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Environmental Conscious Behavior in Indonesian Zoomer Consumers

Budi Astuti [1]*, Anas Hidayat [2]
[1,2] Universitas Islam Indonesia, Indonesia

*Corresponding Author: 873110102@uii.ac.id

ABSTRACT

The increasingly pressing environmental issues demand changes in consumption behavior. This study presents an integrative model that combines the Theory of Reasoned Action (TRA) and the Theory of Planned Behavior (TPB) to explain the intention and behavior of environmentally conscious consumers (Ecologically Conscious Consumer Behavior/ECCB) in the Indonesian zoomer generation. The model examines the role of attitude (AT), subjective norm (SN), perceived consumer effectiveness (PCE), and environmental concern (EC) as antecedents of Ecologically Conscious Behavioral Intention and Ecologically Conscious Consumer Behavior/ECCB. The study was designed using a quantitative approach with a convenience sampling technique that resulted in 152 respondents from the zoomer generation. The results of the analysis show that subjective norms and perceived consumer effectiveness have a positive effect on green behavioral intention, and intention has a significant effect on actual behavior. Meanwhile, attitude has no significant effect on intention, and a negative effect on actual behavior. In addition, perceived consumer effectiveness does not directly affect behavior, but through intention. Environmental concern improves attitudes, social norms, and perceived consumer effectiveness, but has not been able to directly increase intention.

Keywords: Ecologically Conscious Behavioral Intention, Ecologically Conscious Consumer Behavior, Attitude, Subjective Norm, Perceived Consumer Effectiveness, Environmental Concern

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INTRODUCTION

The global economy currently faces significant challenges. Various problems, such as air/water/soil pollution, species extinction, the greenhouse effect, and the depletion of natural resources, pose serious threats to the environment and its sustainability (Wang et al., 2020; Xu et al., 2020). According to Hopkins, 2020; Xu et al., 2020; Wu et al., 2020; Steg & Vlek, 2009, these problems arise largely due to irresponsible human behavior towards the environment.

Researchers agree that this problem can be managed and resolved by improving human behavior toward environmentally friendly ones (Han, 2020). This means that individual consumer participation is crucial to curbing this rapidly growing global environmental problem (Steg and Vlek, 2009). In particular, changes in individual consumption behavior are considered a crucial prerequisite for environmental sustainability (Halder et al., 2020; Wang et al., 2020).

In developed countries, studies on pro-environmental consumer behavior have been extensively conducted, while in several developing countries, including Indonesia, they are still in their infancy. Furthermore, several recent studies have found an attitude-behavior gap, a situation where consumers have positive attitudes toward green products but have not yet fully implemented their actual purchasing decisions (Testa et al., 2021; Nguyen et al., 2024).

Therefore, it is interesting to conduct research on environmentally friendly consumer behavior. This is in line with Biswas and Roy's (2015a, 2015b) statement that new research efforts are needed to examine the development of pro-environmental consumer behavior in the Asian region. Furthermore, in countries with significant heterogeneity in socioeconomic, demographic, cultural, and overall consumer lifestyle standards, research on pro-environmental consumer behavior is considered an ideal context for replicating and advancing marketing theory.

Eco-friendly marketers require specific marketing strategies when serving different consumer groups (Debevec et al. 2013) and one group of interest in this study is the younger generation, Gen Z (14–29 years old). Debevec et al. (2013) stated that the younger consumer segment (18–24 years old) is considered less engaged in environmentally responsible behavior than their older counterparts (25–34 years old). As the younger generation of zoomers transitions into independent consumers, their consumption habits will begin to impact the environment.

Thus, understanding the consumer behavior of the educated, pro-environmental generation of young people, who represent future consumers and the future of society, is crucial for developing sustainable marketing strategies specific to the target group. Despite the importance of the younger generation as future mainstream consumers, only a handful of studies have examined their sustainable attitudes and behaviors.

This study reveals potential antecedents in predicting environmentally friendly consumer behavior of young educated urban consumers by applying the Theory of Planned Behavior (TPB) framework, as one of the most predictive persuasion theories in understanding behavioral intention and the Theory of Reasoned Action (TRA), to predict consumers' environmentally friendly product purchase intention. Therefore, this study integrates attitude/AT, subjective norm/SN, perceived consumer effectiveness/PCE and environmental concern/EC as antecedents of behavioral intention/ECBI. The appropriate model then connects intention to ecologically conscious consumer behavior/ECCB.

Thus, the objectives of this study are (1) to examine the factors that can trigger the environmentally conscious consumer behavior (ECCB) of the younger generation of zoomers and (2) to provide green marketers with insights to create effective marketing strategies or in other words, green marketers will benefit from this theoretical investigation, as it will help in formulating effective marketing strategies for the evolving consumers in the future.

LITERATURE REVIEW

Zoomers: The Emerging Eco-Friendly Consumer

Recent research defines eco-friendly consumer behavior not only as decisions to purchase green products, but also as reducing consumption, reusing, repairing, and recycling. This approach is known as sustainable consumption behavior (White et al., 2019; Kumar et al., 2023). Among all consumer groups for eco-friendly products, zoomers (ages 14-29) constitute a large portion of the population, are still in college, and continue to influence family purchasing decisions directly and indirectly (Fry 2015), making this segment a high-priority target for marketers.

Only a handful of academic studies have looked at the zoomer generation and sustainable behavior, and findings suggest that young people tend to value interpersonal relationships (e.g., peers and family) and that these relationships impact their environmentally friendly attitudes and behaviors (Muralidharan, Rejón-Guardia, and F. Xue, 2016). In addition, young people tend to promote green products among their friends if they are affordable and made from recycled materials (Smith, 2010).

Despite their promises of pro-environmental attitudes and environmental concerns, the majority of young people fail to translate these attitudes into actual behavior (Gaudelli, 2009).

Gaudelli (2009) explains that the absence of instant gratification and lack of personal involvement can negatively impact the purchasing behavior of younger generations. Therefore, marketers must make younger generations feel empowered, knowledgeable, and exclusive in their marketing campaigns (Jordaan, Ehlers, and Grove, 2011). The general consensus suggests that despite their environmental literacy, younger generations struggle to translate their knowledge and intentions into pro-environmental behavior (Gaudelli 2009). More importantly, differences in sustainable behavior have also been found within this group; younger millennials (18–24 years old), mostly college students, have been found to be less engaged in environmentally responsible behavior than older millennials (25–34 years old) (Debevec et al., 2013). Other researchers have suggested that younger millennials may differ from their older counterparts in terms of sustainable attitudes and behaviors (Smith 2010).

The Theory of Reasoned Action and the Theory of Planned Behavior

In attempts to explain human pro-environmental behavior, academics and industry practitioners typically focus on specific behaviors of interest, such as water conservation, recycling, energy conservation, public transportation use, avoiding single-use products, or environmental protection (Moon, 2021; Paiano et al., 2020). Understanding the determinants of behavior provides a basis for planning to promote environmentally friendly behavior and mitigate environmental problems.

Ajzen (2091) stated that in recent decades, academics in environmental psychology, social behavior, and tourist behavior have relied heavily on the theory of reasoned action and the theory of planned behavior as their conceptual frameworks to explain customer pro-environmental behavior (Garay et al., 2019; Han, 2020). According to the theory of reasoned action, an individual's behavioral intention, which is a direct precursor to actual action, is constructed by his or her attitude toward the behavior and subjective norms (Fishbein & Ajzen, 2010). In other words, the theory of reasoned action acknowledges the usefulness of attitudinal and social factors but applies these variables to the specific behavior of interest (Meng et al., 2020). Therefore, the primary determinants of an individual's intention and behavior in this theory are attitudes toward the behavior and subjective norms that govern the action under consideration (Ajzen & Kruglanski, 2019). According to Ajzen (1991) attitude toward behavior is the extent to which practicing a particular behavior is judged to be good/bad, which is formed based on a combination of outcome beliefs and the subjective value of the anticipated outcome (Manosuthi et al., 2020). Meanwhile, outcome beliefs according to Manosuthi et al (2020) are behavioral beliefs that indicate the individual's perceived probability that the action will produce a given outcome.

Subjective norms indicate the social pressure an individual feels to practice or not practice a particular behavior (Ajzen, 1991). In addition, by Meng et al (2020) and Moon (2021), subjective norms are assumed to be a critical function of normative beliefs from important referents and motivation to comply with the referents. The meaning of normative beliefs indicates certain behavioral expectations from important referents while the meaning of motivation is to comply with how critical the referent's expectations are. Meng et al (2020) stated that these referents can include: family/relatives, teachers, supervisors, coworkers, or peers. Ajzen (2012) and Moon (2021) describe attitudes toward behavior and subjective norms including their predictors as volitional processes.

The theory of planned behavior is an advanced version of the theory of reasoned action (Ajzen, 1991). In this theory, a person's behavioral intentions are the proximal determinants of their actual behavior, and these intentions are formed through volitional and non-volitional processes (Garay et al., 2019). Ajzen (1991) differentiates the theory of planned behavior from the theory of reasoned action by integrating non-volitional processes into his theoretical framework. A key aspect of non-volitional processes is perceived behavioral control, which refers to the level of an individual's perception of their ability to perform a particular behavior (Ajzen, 2012). Meanwhile, according to Manosuthi et al. (2020) and Moon (2021), the form of perceived behavioral control is based on a combination of control beliefs

and perceived power. Control beliefs refer to a person's perception of the presence/absence of factors that facilitate/inhibit the performance of their behavior, while perceived power is about how important these factors are to them (Ajzen, 1991; Meng et al., 2020).

Perceived Consumer Effectiveness (PCE)

Perceived consumer effectiveness (PCE) is defined by Ellen, Wiener, and Cobb-Walgren (1991) as the domain-specific perceived belief that consumer effort can make a difference in a solution. This particular construct is similar to self-efficacy (Bandura, 1986), which refers to one's confidence and ability to achieve goals through effort. Attitudes are a function of salient beliefs (Fishbein, 1967); thus, PCE differs from attitude, which is the 'evaluation of a problem' (Tesser and Shaffer, 1990), or EC (Ellen, Wiener, and Cobb-Walgren, 1991). In environmental studies, PCE can be defined as the internal locus of control held by consumers that one's actions can make a difference in protecting the environment (Cleveland, Kalamas, and Laroche, 2012). With economic progress comes a variety of environmental problems that impact society, and beliefs stem from personal and social values that are threatened by environmental degradation (Hofstede and Bond 1984). Early findings from the environmental literature indicate that PCE is a strong predictor of environmentally conscious behavior, as in the study by Kinnear, Taylor, and Ahmed (1974), which stated that PCE influences the choice of detergent type and the level of purchasing environmentally friendly products.

According to Bang et al. (2000), applying the theory of reasoned action means examining the impact of beliefs on attitudes and stating that beliefs in the positive outcomes of renewable energy use are positively related to attitudes toward paying more for renewable energy, in addition to that consumer beliefs are the building blocks for stronger and more stable attitudes. This is reinforced by Vermeir and Verbeke (2006) who stated that PCE is positively correlated with attitudes toward purchasing sustainable dairy products and, in turn, with purchase intentions. Studies have shown that PCE is a critical predictor of green behavior, but data are largely based on the separate impact of environmental variables (Ellen, Wiener, and Cobb-Walgren 1991). Recent research shows that PCE plays a crucial role in bridging intentions and actual behavior. Consumers with high PCE are more likely to pay a price premium and consistently purchase green products (Confente et al., 2020; Nguyen et al., 2024).

Ecologically Conscious Consumer Behavior (ECCB)

ECCB is the extent to which consumers purchase goods they believe are environmentally beneficial (Roberts 1996). Pro-environmental behavior, such as ECCB, is considered a prerequisite for solving environmental problems (Roberts and Bacon 1997), and the need to understand ECCB has increased due to increased media attention to environmental issues (Mazur and Lee 1993).

Furthermore, a high concentration of green shoppers is in the baby boomer segment, and although younger shoppers place the highest importance on green issues, these issues are not as fully integrated into their actual shopping practices as their older counterparts. This finding relates to the notion that millennials, especially younger ones, care about the environment but fail to act on it (Gaudelli, 2009). ECCB can be operationally defined in various ways: the use of recycled paper products, energy savings by driving less, general recycling, consumer purchasing decisions, and electricity conservation (Roberts and Bacon 1997). Considering the gap between attitudes and actual purchasing behavior, the current study defines ECCB as the purchase of environmentally friendly goods (Roberts 1996) and operationalizes the construct as actual green purchasing behavior rather than intention to purchase green products.

Environmental Concern (EC)

Environmental concern (EC) is the evaluation, or attitude toward the fact that one's own behavior, or the behavior of others, has consequences for the environment (Fransson and Gärling, 1999; Takala, 1991). EC has been treated as a domain-specific concept that uniquely predicts consumers' environmentally

conscious behavior. While the relationship between environmental attitudes (i.e., EC) and behavior has been well documented, scholars have explained the influence of EC on green behavior in various ways. For example, people who are highly concerned about the environment tend to exhibit higher purchase intentions for environmentally friendly products (Mainieri et al., 1997). Stern and Oskamp, 1987, suggested that the relationship between concern and pro-environmental behavior depends on whether the behavior is easy to perform and whether the attitudes and behavior are specific rather than general.

Despite all the potential moderators that may influence the impact of EC, sustainability scholars have come to agree that EC is a good predictor of ECCB (Ellen, Wiener, and Cobb-Walgren 1991). For example, Lepisto (1974) reported that if the physical environment is perceived as pleasant or beautiful, environmental concern increases, leading to pro-environmental behavior. Roberts (1996) found that EC is a strong predictor of ECCB, following PCE. Straughan and Roberts (1999) also found that although the impact of EC is not the strongest, its impact on behavior is still significant.

Muralidharan, Rejón-Guardia, and Xue (2016) explored the green purchasing behavior of young Millennials from India and the United States. Their findings suggest that EC (i.e., an attitudinal outcome) mediates the relationship between socialization agents (i.e., family and peers) and green purchasing behavior. Communicating with peers and family members about green consumerism can increase one's concern for the environment, further encouraging green purchasing behavior. Environmental concern has been shown to increase preference for sustainable brands, especially when consumers believe that individual actions can have a tangible impact. However, this influence is weakened when consumers are skeptical of greenwashing (Sun & Wang, 2022).

Given the various previous findings, an important objective of this study is to evaluate how consumers' level of environmental concern influences attitudes, subjective norms, perceived consumer efficacy, behavioral intentions, and environmentally conscious consumer behavior. Following Minton and Rose (1997), the current study treats EC as a general attitude toward environmental conservation.

Hypothesis Development

Attitude

Within the TPB framework, attitude is considered one of the determinants of behavioral intention. This suggests that attitude toward a behavior is defined as the extent to which an individual evaluates whether or not a particular behavior is favorable or unfavorable (Ajzen, 1991). In an environmental context, attitude is defined as "a cognitive and affective evaluation of an environmental protection objective" (Bamberg, 2003). Consistent with this, several authors argue that consumers with greater ecological concern tend to be pro-environmental in their consumption behavior (Wang et al., 2014). Thus, environmentally conscious consumers are more likely to have the intention to adopt environmentally responsible consumption behavior.

Ellen et al. (1991) first argued that a significant antecedent of ECCB is consumers' general attitudes toward environmental conservation. Since then, numerous studies have confirmed that environmental attitudes are one of the strongest predictors of environmental behavior. The influence of attitudes on behavioral intentions related to pro-environmental consumer behavior was also demonstrated in research by Verma and Chandra (2017). Furthermore, Yadav and Pathak (2016) found a significant positive effect of attitudes on green purchasing intentions. However, none of these studies examined the mediating effect of behavioral intentions on the attitude-behavior relationship. This literature review leads to the following hypotheses in this study:

H1a: *Consumer attitudes toward the environment have a significant positive effect on environmentally conscious behavioral intentions.*
H1b: *Consumer attitudes toward the environment have a significant positive effect on environmentally conscious consumer behavior/ECCB.*

Subjective Norms

Werner (2004) states that subjective norms refer to an individual's assessment of others' preferences and support for a behavior. These "others" include family members, friends, coworkers, or other reference groups. According to Perkins (2003), many social campaigns have effectively used social conformity norms to shape behavior by suggesting the "desirable" behavior of the majority. This is in line with Yadav and Pathak's (2016) assertion that these social norms are claimed to be effective in promoting pro-environmental consumer behavior. Meanwhile, Biswas and Roy (2015b) found that the most significant influences on pro-environmental consumption behavior come from peer influence and social recognition. This is supported by the findings of Verma and Chandra (2017) that subjective norms have a significant positive effect on intention to visit eco-friendly hotels among local consumers. Therefore, the following hypothesis is proposed:

H2a: *Subjective norms (social conformity) have a significant positive effect on intention to behave in an environmentally conscious manner.*
H2b: *Subjective norms (social conformity) have a significant positive effect on environmentally conscious consumer behavior/ECCB.*

Perceived Consumer Effectiveness

Furthermore, empirical evidence shows that an individual's level of control over their ability to perform a behavior significantly influences their behavior (Bandura et al., 1980). Studies of environmentally conscious consumer behavior in collectivistic societies have also confirmed the positive influence of PCE on behavioral intensity and/or actual behavior (Yadav and Pathak, 2016). Based on this, the following hypotheses are developed:

H3a: *PCE has a significant positive effect on environmentally conscious behavioral intention.*
H3b: *PCE has a significant positive effect on environmentally conscious consumer behavior/ECCB.*

Behavioral Intention

According to Ajzen (1988), behavioral intention refers to an individual's level of determination and willingness to perform a particular behavior, which is often determined by attitudes and subjective norms. Furthermore, Ajzen (1988) also stated that a higher level of willingness tends to result in a better opportunity to perform that behavior. Environmentally responsible consumers are said to be more willing to act to improve the environment. In line with this, Lin and Huang (2012) argue that when two products are perceived as identical, environmental aspects become the primary decision criterion in consumer product evaluation. This has fueled the rise of green consumerism in Asia (Gurau and Ranchhod, 2005), along with consumers' desire to help preserve the environment (Harris, 2006). Based on these findings, the following hypothesis is proposed:

H4: *Consumers' environmentally conscious behavioral intention will positively influence environmentally conscious consumer behavior (ECCB).*

Environmental Concern

Environmental concern (EC), according to Hu et al. (2010), is the extent to which people are aware of environmental problems and support efforts to solve them and/or demonstrate a willingness to personally contribute to their solutions (Dunlap and Jones, 2002). Research by Van Doorn and Verhoef (2011) explored consumer concern for environmental issues and willingness to pay for sustainable products. According to Caruana (2007), consumers may be willing to pay a premium for ethical product attributes. Some previous studies focused on early EC research on ecological issues such as pollution and energy conservation (Kinnear et al., 1974), while the current focus is on overall environmental concern

(Zimmer et al., 1994). Hu et al. (2010) advocated general environmental concern as a construct to measure green consumption.

In a study by Hansla et al. (2008), EC was significantly associated with green behavior; namely, consumers' willingness to pay premiums for environmentally friendly electricity. Consumers perceive energy conservation as more beneficial to them. More specifically, purchasing intentions for environmentally friendly products are strongly motivated by EC (Hutchins and Greenhalgh, 1997). Environmentally conscious individuals also influence the behavior of others through peer group/family pressure, acting as "significant others" who accept or reject the environmentally friendly purchasing behaviors exhibited by others. Thus, consumers' subjective norms are influenced by increased EC, decreased perceptions of difficulty in terms of resources, time, and other factors. Individuals themselves are more environmentally conscious when they recognize the positive benefits of green consumption.

Recently, Chen and Tung (2014) developed an extended TPB to predict consumers' intention to visit green hotels, observing that TPB variables function as mediators in the intention-environmental concern relationship. The analysis showed that intention to visit green hotels is indirectly influenced by EC, through attitude, subjective norm, and perceived behavioral control. However, EC is a component of attitude, and therefore, its direct influence on purchase intention should better explain intention to use green products. The direct relationship between environmental concern and purchase intention was ignored in Chen and Tung (2014). Therefore, in this study, the researchers intend to extend the TPB and TRA theories to the context of pro-environmental behavior.

Therefore, the researchers propose the following hypotheses:

H5. *Environmental concern has a significant positive effect on attitudes toward environmentally conscious behavior.*

H6. *Environmental concern has a significant positive effect on subjective norm toward environmentally conscious behavior.*

H7. *Environmental concern has a significant positive effect on consumers' perceived effectiveness in environmentally conscious behavior.*

H8. *Environmental concern has a significant positive effect on consumers' intention to behave environmentally consciously.*

Research Framework

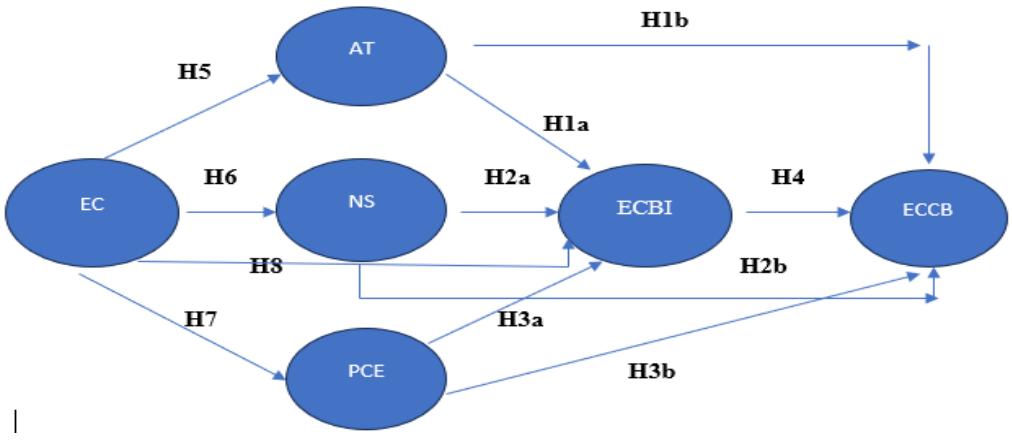


Figure 1. Research Framework

METHOD

Research Design

The population for this study was educated young zoomers (aged 14–29), while the sample was drawn from individuals aged 18–29 years and above. For research ethics reasons, parental consent is not

recommended for younger individuals under this age. Furthermore, due to the conceptual complexity of the context of environmentally conscious behavior being investigated, it is difficult for minors to understand (Chan, 2001). For this reason, adults are given a greater ability to compare and evaluate available options and make informed choices. Indeed, as evidenced in the environmental literature, highly educated individuals can more easily understand the topics under consideration and contribute to more accurate data than less educated individuals (Hedlund, 2011). This study covers a large geographic area, namely Indonesia, and for this reason, the researchers chose an online survey to reach the maximum number of respondents across the target region in a cost-effective manner (Zikmund, 1997).

Therefore, the researcher collected data from a sample of highly educated Generation Z consumers, using convenience sampling and primary data collection, conducted online through Google Forms. The sample size required for this study was calculated based on Hair et al. (1998) recommending a desired level of 15-20 observations per variable studied. This study has six constructs consisting of: 5 items for attitudes (Ajzen, 1991; Han, 2020), 4 items for subjective norms (Ajzen, 1991; Yadav & Pathak, 2016), 3 items for perceived consumer effectiveness (Ellen et al, 1991), 5 items for environmental concern (Dunlap & Jones, 2002), 3 items for purchase intentions (Han, 2020; Ajzen, 2012) and 5 for ecological behavior (Roberts, 1996), totaling 25 items, resulting in a sample size of between 125-250 respondents. The questionnaire responses will be analyzed using SEM-PLS, with a measurement scale using a 5-item Likert type.

RESULTS

Descriptive Variable Analysis Results

In general, the average respondent's responses to the research variable indicators showed a positive trend across all research constructs. This is indicated by high environmental concern, relatively positive attitudes toward the environment, relatively strong subjective norms, moderate perceived consumer effectiveness, and high green behavioral intentions, although actual behavior fell within the moderate to high category.

Therefore, based on the descriptive variable analysis results, it is concluded that the Indonesian Zoomers generation has good environmental awareness, but the implementation of actual behavior still requires strengthening.

Outer Model Test

Validity indicates the extent to which a test or series of operations measures what it is intended to. If the loading factor and AVE values are greater than 0.5, all questionnaire items are considered valid. Based on the data in Table 1, all instruments had loading factor and AVE values greater than 0.5, implying that the validity test results for all instruments can be declared valid.

Table 1. Validity Test Results

Variables	Indicator	Loading Factor	AVE
Environmental Attitude	AT1	0.900	0.691
	AT2	0.898	
	AT3	0.790	
	AT4	0.747	
	AT5	0.812	
Subjective Norm	SN1	0.887	0.721
	SN2	0.895	
	SN3	0.900	
	SN4	0.697	

Variables	Indicator	Loading Factor	AVE
Environmental Concern	EC 1	0.797	0.609
	EC 2	0.853	
	EC 3	0.783	
	EC 4	0.900	
	EC 5	0.506	
Perceived Consumer Effectiveness	PCE1	0.900	0.729
	PCE2	0.43	
	PCE3	0.816	
Ecologically Conscious BI	BI1	0.900	0.782
	BI2	0.869	
	BI3	0.884	

Source: *Primary data processed (2026)*

Reliability testing is necessary to confirm that research results are consistent and accurate. Referring to the composite reliability (CR) value, it must be at least 0.6 to be considered reliable. A higher value indicates a more reliable study (Hair et al., 2010). Details of the reliability test results using the Cronbach's Alpha formula are presented in Table 2. The comprehensive calculation results in Table 2 show that the various types of variables studied have produced a reliable instrument, as indicated by a Cronbach's Alpha value greater than 0.60.

Table 2. Reliability Test Results

No	Variable	Number of Item	Cronbach's Alpha	Description
1	Environmental Attitude	5	0.869	Reliable
2	Subjective Norm	4	0.902	Reliable
3	Environmental Concern	5	0.833	Reliable
4	Perceived Consumer Effectiveness	3	0.885	Reliable
5	Ecologically Conscious BI	3	0.930	Reliable
6	Ecologically Conscious CB	5	0.942	Reliable

Source: *Primary data processed (2026)*

Inner Model Test

R-square is a metric often used to measure how well exogenous variables explain variation in endogenous variables. Table 3 shows that the R-square and adjusted R-square values range from moderate to high. This indicates that all independent variables in this study can be well explained by the dependent variable.

Table 3. Results of the Coefficient of Determination (R-Square) Test

Variable	R Square
Ecologically Conscious BI	0.482
Ecologically Conscious CB	0.545

Source: *Primary data processed (2026)*

The next important step in testing the hypothesis is to use the path coefficients, which are calculated using the bootstrapping technique in the SmartPLS application. The complete results of the hypothesis analysis can be seen in Table 4. Table 4 shows that of the 11 hypotheses, four were not supported.

Table 4. Path Coefficient Test Results (Hypothesis)

Hypothesis	Path	Coefficient	P Value	Conclusion
H1a	AT → ECBI	0.103	0.463	Rejected
H1b	AT → ECCB	-0.631	0.000	Rejected
H2a	SN → ECBI	0.241	0.015	Accepted
H2b	SN → ECCB	0.452	0.000	Accepted
H3a	PCE → ECBI	0.575	0.000	Accepted
H3b	PCE → ECCB	-0.071	0.433	Rejected
H4	ECBI → ECCB	0.608	0.000	Accepted
H5	EC → AT	0.664	0.000	Accepted
H6	EC → SN	0.703	0.000	Accepted
H7	EC → PCE	0.416	0.000	Accepted
H8	EC → ECBI	-0.072	0.539	Rejected

Source: *Primary data processed (2026)*

Discussion

The Influence of Attitude on Environmentally Conscious Behavioral Intention

The test results show that attitude toward the environment does not significantly influence ecologically conscious behavioral intention (β = 0.103; p = 0.463). Thus, H1a is rejected. This finding indicates that although respondents have a positive attitude toward the environment, it is not strong enough to drive environmentally conscious behavioral intention. Theoretically, these results differ from the Theory of Planned Behavior (Ajzen, 1991), which positions attitude as the primary determinant of behavioral intention. However, in the context of modern green consumer behavior, many studies have found that the relationship between attitude and intention is increasingly non-linear, especially among the younger generation.

Recent research has shown an attitude-intention gap, a situation where consumers cognitively and emotionally support environmental issues but have not yet committed to purchasing or taking concrete action. A 2024 study found that positive attitudes toward green products do not always translate into purchase intentions due to concerns about greenwashing, uncertainty about benefits, and low consumer trust. Furthermore, research on Gen Z Indonesia shows that intention to purchase green products is more influenced by perceived value, functional benefits, and environmental concerns than by attitude alone.

In the context of Indonesian Zoomers, these results make sense because this group is known for its high social awareness but is very pragmatic in its consumption decisions. They consider: product price, quality and performance, ease of access, social trends, influencer recommendations, and brand image. Therefore, positive attitudes do not automatically translate into actual intentions. These findings also indicate that the Zoomer generation tends to practice symbolic environmentalism, namely supporting environmental issues as a social identity, but this has not yet fully translated into behavioral intentions. Therefore, the implications of green marketing strategies are not sufficient to simply build positive attitudes. Companies need to include: evidence of the product's tangible benefits, affordable prices, ease of access, social endorsements, and clarity of green claims.

The Influence of Attitude on Environmentally Conscious Consumer Behavior

The test results show that attitude significantly influences actual behavior, but in a negative direction (β = -0.631; p = 0.000). Because the direction of the relationship is opposite to the hypothesis, H1b is rejected. This finding indicates an attitude-behavior gap phenomenon, where consumers have high pro-

environmental attitudes but low actual behavior. Recent literature indicates that this gap is one of the most dominant issues in global green marketing. A 2023–2024 study showed that many consumers expressed high concern for green products but still purchased conventional products. This is due to: lower cost, greater convenience, easier access, familiarity, and lower perceived risk.

Therefore, the implication of this finding is that companies cannot rely on consumer attitudes as the sole predictor of purchasing behavior. The focus should shift to: affordability, convenience, trust, accessibility, and social proof.

The Influence of Subjective Norms on Environmentally Conscious Behavioral Intentions

The test results show that subjective norms have a significant positive effect on green behavioral intentions (β = 0.241; p = 0.015). Therefore, H2a is accepted. This finding suggests that social pressure, the opinions of family, friends, community, and reference groups can drive environmentally conscious behavioral intentions.

For the Zoomer generation, social norms are particularly important because this group lives in a digital ecosystem heavily influenced by social validation. Social media, peer groups, campus communities, and influencers shape their consumption preferences. Recent studies have shown that social norms are a strong predictor of green purchase intentions, particularly among young consumers in Asia and emerging markets. Therefore, the implication of these findings is that companies need to conduct green marketing campaigns using communities, influencers, user-generated content, collective movements, and social challenges.

The Influence of Subjective Norms on Environmentally Conscious Consumer Behavior

Subjective norms also have a positive effect on actual behavior (β = 0.452; p = 0.000). This indicates that social influence shapes not only intentions but also actual actions. When the social environment supports a green lifestyle, consumers are more likely to carry a tumbler, purchase eco-products, or separate waste. This is consistent with social conformity theory, which states that individuals adapt their behavior to group norms.

The Influence of Perceived Consumer Effectiveness on Intention

PCE has a significant positive effect on intention (β = 0.575; p = 0.000). This is one of the strongest influences in the model. This means that the higher the belief that personal actions can help the environment, the greater the intention to behave green. This finding aligns with recent research on Indonesian Gen Z, which found that PCE is a strong predictor of green purchase intention. The implication of this finding is that marketers need to emphasize that: a single consumer purchase has a real impact, small choices can change the environment, and consumers are part of the solution.

The Influence of Perceived Consumer Effectiveness on Environmentally Conscious Consumer Behavior

PCE did not have a significant direct effect on actual behavior (β = -0.071; p = 0.433), rejecting H3b. This indicates that consumer beliefs do not automatically translate into concrete actions. Consumers may believe their behavior is important, but are still hampered by external factors. Recent studies have shown that PCE is more effective as a driver of intention than a direct predictor of behavior. Actual behavior is still typically influenced by price, accessibility, and habit. In other words, PCE does not directly influence environmentally conscious consumer behavior, but rather through intention variables.

The Influence of Intention on Actual Behavior

Intention significantly influences actual behavior (β = 0.608; p = 0.000), and also has the largest influence on ECCB. This finding is highly consistent with the TPB, which states that intention is the proximal antecedent of behavior. When consumers have a commitment, the probability of actual behavior increases significantly.

The Influence of Environmental Concern on Attitude

Environmental concern has a positive effect on attitude (β = 0.664; p = 0.000). This means that the higher the environmental concern, the more positive the consumer's evaluation of green behavior. This finding aligns with numerous global studies that suggest environmental concern is fundamental to the formation of green attitudes.

The Influence of Environmental Concern on Subjective Norms

EC has a positive effect on subjective norms (β = 0.703; p = 0.000). Consumers who care about the environment tend to build social relationships with groups that share similar values. This suggests that environmental values can be socially contagious.

The Influence of Environmental Concern on PCE

EC has a positive effect on PCE (β = 0.416; p = 0.000). The greater the concern about environmental issues, the higher the belief that personal actions can help.

The Influence of Environmental Concern on Intention

EC has no significant effect on intention (β = -0.072; p = 0.539). This means that environmental awareness alone is not enough to drive intention. Recent research shows that environmental concern often stops at the level of concern if it is not accompanied by trust, affordability, and product relevance. In the context of Indonesian Zoomers, environmental concern is already high, but consumption decisions remain pragmatic.

CONCLUSION

Based on the research results, we can conclude:

1. Subjective norms and PCE have a positive effect on green behavioral intentions.
2. Intention has a significant effect on actual behavior.
3. Attitude has no significant effect on intention and a negative effect on actual behavior.
4. PCE does not directly influence behavior, but rather through intention.
5. Environmental concern increases attitudes, social norms, and PCE, but is not able to directly increase intention.
6. The model is able to explain 54.5% of the variation in environmentally friendly behavior.

Theoretical Implications

1. The TPB needs to be expanded to include PCE and EC.
2. Attitude is not always the dominant predictor in the context of the younger generation.
3. Social influence is more relevant to the green behavior of Zoomers.

Managerial Implications for Companies

1. Use influencers and green communities.
2. Show the real impact of purchases.

3. Lower the price barrier for green products.
4. Avoid greenwashing.

Managerial Implications for Government

1. Simple action campaigns can have a big impact.
2. Subsidies or incentives for environmentally friendly products.
3. Clear green label regulations.

Managerial Implications for Academics

1. Green campus movement.
2. Student green behavior competitions.
3. Integration of sustainability into the curriculum.

Recommendations

Indonesia's Zoomer generation has demonstrated a strong environmental awareness, but the transformation toward actual behavior is still influenced by social, economic, and practical factors. Therefore, sustainability strategies need to shift from simply building awareness to facilitating concrete consumer action. For further research, the following are recommended:

1. Increase the national sample size.
2. Compare Gen Z, Millennials, and Gen Alpha.
3. Add variables such as price, trust, greenwashing skepticism, and lifestyle.
4. Use SEM-CB or a longitudinal study.
5. Further test mediation and moderation.

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