

# Attitude, subjective norms, and environment friendly as antecedents of customer purchase behavior

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## ABSTRACT

**Purpose-**Consumer purchasing behavior towards a product is certainly influenced by various factors, both internal and external. This study aims to determine the effect of attitudes, subjective norms, and environment friendly on consumer purchasing behavior. These factors have a positive impact on consumer purchasing behavior.

**Design/Methodology/Approach-**This research focuses on Tokopedia e-commerce users in Yogyakarta, Indonesia. The total research sample consists of 96 respondents, who were surveyed using a purposive sampling technique. The research data is primary data obtained through questionnaire distribution. Data analysis was carried out using SPSS version 25.

**Findings-**The results of this study prove that attitude has a positive but insignificant effect on consumer purchasing behavior. Subjective norms and a friendly environment have a partial positive impact on consumer purchasing behavior. The subjective norms adopted by consumers and their concern for the environment influence consumers when purchasing a product. However, this attitude has proven insignificant in influencing consumer purchasing behavior because other factors, such as the other two variables, are more significant in influencing consumer purchasing behavior.

**Research limitations/implications-**The research is limited to a small number of respondents and only examines users of the Tokopedia e-commerce application in Yogyakarta, Indonesia. Therefore, the results of this study cannot be used as a reference to describe consumer purchasing behavior among e-commerce users in general and in various regions of Indonesia.

**Originality/value-**Previous research has not analyzed the factors that influence consumer purchasing behavior as in this study, especially for Tokopedia e-commerce users in Yogyakarta. Previous research analyzes different aspects and uses different research objects as well.

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## 1. The Introduction

Digital world development has penetrated various business elements, including product marketing (Hofacker et al., 2020). Digital development is very important in advancing business, especially marketing, because it can facilitate consumer access while expanding consumer reach (Kannan & Li, 2017). This convenience can be felt by consumers in the presence of e-commerce as a service for buying and selling products online. E-commerce provides benefits for consumers and producers because it can reach consumers widely and win business competition. Digital business transformation also affects consumer behavior when purchasing products.

Consumer purchasing behavior includes all activities, actions, and psychological processes before buying, when buying, using, spending, and evaluating a product (Liu et al., 2020). Consumer purchase behavior determines the analysis of customer behavior based on the assumption that customers act as users, payers, and buyers (Peighambari et al., 2016). Cultural, economic, and technological changes have resulted in diverse and comprehensive consumer behaviors (Peighambari et al., 2016). Purchasing behavior is influenced by consumers' desire to meet their needs and concern for environmental interests and issues. People often ignore environmental impacts to increase consumption and modernize (Barber et al., 2014).

Attitude refers to the extent to which an individual has a positive or negative assessment of something (Ajzen et al., 2018). Attitudes are beliefs about a particular behavior that can be positive or negative (Kroesen et al., 2017). If an individual has a positive attitude towards a certain behavior, he is likelier to behave in a certain way. The level of consumer knowledge, attitudes, values, and practices largely determines environmental quality. Attitude is a consistent factor in predicting consumers' willingness to purchase environmentally friendly products (Kumar et al., 2017). Therefore, attitudes in this study included beliefs, desires, feelings, and behaviors related to the environment. Consumers who care about the environment buy products with minimal environmental impact (Jacobs et al., 2018).

Zhang et al. (2019) stated that subjective norms describe the social pressure exerted on individuals to perform or not perform a behavior. Vizano et al. (2021) describe subjective norms as the influence of close or important people, such as business partners, colleagues, and friends. Subjective norms have an important influence on consumer behavior. Regarding subjective norms, Djafarova and Rushworth (2017) argue that social elements, including family, social roles and status, and reference groups, influence how consumers behave while making purchases. Subjective norms significantly influence consumer purchase behavior (Paul et al., 2016). Subjective norms have a significant influence because friends, family, and coworkers provide powerful behavioral reference points for people (Shan & King, 2015). Customers have differing opinions on a product, where subjective norms significantly influence their buying decisions.

Being environmentally friendly is a product's ability to minimize environmental damage during its life cycle (Shrivastava, 2018). Awareness of environmentally friendly products will result in positive outcomes, such as achieving a competitive advantage and creating a positive image. Environmental pollution increases consumer concerns about sustainable products. Consumers can improve the quality of their environment by purchasing eco-friendly products (Ma et al., 2017). Therefore, all organizations should implement sustainable green practices in their operations. Consumers participate in environmental activities, such as using recycled products, and prefer green service providers (Malik & Singhal, 2017).

E-commerce in Indonesia is rapidly developing into a form of digital service for communities to fulfil their daily needs. Data collected from the Ministry of Trade of the Republic of Indonesia show that the number of e-commerce users in Indonesia will continue to increase from 2020 to 2024, and it is predicted that it will continue to increase until 2029. Currently, many e-commerce sites are being developed in Indonesia, including Tokopedia. Tokopedia won first position as an e-commerce site or application often visited and accessed by Indonesians, followed by Shopee, Lazada, Bukalapak, and other e-commerce sites.

## 2. Literature Review and Hypothesis Development

Attitude refers to a person's feelings that indicate their feelings of liking or disliking something (Kurniawan et al., 2019). According to Vogel and Wanke (2016), attitude determines a person's behavior. Attitudes can influence consumer behavior to act in a certain way to obtain, dispose of, and use products (Soyer & Dittrich, 2021). Good consumer attitudes significantly influence purchasing behavior (de Leeuw et al., 2015). Consumer attitudes are an important concept in understanding consumers and their decisions. The concept of consumer attitudes consists of beliefs and behaviors. Botsaris and Vamvaka (2016) found that attitudes are important interpreters of behavior, behavioral intentions, and factors that explain variations in individual behavior. Dagher et al. (2015) stated that attitude towards a particular issue predisposes a person to behave consistently.

### **H<sub>1</sub>: Attitude Has a Positive Effect on Customer Purchase Behavior**

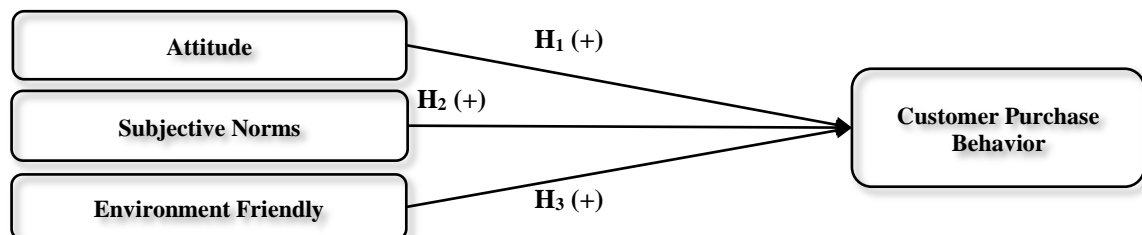
Subjective norms refer to perceived social pressure from others regarding behavior (Zhang et al., 2019). Subjective norms are determined by perceived social pressure from others to behave and the motivation to comply with these views. Regarding subjective norms, Djafarova and Rushworth (2017) suggest that social factors such as reference groups, family, and social roles and status affect consumer behavior in making purchases. Subjective norms play an important role in consumer purchasing behavior (Paul et al., 2016). Subjective norms play an important role, and family members, friends, and colleagues are strong reference points for individuals to behave in (Shan & King, 2015). Consumers have different beliefs about a product, where subjective norms play an important role in influencing their purchasing behavior.

### **H<sub>2</sub>: Subjective Norms Have a Positive Effect on Customer Purchase Behavior**

Consumers' concerns and knowledge about the environment increase the demand for environment-friendly products. Concern for the environment that tends to be stronger causes consumers to prefer environment-friendly products (Ali & Ahmad, 2016). Thus, environment-friendly products positively affect consumer purchasing behavior and allow consumers to buy certain products because of their concern for the environment. Bhutto et al. (2021) suggest that consumer characteristics in the form of knowledge about environment-friendly products and energy-saving behavior positively impact purchasing decisions for environment-friendly products. Gaining a competitive advantage and enhancing one's reputation are the two benefits of increasing awareness of environmentally friendly products. Consumers are becoming more concerned about sustainable products owing to the global environmental crisis. Consumers can support the environment by buying environmentally friendly products (Ma et al., 2017). As a result, all businesses should integrate environmentally friendly and sustainable methods into their daily operations. According to Malik and Singhal (2017), consumers support environmental activities by using recycled products and favor green service providers.

### **H<sub>3</sub>: Environment Friendly Has a Positive Effect on Customer Purchase Behavior**

Figure 1 shows the research model for analyzing the factors that influence consumer purchasing behavior. This study analyzed the positive influence of attitude, subjective norms, and environmental friendliness on consumer purchasing behavior.



**Figure 1. Research Model**

### 3. Research Methodology

The population of this research was all people in Yogyakarta, Indonesia, who used the Tokopedia e-commerce application. Because the population in this study was relatively large or unknown with certainty, it was necessary to draw a sample from the population. The sample was selected from a portion of the population with characteristics determined by the researcher using a purposive sampling technique. The criteria for determining the sample in this study are that people who live in Yogyakarta are Tokopedia e-commerce users and have made purchases on Tokopedia more than twice. Based on these criteria, 96 respondents were obtained.

The research data were obtained by distributing questionnaires online to the people of Yogyakarta using Google Forms. The questionnaire contained statements that represented each research variable. Each variable in this study consisted of three indicator items, and the measurement used a five-point Likert scale. SPSS analysis tools were used to test data validity, reliability, and the research hypothesis.

The data analysis begins by conducting a validity test. The validity test was measured based on the factor loading value of the indicator items of each variable. If the factor loading value exceeded 0.6, the indicator item was considered valid (Hair et al., 2020). However, if the factor loading value is less than 0.6, then the indicator item must be removed, and data testing is repeated. After completing the validity test, we proceeded with the reliability test for each research variable. The reliability test was measured based on Cronbach's alpha value for each variable. If the Cronbach's alpha value is greater than 0.6, then the variable can be considered reliable (Hair et al., 2020). Finally, the research hypothesis was tested. The research hypothesis can be accepted if it shows a significance number of less than 0.05, whereas if it is more than 0.05, it is rejected (Ghozali, 2018).

### 4. Result and Discussion

#### Characteristic Respondent

Table 1 shows the tabulation of data regarding the characteristics of the respondents. Based on these results, the respondents of this study were balanced between males and females. The age of respondents is dominated by those aged 21-30, as many as 83 people. Most respondents' incomes are from 1 to 5 million rupiah, with 53 respondents. Most respondents came from Yogyakarta City, followed by Sleman Regency, Bantul Regency, Gunung Kidul Regency, and Kulon Progo Regency.

**Table 1. Characteristic Respondent**

Classification	Description	Total
Gender	Male	48
	Female	48
Age	<= 20 Years Old	11
	21 – 30 Years Old	83
	31 – 40 Years Old	2
	>= 40 Years Old	0
Salary	<= 1 Million Rupiah	40
	1 – 5 Million Rupiah	53
	>= 6 Million Rupiah	4
City	Yogyakarta City	41
	Bantul Regency	13
	Sleman Regency	33
	Gunung Kidul Regency	7
	Kulon Progo Regency	2

Source: Primary Data Processed (2024)

#### Validity Test

Table 2 presents a tabulation of the validity test results of this research. All indicator items representing attitude variables (ATT), subjective norms (SJN), environment-friendliness (EVF),

and consumer purchasing behavior (CPB) are proven valid. This can be proven by the factor loading value of each indicator item being greater than 0.6.

**Table 2. Validity Test Result**

Indicator	Attitude	Subjective Norms	Environment Friendly	Customer Purchase Behavior
ATT 1	0.669			
ATT 2	0.966			
ATT 3	0.965			
SJN 1		0.928		
SJN 2		0.969		
SJN 3		0.968		
EVF 1			0.859	
EVF 2			0.897	
EVF 3			0.866	
CPB 1				0.881
CPB 2				0.501
CPB 3				0.874

Source: Primary Data Processed (2024)

### Reliability Test

Table 3 shows that all the variables used in this study are reliable. This can be proven by the Cronbach's alpha value of each variable, which was greater than 0.6. The Cronbach's alpha value of the attitude variable was 0.830, that of the subjective norm variable was 0.952, that of the environment-friendly variable was 0.630, and that of the consumer purchasing behavior variable was 0.629.

**Table 3. Reliability Test Result**

Variable	Cronbach's Alpha
Attitude	0.830
Subjective Norms	0.952
Environment Friendly	0.630
Customer Purchase Behavior	0.629

Source: Primary Data Processed (2024)

### Hypothesis Test

Table 4 shows that two of this study's three hypotheses are accepted; namely, the second and third hypotheses are accepted because they have a significance value of less than 0.05. Subjective norms and environment-friendliness in this study have been proven to positively affect consumer purchasing behavior. The third hypothesis is rejected because it has a significance value greater than 0.05. This means that attitudes positively affect consumer purchasing behavior but are not significant.

**Table 4. Hypothesis Test Result**

Hypothesis	Coefficient	Sig.
Attitude → Customer Purchase Behavior	0.055	0.914
Subjective Norms → Customer Purchase Behavior	0.346	0.025
Environment Friendly → Customer Purchase Behavior	0.490	0.003

Source: Primary Data Processed (2024)

## Discussion

### The Effect of Attitude on Customer Purchase Behavior

This study proves that attitudes positively affect purchasing decisions. However, this is insignificant; therefore, the first hypothesis is rejected. Attitude describes a person's feelings and whether they like or dislike something (Kurniawan et al., 2019). Vogel and Wanke (2016) argues that a person's attitude influences their behavior. Consumers' behavior, including how they

acquire, utilize, and discard things, can be influenced by their attitudes (Soyer & Dittrich, 2021). Positive consumer feelings significantly affect what consumers buy (de Leeuw et al., 2015). One of the key ideas in comprehending customers and their choices is consumer attitude. Beliefs and actions make up the notion of consumer attitudes. When examining behavior, various consumer behaviors point to attitude variables. Botsaris and Vamvaka (2016) found that attitudes play a significant role in interpreting behavior, behavioral intentions, and the variables that account for individual behavioral variances. Dagher et al. (2015) argued that a person's attitude toward a certain topic predisposes them to act consistently toward that issue.

#### **The Effect of Subjective Norms on Customer Purchase Behavior**

This study proves that subjective norms positively affect consumers' purchasing decisions. Subjective norms, known as social norms, are important variables that influence purchasing behavior (Wang, 2019). According to Djafarova and Rushworth (2017), subjective norms correlate with a person's belief that important individuals or groups will approve or disapprove of the person's behavior. The Theory of Reasoned Action presented indicates a positive relationship between subjective norms and one's behavior. When consumers realize that their group tends to buy a certain product, they are subconsciously attracted and intend to buy that product with collective behavioral clues.

#### **The Effect of Environment Friendly on Customer Purchase Behavior**

This study proves that being environmentally friendly positively affects consumers' purchasing decisions. Customers' awareness of and concern for the environment drive an ongoing increase in demand for eco-friendly products. Customers who are more concerned about the environment tend to favor environmentally friendly products (Ali & Ahmad, 2016). Thus, being environmentally friendly benefits consumers' purchasing behavior and helps them acquire particular products because of their care for the environment. Consumer traits, such as energy-saving practices and product knowledge about environmentally friendly products, positively influence consumers' decisions to buy environmentally friendly products. The two advantages of raising awareness of eco-friendly products are gaining a competitive advantage and improving one's reputation. The potential of a product to reduce environmental harm through its life cycle makes it environmentally friendly. Gaining a competitive edge and enhancing one's reputation are the two benefits of raising awareness of environmentally friendly products. Consumers are becoming more concerned about sustainable products owing to the global environmental crisis. Consumers can support the environment by buying environmentally friendly products (Ma et al., 2017). As a result, all businesses should integrate environmentally friendly and sustainable methods into their daily operations. According to Malik and Singhal (2017), consumers engage in environmental activities using recycled products and tend to favor green service providers. Because packing is one of the key components of selling a product, environmental friendliness, such as packaging, is an external feature of the product.

### **5. Conclusion**

This study shows that the second and third hypotheses are accepted, whereas the first hypothesis is rejected. Subjective norms and environmental friendliness have a partially positive effect on consumer purchasing behavior. In this study, attitudes were proven to have a positive but insignificant effect on consumer purchasing behavior. Consumers subjective norms and concern for the environment undoubtedly affect their behavior in buying a product. Consumers buy products according to this understanding when they understand the concept. Attitudes also affect consumer behavior when purchasing, but these are not significant because other factors influence them.

This research was limited to a small number of respondents and only examined users of the Tokopedia e-commerce application in Yogyakarta, Indonesia. Therefore, the results of this study cannot be used as a reference to describe consumer purchasing behavior among e-commerce users in general and in various regions in Indonesia. Based on these limitations, the researcher suggests

that future research expand the respondents' scope and add variables or use mediation or moderation models.

## REFERENCES

- Ajzen, I., Fishbein, M., Lohmann, S., & Albarracín, D. (2018). *The influence of attitudes on behavior*. Routledge.
- Ali, A., & Ahmad, I. (2016). Environment friendly products: Factors that influence the green purchase intentions of Pakistani consumers. *Pakistan Journal of Engineering, Technology & Science*, 2(1). <https://doi.org/10.22555/pjets.v2i1.697>
- Barber, N. A., Bishop, M., & Gruen, T. (2014). Who pays more (or less) for pro-environmental consumer goods? Using the auction method to assess actual willingness-to-pay. *Journal of Environmental Psychology*, 40. <https://doi.org/10.1016/j.jenvp.2014.06.010>
- Bhutto, M. Y., Liu, X., Soomro, Y. A., Ertz, M., & Baeshen, Y. (2021). Adoption of energy-efficient home appliances: Extending the theory of planned behavior. *Sustainability (Switzerland)*, 13(1). <https://doi.org/10.3390/su13010250>
- Botsaris, C., & Vamvaka, V. (2016). Attitude toward entrepreneurship: Structure, prediction from behavioral beliefs, and relation to entrepreneurial intention. *Journal of the Knowledge Economy*, 7(2). <https://doi.org/10.1007/s13132-014-0227-2>
- Dagher, G. K., Itani, O., & Kassar, A. N. (2015). The impact of environment concern and attitude on green purchasing behavior: Gender as the moderator. *Contemporary Management Research*, 11(2). <https://doi.org/10.7903/cmr.13625>
- de Leeuw, A., Valois, P., Ajzen, I., & Schmidt, P. (2015). Using the theory of planned behavior to identify key beliefs underlying pro-environmental behavior in high-school students: Implications for educational interventions. *Journal of Environmental Psychology*, 42. <https://doi.org/10.1016/j.jenvp.2015.03.005>
- Djafarova, E., & Rushworth, C. (2017). Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users. *Computers in Human Behavior*, 68. <https://doi.org/10.1016/j.chb.2016.11.009>
- Ghozali, I. (2018). *Aplikasi Analisis Multivariate dengan Program IBS SPSS 25 (9th ed)*. Badan Penerbit Universitas Diponegoro.
- Hair, J. F., Howard, M. C., & Nitzl, C. (2020). Assessing measurement model quality in PLS-SEM using confirmatory composite analysis. *Journal of Business Research*, 109. <https://doi.org/10.1016/j.jbusres.2019.11.069>
- Hofacker, C., Golgeci, I., Pillai, K. G., & Gligor, D. M. (2020). Digital marketing and business-to-business relationships: A close look at the interface and a roadmap for the future. In *European Journal of Marketing*, 54(6). <https://doi.org/10.1108/EJM-04-2020-0247>
- Jacobs, K., Petersen, L., Hörisch, J., & Battenfeld, D. (2018). Green thinking but thoughtless buying? An empirical extension of the value-attitude-behaviour hierarchy in sustainable clothing. *Journal of Cleaner Production*, 203. <https://doi.org/10.1016/j.jclepro.2018.07.320>
- Kannan, P. K., & Li, H. "Alice." (2017). Digital marketing: A framework, review and research agenda. *International Journal of Research in Marketing*, 34(1). <https://doi.org/10.1016/j.ijresmar.2016.11.006>
- Kroesen, M., Handy, S., & Chorus, C. (2017). Do attitudes cause behavior or vice versa? An alternative conceptualization of the attitude-behavior relationship in travel behavior modeling. *Transportation Research Part A: Policy and Practice*, 101. <https://doi.org/10.1016/j.tra.2017.05.013>
- Kumar, B., Manrai, A. K., & Manrai, L. A. (2017). Purchasing behaviour for environmentally sustainable products: A conceptual framework and empirical study. *Journal of Retailing and Consumer Services*, 34. <https://doi.org/10.1016/j.jretconser.2016.09.004>
- Kurniawan, D. A., Astalini, A., Darmaji, D., & Melsayanti, R. (2019). Students' attitude towards natural sciences. *International Journal of Evaluation and Research in Education*, 8(3). <https://doi.org/10.11591/ijere.v8i3.16395>

- Liu, Q., Zhang, X., Huang, S., Zhang, L., & Zhao, Y. (2020). Exploring consumers' buying behavior in a large online promotion activity: The role of psychological distance and involvement. *Journal of Theoretical and Applied Electronic Commerce Research*, 15(1). <https://doi.org/10.4067/S0718-18762020000100106>
- Ma, J. H., Choi, S. B., & Ahn, Y. H. (2017). The impact of eco-friendly management on product quality, financial performance and environmental performance. *Journal of Distribution Science*, 15(5). <https://doi.org/10.15722/jds.15.5.201705.17>
- Malik, C., & Singhal, N. (2017). Consumer environmental attitude and willingness to purchase environmentally friendly products: An SEM approach. *Vision*, 21(2). <https://doi.org/10.1177/0972262917700991>
- Paul, J., Modi, A., & Patel, J. (2016). Predicting green product consumption using theory of planned behavior and reasoned action. *Journal of Retailing and Consumer Services*, 29. <https://doi.org/10.1016/j.jretconser.2015.11.006>
- Peighambari, K., Sattari, S., Kordestani, A., & Oghazi, P. (2016). Consumer behavior research: A synthesis of the recent literature. *SAGE Open*, 6(2). <https://doi.org/10.1177/2158244016645638>
- Shan, Y., & King, K. W. (2015). The effects of interpersonal tie strength and subjective norms on consumers' brand-related ewom referral intentions. *Journal of Interactive Advertising*, 15(1). <https://doi.org/10.1080/15252019.2015.1016636>
- Shrivastava, P. (2018). *Environmental technologies and competitive advantage*. Routledge.
- Soyer, M., & Dittrich, K. (2021). Sustainable consumer behavior in purchasing, using and disposing of clothes. *Sustainability (Switzerland)*, 13(15). <https://doi.org/10.3390/su13158333>
- Vizano, N. A., Khamaludin, K., & Fahlevi, M. (2021). The effect of halal awareness on purchase intention of halal food: A case study in Indonesia. *Journal of Asian Finance, Economics and Business*, 8(4). <https://doi.org/10.13106/jafeb.2021.vol8.no4.0441>
- Vogel, T., & Wanke, M. (2016). *Attitudes and attitude change*. Psychology Press.
- Wang, X. . P. F. . L. J. and K. R. . (2019). Factors influencing organic food purchase intention in developing countries and moderating role of knowledge. *Sustainability*, 11.
- Zhang, C. Q., Zhang, R., Gan, Y., Li, D., & Rhodes, R. E. (2019). Predicting transport-related cycling in Chinese employees using an integration of perceived physical environment and social cognitive factors. *Transportation Research Part F: Traffic Psychology and Behaviour*, 64. <https://doi.org/10.1016/j.trf.2019.06.003>