



## Determinants on Generation Z's propensity to purchase sustainable products in Jakarta, Indonesia

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### ARTICLE INFO

#### ► Research Article

#### Article History

Received 3 December 2023

Accepted 16 June 2024

Published 2 October 2024

#### Keywords

consumer behavior;  
generation Z; green attitude;  
purchase intention

#### JEL Classification

D12; M31; Q50

### ABSTRACT

Except for consumers from the Millennial and Generation Z generations, sustainable products with their primary selling point—being ecologically friendly in the business concept and the production process—have less of a place in people's purchasing preferences. Future consumers of millennials and Generation Z are committed to and interested in adopting sustainable products, which also exhibit extremely environmentally conscious consumer behavior. They will own and shape future consumption patterns. Jakartans stand out among them as particularly significant markers of economic advancement and development. This study focuses on green attitudes, social norms, and perceived behavioral control, which are thought to influence green purchase behavior through green purchase intention, in order to identify the determinant factors of green purchasing behavior toward sustainable products. A questionnaire for the non-probability sampling method was included in a Google Form package. Purchase behavior is influenced by elements from the Theory of Planned Behavior (attitude, subjective norms, and perceived behavioral control), which in turn results in sustainable product purchasing behavior. Data analysis using SmartPLS software demonstrates that purchase intention has a direct impact. The results support the benefits of sustainable product adoption patterns.

**To cite this article:** Ichsan, M., Sutanto, H., Sudjatmoko, A., Soenarto, H. A., Salsabila, Z. Z., & Febioza, M. A. (2024). Determinants on generation Z's propensity to purchase sustainable products in Jakarta, Indonesia. *Journal of Socioeconomics and Development*, 7(2), 144-155. <https://doi.org/10.31328/jsed.v7i2.5196>

ISSN 2615-6075 online; ISSN 2615-6946 print  
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### INTRODUCTION

For decision-makers, the quickly changing digital era offers both opportunities and challenges. Prospects that are ten or even twenty times larger than those found elsewhere in the world are now available to businesses. From anywhere in the world, anyone can reach wider market. Digital platforms offer effective tools for attracting new clients, retaining existing ones, boosting revenue, and enhancing efficiency and productivity across all sectors of the economy. Because the market is so competitive,

businesses need to get a better understanding of how Generation Z (Gen Z) behaves (Lestari, 2019).

Millennials and Gen Z are more likely than previous generations to adopt sustainable products because they are aware of the effects of environmental degradation on the continuation of life on earth. Sustainable products also reflect a sustainable way of living. Given that 54% of the world's population is made up of Millennials and Gen Z, and that 65% of them are highly concerned about the environment and the sustainability of products, this phenomenon is extremely important. This is consistent with the 77%

of Indonesians who are aware of climate change and its effects on the global community, respectively (Bustoni & Utami Tjhin, 2023; Siregar & Pinagara, 2022). Additionally, it is anticipated that these two generations will contribute significantly to global consumer spending overall, increasing from 48% in 2019 to 69% in 2024, giving a major influence on sustainability trends in the future (Credit Suisse, 2022; Siregar & Pinagara, 2022). A 96.7% of consumers said they would rather buy products from companies that have taken part in a range of sustainable initiatives (Ayuni, 2019). But after more examination, it becomes necessary to doubt the sincerity of the promises given (Hasyati, 2017).

This phenomenon aligns with the findings of numerous studies, which generally concluded that although consumers express interest in sustainable products, this does not always translate into their intention to purchase them (Wang et al., 2021). Furthermore, consumers have not actively looked into environmental issues or altered their lifestyles to be more environmentally conscious (Boston Consulting Group & Sampangan Business, 2022). This is thought to be due to a lack of knowledge about environmental issues and their impacts, convenience and habit, higher product and lifestyle costs, limited access to decision-making, conflicting priorities due to financial and health concerns, psychological distance due to perceptions about environmental issues, social influence as people are less likely to engage in environmentally conscious behavior, and complexity and overwhelm due to the scope of the problem and greenwashing and misinformation. These can hinder the adoption of environmentally friendly behavior.

Studies that are comparable, however, are currently hard to come by and focus on the interest and adoption of sustainable products among Millennials and Gen Z. This research should help businesses and policymakers better understand the interests of Millennials and Gen Z and how they adopt sustainable products. Therefore, before coming up with the best strategy for sustainable product management, research into the factors influencing consumers' decisions to purchase sustainable products is required. This is because, as Millennials and Gen Z become more common as prospective buyers of sustainable products, researchers and industry professionals must comprehend the attitudes and behaviors of these consumers (Gomes et al., 2023).

The most technologically advanced and dynamic city in Indonesia, Jakarta, is the target audience for the study's millennial and Gen Z consumers. It also takes into account both external and internal factors that influence consumers' choices to purchase sustainable goods. It is anticipated that the findings will serve as a standard and predictor of the variables influencing consumers' choices to purchase sustainable goods, particularly among Indonesia's Millennials and Gen Z.

According to Sdrolia and Zarotiadis (2019), sustainable products follow a zero-waste business plan, use renewable resources, minimize energy consumption and waste, and take into account high initial costs but low maintenance costs and long service life. It encourages innovation and minimizes the ecological footprint (De Canio et al., 2020; Lopes et al., 2024; Ostermann et al., 2021). Furthermore, because it is designed to minimize pollution, waste, and resource consumption, sustainable products have a significant impact on society and the economy. Such impacts include environmental preservation, job creation, changes in consumer behavior, long-term cost savings, social equity, policy changes, improved competitiveness, and resource efficiency.

The adoption of sustainable products can provide several strategic advantages and opportunities, despite the increasing social pressure placed on business executives in particular by investors, consumers, and employees (De Canio et al., 2020; Lopes et al., 2024). The benefits of sustainable products include market differentiation and brand reputation that attracts consumers and investors, risk mitigation and long-term viability by reducing risks related to resources, regulatory changes, and consumer preferences, cost savings, and efficiency improvements, new market access and innovation through green design and technology, improved employee engagement, compliance with environmental regulations, and resilience and supply chain relationships with ethical suppliers. Sustainability strategies ensure long-term success and positive socio-economic impact.

Consumer behavior is the study of how individuals or groups acquire, use, or dispose of products and services to satisfy their needs (Akhtar & Husnain, 2015). The business world can understand why, when, where, and how individuals choose to buy certain products (Das et al., 2022). This behavior includes usage patterns, purchase choices, and attitudes that

influence purchase intentions (Chen et al., 2018). Companies that prioritize the needs of their clients have an advantage over competitors. Green attitudes are predictors of green product purchase intentions and behaviors (Jaiswal & Kant, 2018; Le & Nguyen, 2022), desire for sustainability and good intentions for green purchases (Zhang et al., 2021).

Perceived behavioral control is critical in social psychology, supporting the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB). TRA focuses on intention, behavior, and influencing views, predicting deliberate decision-making (Lestari, 2019). TPB, expanding on TRA, is widely validated for predicting human behavior, particularly consumer behavior, by defining goals as behaviors determined by beliefs (Michel et al., 2023; Roseira et al., 2022). The first term, behavioural beliefs, is defined as the belief that a behaviour will result in positive or negative outcomes. The second term is normative beliefs, and the third is control beliefs, which are the perceived presence of factors that influence one's ability to complete a planned purchase (Ajzen, 2001; Lestari, 2019).

Nonetheless, when assessing subjective norms and determining the degree of control over the behaviour in question, it is necessary to consider the individual's attitude. The "theory of planned behavior" (TPB) predicts purchasing intentions as the basis of purchasing behaviour using three variables: attitudes, subjective norms, and perceived control (Ajzen, 1985; Nguyen et al., 2022). TPB was applied in several studies to evaluate young consumers' propensity to buy environmentally friendly products. Gonçalves et al. (2016), Jing et al. (2022) and Martinho et al. (2015) looked into the variables influencing consumers' intentions to buy sustainable packaging and their recycling habits. Sustainable packaging is related to recycling behavior. Green purchasing behavior includes purchasing patterns of sustainable products that benefit the environment and society (Jaiswal & Kant, 2018). Socio-economic impacts include reduced carbon footprint, energy consumption and waste, increased innovation and technology, corporate social responsibility, consumer education and awareness, reduced long-term costs, equality, and social justice with fair trade practices and regulatory influences that strengthen environmental protection and sustainable practices.

Therefore, environmentally conscious consumers must consider the environment, the interests of the

community at large, as well as their desire to fulfill specific needs as individuals or groups, in keeping with the nature of purchasing behavior, which involves the act of making a decision and acquiring a good or service (Witek & Kuźniar, 2021; Zarei et al., 2019). To align with the findings of Chen and Deng (2016), Le and Nguyen (2022), and Yang et al. (2019) that demonstrate a positive correlation between environmentally friendly attitudes and environmentally friendly purchasing intentions, this paper hypothesizes that green attitudes have a significant relationship with green purchase intention. The intention to make green purchases has a big impact on green attitudes. Individuals who have a positive attitude towards the environment are likely to choose greener products (Pathak et al., 2024; Sadiq et al., 2021). Green attitudes are important because they influence the purchasing decisions of Gen Z, who are very concerned about the environment. Because they are more conscious of the negative effects on the environment, members of this generation are more likely to select products and services that are produced using environmentally friendly practices (Khan et al., 2021). Thus, a deeper understanding of the connection between green attitudes and green purchase intentions is essential for analyzing the adoption behaviour of Gen Z.

## RESEARCH METHOD

Quantitative methods, which emphasize the use of numerical data and statistical techniques to explore information, identify patterns, and address research questions, were empirically tested in this study. Aside from the advantages, these include objectivity, dependability to boost confidence in research, application of robust statistical and analytical methods, generalization, efficiency, monitoring and evaluating changes, ability to compare, ease of decision-making and planning, capacity to gauge the success of interventions, and support for opportunities for advanced research. Nevertheless, they still have drawbacks and aren't always appropriate for all kinds of research.

A non-probability sampling method was used to choose research participants from the population of DKI Jakarta residents who were born in the years 1981–1997 (millennial generation) and 1998–2012 (Gen Z). No element in the population had a known probability of being chosen, reflecting the lack of a

conclusive method to determine the likelihood of each element being included in the sample. Using a six-point Likert scale, a Google form questionnaire was distributed to gather primary data. Respondents were encouraged to provide specific responses to the questionnaire's statements (Croasmun & Ostrom, 2011).

Partial Least Square-Structural Equation Modeling (PLS-SEM) was utilized for data processing, and Smart PLS 4 was used for analysis. PLS-SEM is especially helpful for complex models, small sample sizes, non-normally distributed data, and scenarios requiring predictions. It is a useful tool for developing theories and testing hypotheses in a variety of fields, especially when experimental designs are impractical or not feasible. Based on the literature review, the proposed operationalization variables and the research model is shown in Table 1 and Figure 1.

Table 1. Operationalization of Variables

Variables and Indicators	Reference
Green Attitude (GA)	Zhang et al (2019),
GA1: Environmental concern	Dajani et al (2022) and
GA2: Environmental consciousness	Roseira et al (2022)
GA3: Environmental awareness	
Social Norms (SN)	Zhang et al (2019),
SN1: Pressure from the social environment	Roseira et al (2022), and Zhang et al (2020)
SN2: Pressure from the internal environment	
Perceived Behavioral Control (PBC)	Zhang et al (2020),
PBC1: Behavioral decisions	Dajani et al (2022),
PBC2: Availability	and Zhang et al (2019)
PBC3: Environmental knowledge	
Green Purchase Intention (GPI)	Yang et al (2019),
GPI1: Transactional interest	Dajani et al (2022) and
GPI2: Willingness to buy	Rausch & Kopplin (2021)
GPI3: Purchase plan	
Green Purchase Behavior (GPB)	Dajani et al (2022),
GPB1: Actual purchase	Roseira et al (2022), and Jaiswal & Kant (2018)

## RESULT AND DISCUSSION

### Respondent Characteristic

The data collection process utilizing this questionnaire yielded 230 respondents (Table 2), surpassing the required minimum sample size of 200 or five to ten times the five indicators utilized in the study (Hair, Anderson, et al., 2019). These respondents were subsequently categorized into 200 groups based on their compliance with the analysis criteria.

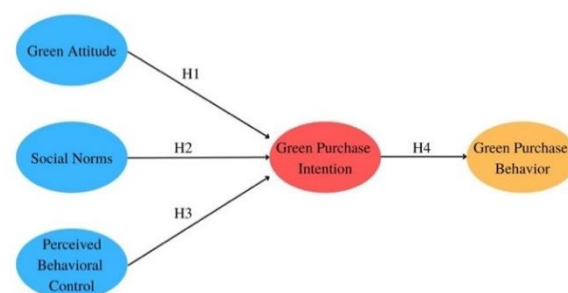


Figure 1. Proposed research model

Based on survey data involving 200 respondents from DKI Jakarta, this research reveals some critical findings related to the demographics and preferences of the population studied. The majority of respondents came from Gen Z, who were born between 1998 and 2012, with 119 people or 59.5% of the total respondents. Meanwhile, the Millennial Generation, born between 1981 and 1997, accounted for 81 people, or 40.5% of the total respondents. The more significant proportion of Gen Z in this study may indicate that this group is more active or more accessible to reach in the surveys conducted or may have a higher interest in buying sustainable products. The preponderance of Gen Z in this survey indicates a high inclination towards sustainable products. This generation is known to be more environmentally conscious and more concerned about the social impact of purchases compared to previous generations. Gen Z has grown up in an era where climate change and sustainability issues are frequently discussed, both in the media and in formal education. Therefore, Gen Z's propensity to support sustainable products is higher, as Gen Z understands the importance of preserving the environment for the future.

Table 2. Respondent Characteristics

Variable	Frequency	Proportion %
Year of Birth		
1981–1997 (Millenials)	81	40.5
1998–2012 (Gen Z)	119	59.5
Gender		
Male	88	44.0
Female	112	56.0

In addition, the distribution of residence shows that all respondents answered Jakarta residence in Jakarta by 100%, or 200 respondents answered with the same domicile. This ensures that the findings of

this survey are very relevant in describing the characteristics and behavior of the population in DKI Jakarta. In terms of gender, the survey shows that there were slightly more female respondents compared to male respondents. Of the 200 respondents, 112 people, or 56%, were female, while 88 people or 44% were male. This gender distribution suggests that women may be more responsive to the survey or may be more interested in the topics covered.

The higher number of women in this survey also indicates a higher propensity to support sustainable products. Based on various studies, women tend to be more concerned about environmental and social issues. Women are often more involved in activities that support sustainability, such as recycling, using eco-friendly products, and participating in environmental movements. This awareness may stem from the traditional role of women, who are often more involved in household management and childcare, making them more aware of the importance of maintaining a healthy environment for future generations.

### Validity and Reliability Test Result

The PBC 1 indicator had a loading factor value of 0.677, or below the standard of 0.7, and a Cronbach

alpha value of 0.690, or below the standard of 0.70, according to the computation results (Hair et al., 2019). These two measurement results make it clear that there is no way to trust the PBC1 indicator to provide consistent or accurate information. This can be caused by erroneous data, inconsistent measurement methods, or unforeseen environmental changes. The following outcomes of a subsequent measurement that was performed without the PBC1 indicator were obtained (Table 3).

Since all indicators show that loading factor values and Cronbach's Alpha and Composite Reliability meet the necessary thresholds, all variables are considered reliable. The information it produces can be trusted to be accurate, consistent, and reliable when measuring or displaying conditions or phenomena. Additionally, analyses and even decisions can be made with it. And as can be seen in Table 3, each variable has a high convergent validity value, which indicates that the data will consistently produce results that are close to the truth and suggest good quality in a measurement or research context. The AVE values for each variable are higher than the standard value of 0.50. Furthermore, the computation results were subjected to Fornel-Larcker analysis, a commonly used method to assess a measurement model's discriminant validity.

Table 3. Path Coefficient and Estimate Result

Items	Convergent Validity		Reference	
	Loadings >0.70	AVE >0.50	Cronbach's Alpha >0.70	Compoisite Reliability 0.7<CR<0.95
Green Attitude (GA)		0.719	0.804	0.804
GA1: Environmental concern	0.882			
GA2: Environmental consciousness	0.826			
GA3: Environmental awareness	0.835			
Perceived Behavioral Control (PBC)		0.775	0.711	0.720
PBC2: Availability	0.863			
PBC3: Environmental knowledge	0.898			
Perceived Behavioral Control (PBC)		0.704	0.802	0.889
PBC1: Behavioral decisions	0.888			
PBC2: Availability	0.862			
PBC3: Environmental knowledge	0.762			
Green Purchase Intention (GPI)		0.697	0.785	0.793
GPI1: Transactional interest	0.848			
GPI2: Willingness to buy	0.830			
GPI3: Purchase plan	0.827			
Social Norms (SN)		0.624	0.700	0.723
SN1: Pressure from the social environment	0.803			
SN2: Pressure from the internal environment	0.852			



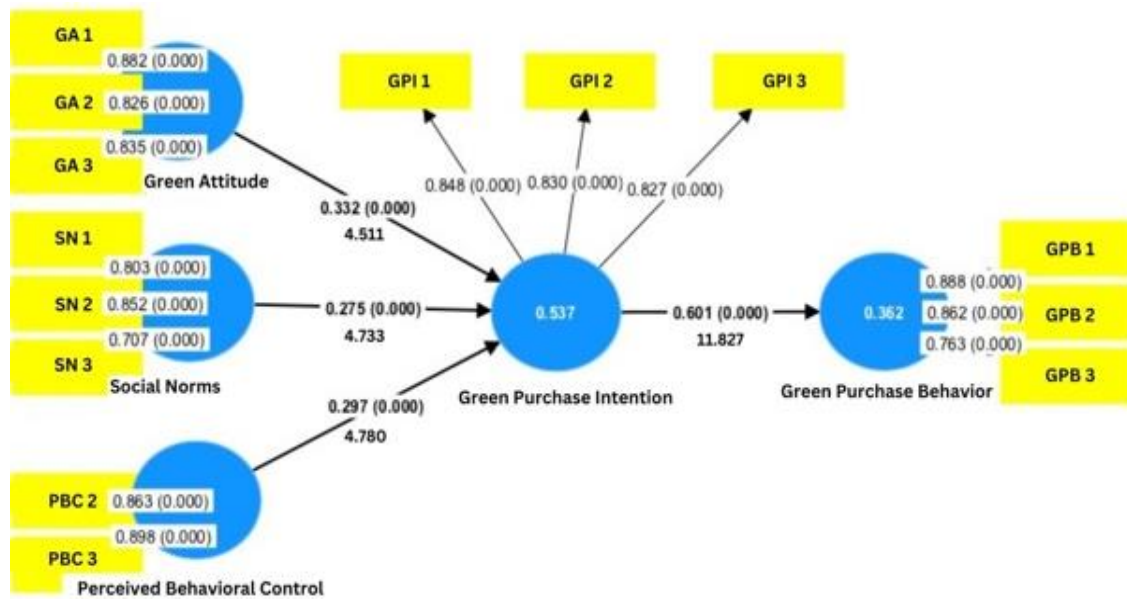


Figure 2. Model of variable relationship affecting purchase sustainable products

Table 4. Fornell Larcker Results

	GA	PBC	GPB	GPI	SN
GA	0.848				
PBC	0.525	0.880			
GPB	0.531	0.528	0.839		
GPI	0.651	0.557	0.601	0.835	
SN	0.595	0.312	0.456	0.565	0.790

Based on the Fornell-Larcker analysis in Table 4, the Average Variance Extracted (AVE) value of each variable exceeds the AVE value of the other variables, indicating strong discriminant validity. This indicates that the measurement used managed to separate each measured construct well without any significant overlap between the variables. Strong discriminant validity is important to ensure that the relationships between variables in this study are appropriate for the constructs they represent rather than the result of measurement problems or unintended overlap.

Social behavior theory, as described by Ajzen (1991) and other related theories, highlights the importance of social norms in influencing purchase behavior, including the propensity to purchase green products. Social norms include generally accepted standards and expectations regarding actions that support the environment. Individual purchasing preferences and decisions are often significantly influenced by social norms, especially in the context of

the intention to purchase green products (Sadiq et al., 2021; Khan et al., 2021).

Furthermore, perceived behavioral control (PBC) refers to an individual's perception of how easy or difficult a particular action is to perform. Previous research has supported this, and it also shows a significant relationship with the intention to purchase green products (Chen & Deng, 2016; Dajani et al., 2022; Le & Nguyen, 2022). Green purchase intention (GPI) refers to the likelihood of a person or group making a purchase based on their level of awareness and concern for the environment. This intention is an important indicator to assess how ready and willing they are to accept sustainable alternatives (Chen & Deng, 2016; Kamalanon et al., 2022).

Thus, these findings support the hypothesis that social norms, perceived behavioral control, and intention to purchase green products are interrelated and influence consumer purchasing behavior. An in-depth understanding of how cultural norms influence consumers' intention to make green purchases is crucial in environmentally conscious consumer behavior.

### Factors Affecting Purchase Sustainable Products

This subcategory further discusses the variable hypothesis testing regarding the effect of Green

Attitude on green purchase intention, the influence of social norms on green purchase intention, the impact of perceived behavioral control on green purchase intention, and the influence of green purchase intention on green purchase behavior. Hypothesis testing was done on the path coefficient between variables by comparing the p-values with alpha (0.05) or t-values ( $>1.96$ ) in order to determine the relationship between the variables. The bootstrapping method with 5000 sub-samples was used to obtain the magnitude of the t-values and the p-values from the output on SmartPLS.

Table 5. Factors Affecting Green Purchase Behaviour

Structural Path	t-value	p-value
Green Attitude -> Green Purchase Intention	4.511	0.000
Social Norm -> Green Purchase Intention	4.733	0.000
Perceived Behavioral Control -> Green Purchase Intention	4.780	0.000
Green Purchase Intention -> Green Purchase Behaviour	11.827	0.000

Based on this research, the path coefficient value for each path shows that the p-value of the structural path had a value of 0.000, which is less than 0.05, then supported by the t-value with a value of 4.511 to 11.827 which is greater than 1.96. So, it can be concluded that there is a significant relationship among variables (Table 5).

The study also revealed that, for all pathways, the indirect effect shows the presence of a mediating variable with a p-value of 0.000, or less than 0.05, indicating a significant effect of Green Attitude on Green Purchase Intention: The study results show a positive relationship with a t-value of 5.511 and a significant effect of 0.000 between Green Attitude on Green Purchase Intention. This study shows that an individual's attitude towards the environment positively relates to the intention to purchase green products. The results support the theory that a positive attitude toward the environment can motivate consumers to choose more sustainable products (Pathak et al., 2024; Sadiq et al., 2021). Gen Z, for example, is more likely to choose green products due to their greater awareness of environmental impacts (Khan et al., 2021). The Social Norm plays a vital role in influencing Green Purchase Intention. The results show a positive and significant influence with a t-value of 4.733 and a substantial value of 0.000. This finding indicates that social norms also influence the purchase

intention of green products. Consumers tend to adjust their behavior to norms that support the environment around them, which can encourage them to choose sustainable products (Le & Nguyen, 2022; Patel, 2019; Pop et al., 2020). This aligns with the theory that social norms can act as solid motivators in influencing consumers' purchasing decisions related to the environment (Zhang et al., 2019).

In addition, perceived behavioral control refers to individuals' beliefs about their ability to take actions that support the environment. The results show a positive and significant influence with a t-value of 4,780 and a substantial value of 0.000. The research shows that the higher an individual's perception of behavioral control towards purchasing environmentally friendly products, the greater their intention to do so. This reflects the TPB concept, where individuals' beliefs about their ability to perform specific actions influence their intention to act (Chen & Deng, 2016; Dajani et al., 2022; Le & Nguyen, 2022). TPB emphasizes the importance of perceived control in shaping consumer behavior related to the environment (Ajzen, 2001).

Intention to buy green products significantly influences purchasing behavior. The results show a positive and significant influence with a t-value of 11.827 and a substantial value of 0.000. The study results show that green product purchase intentions significantly influence consumers' actual behavior in purchasing sustainable products. This means that when consumers have a solid intention to choose an environmentally friendly product, they tend to turn that intention into actual action in buying the product (Chen & Deng, 2016). This theory suggests that intention is early in consumer decision-making, leading to purchase actions that match their preferences (Ajzen, 1991).

Consequently, investments in current education have an effect not only on the current generation but also on future generations. Government involvement is required to interrupt the vicious cycle of poor education among low-class families, given that not all children live in privileged households. Creating an inclusive environment for less affluent persons in the process of accumulating human capital can have a significant impact on social mobility over the long run.

This study's findings indicate an indirect effect of Green Attitude through Green Purchase Intention on Green Purchase Behavior. Specifically, the analysis results show that the t-value was 3.948 with a

significance level 0.000 (Table 6). This indicates that the relationship between green attitude and green purchase intention, as well as between green purchase intention and green purchase behavior, is statistically significant. Implicitly, these findings support theories such as the TRA and TPB, in which an individual's attitude towards a behavior (in this case, green purchasing) can influence an individual's intention to perform the behavior. Intention then significantly mediates attitude and actual behavior. In this context, the findings suggest that the more positive an individual's attitude towards green purchasing practices, the more likely they are to have a solid intention to purchase green products. This firm intention then directly influences the actual behavior of buying environmentally friendly products (Ajzen, 1991). Focusing on increasing positive green attitudes and strengthening green purchasing intentions can be an effective strategy. Educating consumers about the benefits of green products and creating awareness of the positive impacts of green purchasing can also help increase intentions and, ultimately, green purchasing behavior (Zhang et al., 2021).

Table 6. Indirect Effect of Factors Affecting Green Purchase Behaviour

Structural Path	t-values	p-values
Green Attitude -> Green Purchase Intention -> Green Purchase Behaviour	3.948	0.000
Perceived Behavioural Control -> Green Purchase Intention -> Green Purchase Behaviour	4.321	0.000
Social Norm -> Green Purchase Intention -> Green Purchase Behaviour	4.314	0.000

Then, this study shows an indirect effect of Perceived Behavioural Control through Green Purchase Intention on Green Purchase Behaviour. Specifically, the analysis results show that the t value was 4.321 with a significance level 0.000. These results indicate that PBC significantly affects green purchase intention (GPI) and green purchase behavior (GPB). The TPB explains that consumer behavior is influenced by three main factors, namely attitude, subjective norm, and PBC. PBC in TPB refers to individuals' perceptions of the extent to which they have control over the behavior in question. In the context of this study, PBC affects green purchase intention (GPI), which in turn affects green purchase behavior (GPB) (Ajzen, 2001; Lestari, 2019). Previous research has shown that PBC not only influences pro-

environmental behavioral intentions but also directly impacts environment-related consumer behavior (Michie et al., 2008). This corroborates the finding that perceived behavioral control (PBC) is important in moderating green product purchase intentions and behavior.

Furthermore, this study shows an indirect effect of Social Norms through Green Purchase Intention on Green Purchase Behaviour. Specifically, the analysis results show that the t-value was 4.314, with a significance level 0.000. TPB suggests that a person's behavior is influenced by three main factors: attitudes toward behavior, subjective norms (perceptions about expectations from essential people), and Perceived Behavioral Control (PBC) (Ajzen, 1991). In TPB, social norms are crucial in influencing the intention to perform a particular behavior, affecting actual behavior. The results show that social norms affect green purchase intention (GPI), which involves green purchase behavior (GPB). Then, the theory of social influence theory emphasizes that individuals tend to comply with social norms in their environment to maintain good social relationships or gain social approval (Cialdini, 2007). In the context of green purchasing, social norms can act as a critical driver behind consumer intentions and behavior. Research has shown that social norms, such as green purchasing behavior, are essential in shaping consumer behavior related to the environment (Schultz et al., 2007). Social norms can influence individuals' perceptions of their compliance with green purchasing practices, influencing their propensity to adopt such behaviors.

## Research Implication

Both sellers (producers) and buyers, who must both have a high level of environmental awareness and concern, particularly towards sustainable products, have an influence on the formation of purchasing behavior. Subjective norms, behavioral control, and attitudes are additional crucial components (Pathak et al., 2024; Sadiq et al., 2021).

This study investigates the relationship between green attitudes, social norms, perceived behavioral control, green purchase intentions, and green purchase behavior. The findings indicate that an individual's green attitude, which reflects the tendency to consider environmental factors in purchasing decisions, significantly influences the purchase intention of green products. Individuals with solid



attitudes towards sustainability tend to have higher intentions to buy environmentally friendly products (Chen & Chang, 2012). This is consistent with the theory of planned behavior, which suggests that attitude is an essential predictor of consumer behavioral intentions.

Social norms are also shown to influence green purchase intentions. Social norms in this context refer to expectations from society or groups towards consumer behavior regarding environmentally friendly products (Chen & Deng, 2016). This finding suggests that when individuals feel pressure or expectations from their environment to behave in an environmentally friendly manner, they tend to have a higher intention to buy products that are by these social values. Perceived behavioral control also plays a vital role in shaping green purchasing intentions (Sharma & Paço, 2021). This perception describes an individual's belief about his ability to control environmentally friendly purchasing behavior. Individuals who can make green product purchases, although perhaps with certain constraints such as price or availability, tend to have higher intentions to make such purchases (Elnadi & Gheith, 2022).

This study also demonstrates that the research's target audience—Gen Z and the millennial generation—is capable of adopting and using eco-friendly products and understands the value of protecting the environment (Zhang et al., 2021). The market for eco-friendly goods has expanded as a result, which has encouraged businesses to concentrate more on adopting eco-friendly procedures, utilizing eco-friendly materials, and lowering their carbon footprint. Furthermore, since Millennials and Gen Z are more likely to buy products from companies that practice sustainability and social responsibility, businesses that want to stay relevant in the market must include sustainable practices in their business plans (Roseira et al., 2022). This study demonstrates that green attitude, social norms, and perceived behavioral models strongly influence the intention to make green purchases. The intention to make green purchases also significantly influences the behavior to make green purchases. These findings can be viewed as positive scientific evidence that helps shape the intention to make green purchases in Gen Z. It is crucial to be aware of this because Gen Z has a strong inclination towards eco-friendly products due to factors like high environmental awareness, strong social values, early exposure to environmental issues,

easy access to information, and an appreciation of the significance of the environment individual branding in addition to the company's and market's reactions. Thus, Gen Z has a lot of potential to impact the market and encourage a move toward more environmentally friendly consumption (Chakraborty et al., 2022).

While purchasing sustainable products is more expensive than purchasing products that don't fit these requirements, these costs will eventually go down as demand for environmentally friendly products grows and more of them are produced. Furthermore, the expectations of future consumers for sustainable product purchases will rise as members of Gen Z assume leadership roles in business management (Sadiq et al., 2021). The findings of this study are not necessarily universally applicable because they are still restricted to research participants who reside in the DKI Jakarta area, although this region is sometimes used as a gauge of Indonesian business behavior (Khan dkk., 2021). Additionally, three factors—green attitude, social norms, and perceived behavioral control—were found to be predictive of green purchase intention and their impact on green purchase behavior was also explored. To draw more thorough conclusions about the variables influencing preferences and actual product purchasing behavior, this research model should be expanded to include the sample size (respondents) and respondents' domiciles that are not limited to the DKI Jakarta area. sustainable on a personal and collective level.

In addition to lowering carbon footprints, raising environmental awareness, promoting innovation and product development, empowering consumers, improving health and welfare, raising awareness, and fostering a sustainable culture, increasing green purchasing behavior will have a significant positive social and environmental impact (Le and Nguyen (2022). While it is hoped that society will change to become more environmentally conscious and sustainable, multiple stakeholders—aside from Gen Z—need to work together, including consumers, businesses, governments, and non-governmental organizations.

## CONCLUSION AND SUGGESTION

This study aims to identify the determinants of green purchasing behavior, specifically focusing on green attitudes, social norms, and perceived behavioral control. The results show that these factors

significantly influence green purchasing intentions and behaviors. The findings indicate that Gen Z, with a high environmental awareness, tends to choose products that meet green criteria.

Specifically, individual green attitudes - which reflect concern for environmental and sustainability issues - are essential in shaping the intention to purchase green products. Social norms, or societal expectations of ecological behavior, influence this intention through social influence. In addition, perceived behavioral control plays a role in moderating the relationship between intention and actual purchase behavior. Although the results of this study were derived from participants in DKI Jakarta, it is essential to expand to different regions in Indonesia to explore regional variations in consumer preferences and behaviors related to green products. By doing so, this model can provide a more holistic understanding of the variables that influence purchase behavior and consumer preferences in general.

The research also concludes that improving green purchasing behavior will lower carbon footprints and increase environmental awareness, drive product innovation, and empower consumers. This change is not only the responsibility of Gen Z but also requires the cooperation of all stakeholders, including businesses, governments, and non-governmental organizations, to drive the transition to more socially and environmentally sustainable consumption. As such, this research contributes to understanding the factors that drive environmentally friendly consumer behavior and the importance of cross-sector collaboration in achieving broader sustainability goals.

## REFERENCES

- Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. *Action Control*, 11–39. [https://doi.org/10.1007/978-3-642-69746-3\\_2](https://doi.org/10.1007/978-3-642-69746-3_2)
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179–211. [https://doi.org/https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/https://doi.org/10.1016/0749-5978(91)90020-T)
- Ajzen, I. (2001). Nature and operation of attitudes. *Annual Review of Psychology*, 52, 27–58. <https://doi.org/10.1146/annurev.psych.52.1.27>
- Akhtar, W., & Husnain, M. (2015). Factor that effect on consumer behavior: The case of boarding students. *Journal of Progressive Research in Social Sciences (JPRSS)*, 2. [www.scitecresearch.com](http://www.scitecresearch.com)
- Ayuni, R. F. (2019). The online shopping habits and e-loyalty of Gen Z as natives in the digital era. *Journal of Indonesian Economy and Business*, 34(2), 169–186. <http://journal.ugm.ac.id/jieb>
- Boston Consulting Group, & Sampangan Business. (2022). Bridging Indonesian consumers' intent and action.
- Bustoni, W., & Utami Tjhin, V. (2023). Analysis of factors affecting repurchase intention in live streaming e-commerce. *Journal of Theoretical and Applied Information Technology*, 101(8). [www.jatit.org](http://www.jatit.org)
- Chakraborty, D., Siddiqui, A., Siddiqui, M., & Alatawi, F. M. H. (2022). Exploring consumer purchase intentions and behavior of buying ayurveda products using SOBC framework. *Journal of Retailing and Consumer Services*, 65(102889). <https://doi.org/https://doi.org/10.1016/j.jretconser.2021.102889>
- Chen, C. C., Chen, C. W., & Tung, Y. C. (2018). Exploring the consumer behavior of intention to purchase green products in Belt and Road countries: An empirical analysis. *Sustainability (Switzerland)*, 10(3). <https://doi.org/10.3390/su10030854>
- Chen, K., & Deng, T. (2016). Research on the green purchase intentions from the perspective of Product knowledge. *Sustainability (Switzerland)*, 8(9). <https://doi.org/10.3390/su8090943>
- Chen, Y. S., & Chang, C. H. (2012). Enhance green purchase intentions: The roles of green perceived value, green perceived risk, and green trust. *Management Decision*, 50(3), 502–520. <https://doi.org/10.1108/00251741211216250>
- Cialdini, R. B. (2007). *Influence: The Psychology of Persuasion*. New York: Harper Collins.
- Credit Suisse. (2022). The Young Consumer and a Path to Sustainability. Credit-Suisse.Com. <https://www.credit-suisse.com/about-us-news/en/articles/media-releases/the-2022-path-to-sustainability-report--75--of-young-consumers-w-202107.html>
- Croasmun, J. T., & Ostrom, L. (2011). Using likert-type scales in the social sciences. *Journal of Adult Education*, 40(1), 19–22. <https://doi.org/10.1007/s10640-011-9463-0>
- Dajani, D., Yaseen, S. G., El Qirem, I., & Sa'd, H. (2022). Predictors of intention to use a sustainable cloud-based quality management system among academics in Jordan. *Sustainability (Switzerland)*, 14(21). <https://doi.org/10.3390/su142114253>

- Das, D., Sarkar, A., & Debroy, A. (2022). Impact of COVID-19 on changing consumer behaviour: Lessons from an emerging economy. *International Journal of Consumer Studies*, 46(3), 692–715. <https://doi.org/10.1111/ijcs.12786>
- De Canio, F., Martinelli, E., & Endrighi, E. (2020). Enhancing consumers' pro-environmental purchase intentions: the moderating role of environmental concern. *International Journal of Retail and Distribution Management*, 49(9), 1312–1329. <https://doi.org/10.1108/IJRDM-08-2020-0301>
- Elnadi, M., & Gheith, M. H. (2022). What makes consumers reuse ride-hailing services? An investigation of Egyptian consumers' attitudes towards ride-hailing apps. *Travel Behaviour and Society*, 29, 78–94. <https://doi.org/10.1016/j.tbs.2022.06.002>
- Gomes, S., Lopes, J. M., & Nogueira, S. (2023). Willingness to pay more for green products: A critical challenge for Gen Z. *Journal of Cleaner Production*, 390. <https://doi.org/10.1016/j.jclepro.2023.136092>
- Gonçalves, H. M., Lourenço, T. F., & Silva, G. M. (2016). Green buying behavior and the theory of consumption values: A fuzzy-set approach. *Journal of Business Research*, 69(4), 1484–1491. <https://doi.org/10.1016/j.jbusres.2015.10.129>
- Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (2019). *Multivariate Data Analysis*. In *Multivariate Data Analysis, Multivariate Data Analysis B2 - Multivariate Data Analysis, Multivariate Data Analysis (Eight, Vol. 87, Issue 4)*. Cengage.
- Hair, J. F., Risher, J. J., Sarstedt, M., & Ringle, C. M. (2019). When to use and how to report the results of PLS-SEM. *European Business Review*, 31(1), 2–24. <https://doi.org/10.1108/EBR-11-2018-0203>
- Hasyyati, A. N. (2017). ADBI Working Paper Series Demographic and Socioeconomic Characteristics of e-Commerce Users in Indonesia Asian Development Bank Institute. <https://www.adb.org/publications/demographic-socioeconomic-characteristics>
- Jaiswal, D., & Kant, R. (2018). Green purchasing behaviour: A conceptual framework and empirical investigation of Indian consumers. *Journal of Retailing and Consumer Services*, 41, 60–69. <https://doi.org/10.1016/j.jretconser.2017.11.008>
- Jing, K., Qi, M., Mei, Y., & Chen, L. (2022). The impact of empathy with nature on green purchase behavior: An ERP study. *Neuroscience Letters*, 784. <https://doi.org/10.1016/j.neulet.2022.136745>
- Kamalanon, P., Chen, J. S., & Le, T. T. Y. (2022). Why do we buy green products? An extended theory of the planned behavior model for green product purchase behavior. *Sustainability (Switzerland)*, 14(2). <https://doi.org/10.3390/su14020689>
- Khan, S. J., Dhir, A., Parida, V., & Papa, A. (2021). Past, present, and future of green product innovation. *Business Strategy and the Environment*, 30(8), 4081–4106. <https://doi.org/10.1002/bse.2858>
- Le, M. H., & Nguyen, P. M. (2022). Integrating the theory of planned behavior and the norm activation model to investigate organic food purchase intention: Evidence from Vietnam. *Sustainability (Switzerland)*, 14(2). <https://doi.org/10.3390/su14020816>
- Lestari, D. (2019). Measuring e-commerce adoption behaviour among Gen-Z in Jakarta, Indonesia. *Economic Analysis and Policy*, 64, 103–115. <https://doi.org/10.1016/j.eap.2019.08.004>
- Li, J., Gu, Z., & Dai, Y. (2022). Impact of sports sponsorship motivation on consumer purchase intention: Mediating effect based on consumer attitude. *Sustainability (Switzerland)*, 14(22). <https://doi.org/10.3390/su142215430>
- Lopes, J. M. M., Gomes, S., & Trancoso, T. (2024). Navigating the green maze: insights for businesses on consumer decision-making and the mediating role of their environmental concerns. *Sustainability Accounting, Management and Policy Journal*. <https://doi.org/10.1108/SAMPJ-07-2023-0492>
- Martinho, G., Pires, A., Portela, G., & Fonseca, M. (2015). Factors affecting consumers' choices concerning sustainable packaging during product purchase and recycling. *Resources, Conservation and Recycling*, 103, 58–68. <https://doi.org/10.1016/j.resconrec.2015.07.012>
- Michel, J. F., Mombeuil, C., & Diunugala, H. P. (2023). Antecedents of green consumption intention: a focus on Generation Z consumers of a developing country. *Environment, Development and Sustainability*, 25(12), 14545–14566. <https://doi.org/10.1007/s10668-022-02678-9>
- Michie, S., Johnston, M., Francis, J., Hardeman, W., & Eccles, M. (2008). From theory to intervention: mapping theoretically derived behavioural determinants to behaviour change techniques. *Applied Psychology*, 57(4), 660–680. <https://doi.org/10.1111/j.1464-0597.2008.00341.x>

- Nguyen, T. M. A., Nguyen, T. H., & Le, H. H. (2022). Online shopping in relationship with perception, attitude, and subjective norm during covid-19 outbreak: The case of Vietnam. *Sustainability (Switzerland)*, 14(22). <https://doi.org/10.3390/su142215009>
- Ostermann, C. M., Nascimento, L. da S., Steinbruch, F. K., & Callegaro-de-Menezes, D. (2021). Drivers to implement the circular economy in born-sustainable business models: A case study in the fashion industry. *Revista de Gestao*, 28(3), 223–240. <https://doi.org/10.1108/REGE-03-2020-0017>
- Patel, A. (2019). Self identity and internal environmental locus of control: Comparing their influences on green purchase intentions in high-context versus low-context cultures Item Type Article. <http://hdl.handle.net/10454/17524>
- Pathak, K., Prakash, G., Jain, M., Agarwal, R., & Attri, R. (2024). Do eco labels matter for green business strategy and sustainable consumption? A mixed method investigation on green products. *Business Strategy and the Environment*. <https://doi.org/10.1002/bse.3687>
- Pop, R. A., Saplacan, Z., & Alt, M. A. (2020). Social media goes green-the impact of social media on green cosmetics purchase motivation and intention. *Information (Switzerland)*, 11(9). <https://doi.org/10.3390/INFO11090447>
- Roseira, C., Teixeira, S., Barbosa, B., & Macedo, R. (2022). How collectivism affects organic food purchase intention and behavior: A Study with Norwegian and Portuguese young consumers. *Sustainability (Switzerland)*, 14(12). <https://doi.org/10.3390/su14127361>
- Sadiq, M., Adil, M., & Paul, J. (2021). Does social influence turn pessimistic consumers green? *Business Strategy and the Environment*, 30(7), 2937–2950. <https://doi.org/10.1002/bse.2780>
- Schultz, P. W., Nolan, J. M., Cialdini, R. B., Goldstein, N. J., & Griskevicius, V. (2007). The constructive, destructive, and reconstructive power of social norms. *Psychological Science*, 18(5), 429–434. <https://doi.org/10.1111/j.1467-9280.2007.01917.x>
- Sdrolia, E., & Zarotiadis, G. (2019). A comprehensive review for green product term: From definition to evaluation. *Journal of Economic Surveys*, 33(1), 150–178. <https://doi.org/10.1111/joes.12268>
- Sharma, N., & Paço, A. (2021). Moral disengagement: A guilt free mechanism for non-green buying behavior. *Journal of Cleaner Production*, 297. <https://doi.org/10.1016/j.jclepro.2021.126649>
- Siregar, D. H., & Pinagara, F. A. (2022). Analysis of The relationship between practices and performance of green supply chain management in Indonesian micro, small, and medium enterprises (MSMEs). *The South East Asian Journal of Management*, 16(2), 118–138. <https://doi.org/10.21002/seam.v16i2.1169>
- Wang, J., Shen, M., & Chu, M. (2021). Why is green consumption easier said than done? Exploring the green consumption attitude-intention gap in China with behavioral reasoning theory. *Cleaner and Responsible Consumption*, 2. <https://doi.org/10.1016/j.clrc.2021.100015>
- Witek, L., & Kuźniar, W. (2021). Green purchase behavior: The effectiveness of sociodemographic variables for explaining green purchases in emerging market. *Sustainability (Switzerland)*, 13(1), 1–18. <https://doi.org/10.3390/su13010209>
- Yang, S., Su, Y., Wang, W., & Hua, K. (2019). Research on developers' green procurement behavior based on the theory of planned behavior. *Sustainability (Switzerland)*, 11(10). <https://doi.org/10.3390/su11102949>
- Zarei, G., Asgarnezhad Nuri, B., & Noroozi, N. (2019). The effect of internet service quality on consumers' purchase behavior: The role of satisfaction, attitude, and purchase intention. *Journal of Internet Commerce*, 18(2), 197–220. <https://doi.org/10.1080/15332861.2019.1585724>
- Zhang, G., Zhang, Y., Tian, W., Li, H., Guo, P., & Ye, F. (2021). Bridging the intention–behavior gap: Effect of altruistic motives on developers' action towards green redevelopment of industrial brownfields. *Sustainability (Switzerland)*, 13(2), 1–16. <https://doi.org/10.3390/su13020977>
- Zhang, L., Fan, Y., Zhang, W., & Zhang, S. (2019). Extending the theory of planned behavior to explain the effects of cognitive factors across different kinds of green products. *Sustainability (Switzerland)*, 11(15). <https://doi.org/10.3390/su11154222>
- Zhang, L., Hu, Q., Zhang, S., & Zhang, W. (2020). Understanding Chinese residents' waste classification from a perspective of intention-behavior gap. *Sustainability (Switzerland)*, 12(10). <https://doi.org/10.3390/su12104135>