1991). Previous studies believed that subjective norms could affect consumers' purchase behavior, and it is aligned with the current study's result (Robinson and Smith, 2002). In this study, subjective norms are the least significant factor to influence consumers' sustainable behavior. This can mean that no prominent social force in Indonesia can significantly affect people's adoption of sustainable behavior. It could be the existence or non-existence of social power in Indonesia that just does not substantially change the way Indonesian consumers behave.

### **Implication**

This discovery intends to help Small and Medium Enterprises with a sustainability value and products design new marketing and business approach recommendations. The study shows what features can positively affect consumers' sustainable purchase behavior based on the measurement results of confirmatory factor analysis of each barrier. Therefore, it is critical for SMEs with sustainability value to pay more attention to the factors that can impact consumers' long-term purchasing behavior in generating marketing approaches.

Supportive behaviors for the environmental organization have the highest t-value, which means this variable is the most significant to affect consumers' sustainable purchase behavior. Therefore, business entities should focus on collaborating with environmental organizations to be more engaged with potential buyers from the organizations. Focusing on gaining exposure among environmental organizations will be more effective in getting a higher conversion rate of consumers since the target is more likely to be interested in sustainable purchasing. Creating a concept of engaging with consumers by making them as a part of environment campaign volunteers, sharing some of the company's profit for

donation, and creating events with environmental organizations will be the best idea that suits these variables' indicators the most. By applying these approaches, it is predicted that it will reach more niche target markets that exist in the realm of environmental organizations. Still, it will have more effectivity rather than approaching the broad target of market segmentation.

Consumers' attitudes towards sustainable purchasing are proven to have a positive influence on their sustainable purchasing behavior. Therefore, to maximize this opportunity is to make an approach where SMEs can encourage their audience's perspective into supporting the sustainable purchase behavior and educate them about the positive impact of sustainability. SMEs with sustainability values and products can make this approach by making campaigns both with social media or offline, about the list of good things that will happen if people apply sustainability, and this approach can be followed by showing to consumers the real impacts done by the company so that consumers can feel good and involved in sustainable purchasing when buying the products. In addition, social media followers can be a crucial aspect of maintaining consumers' experiences (Ganatra et al., 2021).

Perceived knowledge of sustainability is the second-highest variable that significantly influences consumers' sustainable purchase behavior. Consumers need to be given more information and awareness about sustainability so that the audience gets more educated about sustainability issues happening near them. By doing this, it is expected that the more people understand sustainability issues, the more people apply sustainable purchasing behavior. Running educational advertisements will be a good idea for this approach; other than that, establishing partnerships with educational institutions can help the company reach and educate many more relevant audiences at once since people in educational institutions tend to be more critical toward sustainability issues.

Environmental concerns are also the variable that proven to influence people's behavior on sustainable purchasing. With this information, SMEs can try to make a marketing approach that is more related to the environment where the audience lives. For example, an organization can start a campaign about Indonesia's environmental issues and explain the negative impacts of the environmental problems. Therefore, people's concerns about the environment will increase, and more people will apply sustainable purchase behavior.

Among all of the accepted variables, subjective norms are less significant compared to the others. This means that the perceived social force to carry out a particular behavior is less effective in terms of influencing people's sustainable purchasing behavior even though it is still proven positively to have an influence. Business entities can make a scenario where people who apply sustainable purchase behavior will get a social reward or exposure from their online platform so that more people will expect each other to become more responsible for what they purchase.

## **CONCLUSION**

The purpose of this research is to learn about factors that are predicted to have an influence on consumers' sustainable purchase behavior. Identifying between Perceived knowledge about sustainability issues (PK), Attitude towards sustainable purchasing (AT), Environmental Concern (EC), Subjective Norm (SN), Supportive Behavior for Environmental Organizations (SB), and Perceived marketplace influence (PMI) as the independent variable, which of them are positively influenced consumers' sustainable purchase behavior as a dependent variable. This study result will also serve as SMEs' guide in making decisions regarding the marketing approaches.

It is obtained that from these six factors, only one factor that is not significantly positively influencing the consumers' sustainable behavior, which is perceived marketplace influence (PMI). Meanwhile, the other five factors are found to have positive impacts on consumers' sustainable purchases behavior. From the information collected, marketing recommendations were generated. It can be concluded that the best marketing approach by SMEs with sustainability value to its potential consumers is by making the approach more relatable with the mentioned factors above. The data-driven marketing recommendations generated in the discussion are expected to increase the awareness and engagement of the targeted audiences with sustainable products.

For all local Small and Medium Enterprises which propose sustainability value to their consumers, especially in Jakarta, Yogyakarta, and Bandung, it is best for them to approach their potential customers by knowing what factors can influence their behavior the most, and generate their marketing approaches as relating as possible to the chosen factors. This study shows that supportive behavior for environmental organizations and Perceived knowledge about sustainability are the two most significant factors that influence consumers' sustainable purchase behavior. Therefore, it is recommended for SMEs to focus on engaging and collaborating with environmental organizations and try to educate and gain target market awareness towards sustainability and the environment near them.

#### **LIMITATION**

This study has limitations on the scale of the population that are interested, aware, or even involved in the sustainability movement and only focuses on three urban cities in Indonesia. This study also focuses on six factors that are predicted to influence consumers' sustainable purchase behavior and are also limited to observing only respondents' sustainable purchase behavior. The implication of the study results is also limited to only generating marketing approaches. Therefore, the limitation of this study can be broadened by the future researcher for broader insights and implications.

#### **ACKNOWLEDGMENT**

I would like to express my special appreciation to all those who were directly and indirectly involved in this paper making. Special thanks to my family, and friends who always support me during my hardest time. Last but not least, special gratitude to my supervisor, Ms. Annisa Rahmani Qastharin, who always gives me advice during the making of this paper.

#### **DECLARATION OF CONFLICTING INTERESTS**

The Authors have no conflict of interest to declare. The Author and his supervisor (co-author) have agreed with the contents of this paper and there is no financial interest to report. It can be stated that this paper is original work and not under review at any other publication.

#### **REFERENCES**

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior And Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-t](https://doi.org/10.1016/0749-5978(91)90020-t)
- Alli, H., Rashid, M., Sulaiman, R., Me, R., & Kamarudin, K. (2019). The Development of Sustainable Product Design Method for Sustainable and Successful New Products. *IOP Conference Series: Materials Science And Engineering*, 697, 012025. <https://doi.org/10.1088/1757-899x/697/1/012025>

- Aryani, D., Nair, R., Hoo, D., Hung, D., Lim, D., & Chandran, D. et al. (2021). A Study on Consumer Behaviour: Transition from Traditional Shopping to Online Shopping During the COVID-19 Pandemic. *International Journal Of Applied Business And International Management*, 6(2), 81-95. <https://doi.org/10.32535/ijabim.v6i2.1170>
- Bandura, A., Freeman, W., & Lightsey, R. (1999). Self-Efficacy: The Exercise of Control. *Journal Of Cognitive Psychotherapy*, 13(2), 158-166. <https://doi.org/10.1891/0889-8391.13.2.158>
- Bang, H., Ellinger, A., Hadjimarcou, J., & Traichal, P. (2000). Consumer concern, knowledge, belief, and attitude toward renewable energy: An application of the reasoned action theory. *Psychology And Marketing*, 17(6), 449-468. [https://doi.org/10.1002/\(sici\)1520-6793\(200006\)17:6<449::aid-mar2>3.0.co;2-8](https://doi.org/10.1002/(sici)1520-6793(200006)17:6<449::aid-mar2>3.0.co;2-8)
- Chen, T., & Chai, L. (2010). Attitude towards the environment and green products: Consumers' perspective. *Management Science And Engineering*, 4(2), 27-39. <https://doi.org/http://dx.doi.org/10.3968/j.mse.1913035X20100402.002>
- DE PELSMACKER, P., DRIESEN, L., & RAYP, G. (2005). Do Consumers Care about Ethics? Willingness to Pay for Fair-Trade Coffee. *Journal Of Consumer Affairs*, 39(2), 363-385. <https://doi.org/10.1111/j.1745-6606.2005.00019.x>
- de Carvalho, B., Salgueiro, M., & Rita, P. (2015). Consumer Sustainability Consciousness: A five dimensional construct. *Ecological Indicators*, 58, 402-410. <https://doi.org/10.1016/j.ecolind.2015.05.053>
- Ellen, P., Wiener, J., & Cobb-Walgren, C. (1991). The Role of Perceived Consumer Effectiveness in Motivating Environmentally Conscious Behaviors. *Journal Of Public Policy & Marketing*, 10(2), 102-117. <https://doi.org/10.1177/074391569101000206>
- Fornell, C., & Larcker, D. (1981). Structural Equation Models with Unobservable Variables and Measurement Error: Algebra and Statistics. *Journal Of Marketing Research*, 18(3), 382. <https://doi.org/10.2307/3150980>
- Ganatra, V., Utama, A., Puran, P., Pandey, R., Qi, L., & Kee, D. et al. (2021). A Study of Subway Marketing 4P Strategy. *Asia Pacific Journal Of Management And Education*, 4(2), 47-64. <https://doi.org/10.32535/apjme.v4i2.1069>
- Greenprint.eco. (2021). Retrieved 23 September 2021, from [https://greenprint.eco/wp-content/uploads/2021/03/GreenPrint-Business-of-Sustainability-Index\\_3.2021.pdf](https://greenprint.eco/wp-content/uploads/2021/03/GreenPrint-Business-of-Sustainability-Index_3.2021.pdf).
- Grunert, S. (2021). Everybody seems concerned about the environment: But is this concern reflected in (Danish) consumers' food choice?. *ACR Summer Conference, Amsterdam/The Netherlands*, 428–433. Retrieved 23 September 2021, from [https://www.researchgate.net/publication/285820189\\_Everybody\\_seems\\_concerned\\_about\\_the\\_environment\\_But\\_is\\_this\\_concern\\_reflected\\_in\\_Danish\\_consumer\\_s'\\_food\\_choice](https://www.researchgate.net/publication/285820189_Everybody_seems_concerned_about_the_environment_But_is_this_concern_reflected_in_Danish_consumer_s'_food_choice).
- Hair, Joseph F., Anderson, Rolph E., Black, William C.. (2014). *Multivariate Data Analysis* (Ed. 7th). Harlow: Pearson.
- Hair, J.F., Black, W.C., Babin, B.J., Anderson, R.E. and Tatham, R.L., 1998. *Multivariate data analysis* (Vol. 5, No. 3, pp. 207-219). Upper Saddle River, NJ: Prentice hall.
- Jager, W. (2000). *Modelling consumer behaviour*. s.n.
- Jin Ma, Y., Littrell, M., & Niehm, L. (2012). Young female consumers' intentions toward fair trade consumption. *International Journal Of Retail & Distribution Management*, 40(1), 41-63. <https://doi.org/10.1108/09590551211193595>
- Joshi, Y., & Rahman, Z. (2017). Investigating the determinants of consumers' sustainable purchase behaviour. *Sustainable Production And Consumption*, 10, 110-120. <https://doi.org/10.1016/j.spc.2017.02.002>
- Kaiser, F., Wölfig, S., & Fuhrer, U. (1999). ENVIRONMENTAL ATTITUDE AND ECOLOGICAL BEHAVIOUR. *Journal Of Environmental Psychology*, 19(1), 1-19. <https://doi.org/10.1006/jevp.1998.0107>

- Kozar, J., & Hiller Connell, K. (2013). Socially and environmentally responsible apparel consumption: knowledge, attitudes, and behaviors. *Social Responsibility Journal*, 9(2), 315-324. <https://doi.org/10.1108/srj-09-2011-0076>
- Lamorte, W. (2019). *The Social Cognitive Theory*. Sphweb.bumc.bu.edu. Retrieved 23 September 2021, from [https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories5.html#headingta\\_glink\\_](https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories/behavioralchangetheories5.html#headingta_glink_).
- Leary, R., Vann, R., Mittelstaedt, J., Murphy, P., & Sherry, J. (2014). Changing the marketplace one behavior at a time: Perceived marketplace influence and sustainable consumption. *Journal Of Business Research*, 67(9), 1953-1958. <https://doi.org/10.1016/j.jbusres.2013.11.004>
- Lee, K. (2008). Making Environmental Communications Meaningful to Female Adolescents. *Science Communication*, 30(2), 147-176. <https://doi.org/10.1177/1075547008324364>
- Lee, K. (2009). Gender differences in Hong Kong adolescent consumers' green purchasing behavior. *Journal Of Consumer Marketing*, 26(2), 87-96. <https://doi.org/10.1108/07363760910940456>
- Lee, K. (2014). Predictors of Sustainable Consumption among Young Educated Consumers in Hong Kong. *Journal Of International Consumer Marketing*, 26(3), 217-238. <https://doi.org/10.1080/08961530.2014.900249>
- Menon, A., & Menon, A. (1997). Enviropreneurial Marketing Strategy: The Emergence of Corporate Environmentalism as Market Strategy. *Journal Of Marketing*, 61(1), 51. <https://doi.org/10.2307/1252189>
- Mostafa, M. (2006). Antecedents of Egyptian Consumers' Green Purchase Intentions. *Journal Of International Consumer Marketing*, 19(2), 97-126. [https://doi.org/10.1300/j046v19n02\\_06](https://doi.org/10.1300/j046v19n02_06)
- Nielsen.com. (2021). Retrieved 1 September 2021, from [https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/Global20Sustainability20Report\\_October202015.pdf](https://www.nielsen.com/wp-content/uploads/sites/3/2019/04/Global20Sustainability20Report_October202015.pdf).
- Ozcaglar-Toulouse, N., Shiu, E., & Shaw, D. (2006). In search of fair trade: ethical consumer decision making in France. *International Journal Of Consumer Studies*, 30(5), 502-514. <https://doi.org/10.1111/j.1470-6431.2006.00532.x>
- Petro, G. (2021). *Gen Z Is Emerging As The Sustainability Generation*. Forbes. Retrieved 1 September 2021, from <https://www.forbes.com/sites/gregpetro/2021/04/30/gen-z-is-emerging-as-the-sustainability-generation/?sh=504d6e478699>.
- Phipps, M., Ozanne, L., Luchs, M., Subrahmanyam, S., Kapitan, S., & Catlin, J. et al. (2013). Understanding the inherent complexity of sustainable consumption: A social cognitive framework. *Journal Of Business Research*, 66(8), 1227-1234. <https://doi.org/10.1016/j.jbusres.2012.08.016>
- Singh, P., Rao, K., Chong, A., Kee, D., Jimmy, A., & Hong, A. et al. (2021). The Influence of Consumer Behavior on Brand Success: A Case Study of Panasonic Corporation. *Asia Pacific Journal Of Management And Education*, 4(2), 6-19. <https://doi.org/10.32535/apjme.v4i2.1066>
- Robinson, R., & Smith, C. (2002). Psychosocial and Demographic Variables Associated with Consumer Intention to Purchase Sustainably Produced Foods as Defined by the Midwest Food Alliance. *Journal Of Nutrition Education And Behavior*, 34(6), 316-325. [https://doi.org/10.1016/s1499-4046\(06\)60114-0](https://doi.org/10.1016/s1499-4046(06)60114-0)
- Tanner, C., & Wölfling Kast, S. (2003). Promoting sustainable consumption: Determinants of green purchases by Swiss consumers. *Psychology & Marketing*, 20(10), 883-902. <https://doi.org/10.1002/mar.10101>
- Vermeir, I., & Verbeke, W. (2006). Sustainable Food Consumption: Exploring the Consumer "Attitude – Behavioral Intention" Gap. *Journal Of Agricultural And Environmental Ethics*, 19(2), 169-194. <https://doi.org/10.1007/s10806-005-5485-3>

Wong, Ken. (2013). Partial least square structural equation modeling (PLS-SEM) techniques using SmartPLS. *Marketing Bulletin*. 24. 1-32.

Yeung, S. (2004). Teaching Approaches in Geography and Students' Environmental Attitudes. *The Environmentalist*, 24(2), 101-117. <https://doi.org/10.1007/s10669-004-4801-1>

Young, W., Hwang, K., McDonald, S., & Oates, C. (2009). Sustainable consumption: green consumer behaviour when purchasing products. *Sustainable Development*, n/a-n/a. <https://doi.org/10.1002/sd.394>

## APPENDIX

### Operational Variable List

Variable	Measurement		Source
Perceived knowledge about sustainability issues	PK01	I know I purchase ecologically safe products.	(Ellen et al., 1997)
	PK02	I have more knowledge about recycling than an average person	
	PK03	I know where I can find products that create less wastage.	
	PK04	I have knowledge about the sustainability symbols used on product packages.	
	PK05	I am very knowledgeable about environmental and social issues.	
Attitude towards sustainable purchasing	AT01	I believe that sustainable purchasing by me will help in reducing pollution and also help in improving the environment.	(Do Valle et al., 2005)
	AT02	I believe that sustainable purchasing by me will help in reducing wasteful use of natural resources	
	AT03	I believe that sustainable purchasing by me will help in conserving natural resources	
	AT04	I feel good about myself when I am involved in sustainable purchasing.	
Sustainable purchase behavior	SPB01	When shopping, I deliberately check products for environmentally harmful ingredients.	Lee, 2009
	SPB02	When shopping, I deliberately choose products with environmentally friendly packaging.	

	SPB03	I will prefer to buy sustainable products even if they are more expensive than others.	
	SPB04	While purchasing, I will see environmental and fair trade labels before buying the product	
Environmental concern	EC01	When deciding what to buy, consumers should balance what is cheapest with what is in the best interest of the environment and society.	Leary et al., 2014
	EC02	Those who consume more bear the greatest responsibility when it comes to protecting the environment.	
	EC03	Consumers should consider the environment as one of their stakeholders when making decisions.	
	EC04	To be environmentally responsible, consumers need to make purchases that account for the earth's physical and social limits.	
Subjective norm	SN01	My friends expect me to engage in sustainable purchasing.	Vermeir and Verbeke (2008)
	SN02	My family expects me to engage in sustainable purchasing.	
	SN03	My society expects me to engage in sustainable purchasing.	
	SN04	People can rely on me to make a positive contribution to society due to my engagement in sustainable purchasing?	
Supportive behavior for environmental organizations	SB01	How often do you serve as a volunteer helper in an environmental organization?	Lee (2014)
	SB02	How often do you donate to an environmental organization?	
	SB03	How often do you join an activity that is organized by an environmental organization?	
Perceived marketplace influence	PMI01	I believe my individual efforts to be environmentally friendly will persuade others in my community to purchase environmentally friendly products	Leary et al. (2014)



	PMI02	The choices I make can influence what companies make and sell in the marketplace	
	PMI03	If I buy environmentally friendly products, companies will introduce more of them	