"Consumer behavior and tourists' green purchase intention of Gen Z consumers: Moderating role of environmental knowledge"

	Surahman 🝺 Dadang Lesmana 🝺	
AUTHORS	Dewi Naprida 🛅	
	Bagus Rai Wibowo 🔟 Rizky Yudaruddin 🔟	
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Surahman, Ph.D. in Marketing Innovation and Technology, Department Business Administration, Polytechnic State of Samarinda, Indonesia. (Corresponding author)

Dadang Lesmana, Researcher, Research and Innovation Agency, Indonesia.

Dewi Naprida, Researcher, Research and Innovation Agency, Indonesia.

Bagus Rai Wibowo, Researcher, Research and Innovation Agency, Indonesia.

Rizky Yudaruddin, Lecturer, Faculty of Economics and Business, Department of Management, Mulawarman University, Indonesia.

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# CONSUMER BEHAVIOR AND TOURISTS' GREEN PURCHASE INTENTION OF GEN Z CONSUMERS: MODERATING ROLE OF ENVIRONMENTAL KNOWLEDGE

#### Abstract

The study aims to analyze how factors such as environmental attitude, subjective norms, perceived behavioral control, and environmental knowledge impact the willingness of Generation Z tourists in Indonesia to make green or environmentally friendly purchases. It also explores the moderating role of environmental knowledge in the relationship between environmental attitude and green purchase intentions. The analysis focuses on Generation Z respondents, totaling 543 individuals. The paper employs the structural equation modeling (SEM) method. The results show that when considered individually, consumer behavior, encompassing environmental attitude, subjective norms, and perceived behavioral control, exerts a significantly positive impact on green purchase intentions. These results suggest that tourists' attitudes toward the environment, influence from family or friends, and the ability to control their actions are pivotal in fostering green purchase intentions while traveling. Furthermore, the study demonstrates a substantial positive correlation between environmental knowledge and tourists' green purchase intentions. Additionally, environmental knowledge moderates environmental attitude, amplifying its positive effect on tourists' green purchase intentions. This highlights the vital role of environmental knowledge, which not only stimulates green purchase intentions but also motivates tourists to adopt pro-environmental behavior by opting for eco-friendly products.

#### **Keywords**

consumer economics, eco-friendly, mindset, consumption, demand, sustainability, global warming, ecological

JEL Classification D11, I12, Q50, M30

#### INTRODUCTION

In the contemporary global landscape, the escalating concerns about environmental sustainability have catalyzed a significant shift in consumer behavior, compelling individuals to consider the ecological impact of their choices. This transformative trend is particularly pronounced among Generation Z consumers, a cohort characterized by their innate digital proficiency and heightened environmental awareness. As the first generation to come of age in an era defined by climate activism and sustainability advocacy, Generation Z is distinctively poised to play a pivotal role in reshaping consumption patterns to align with eco-conscious values. Consequently, researchers and industries are prompted to delve into the psychological nuances driving this newfound propensity for sustainable choices.

Generation Z, a key force in the tourism industry, exerts substantial influence over consumer markets. By delving into the intricate rela-

tionship between environmental knowledge, consumer behavior, and green purchase intentions, one can identify effective strategies to encourage sustainable and environmentally friendly purchasing behavior among this generation. Understanding how environmental awareness can moderate a connection between psychological consumer behavior and green purchase intentions offers valuable insights for formulating policies and marketing campaigns focusing on environmental consciousness and responsible buying among Generation Z tourists. Consequently, study in this field has the potential not only to provide deeper insights into the consumer behavior of Generation Z but also to drive sustainable and responsible economic growth in the global tourism industry.

As Indonesia endeavors to rebound from the pandemic's far-reaching effects on its tourism and creative economy sectors, the revival of the tourism industry post-pandemic has signaled a promising trajectory. The Central Statistics Agency's data reveal a noteworthy increase of 508.87% from 2022 in foreign tourist visits during the first quarter of 2023 (BPS, 2023). The tourism sector, a pivotal pillar of the Indonesian economy, is a significant contributor to the nation's GDP and foreign exchange earnings. Although the sector witnessed a remarkable 56% decline in its GDP contribution due to the pandemic, the gradual recovery signals a promising outlook. While the tourism landscape has faced unprecedented obstacles resulting from the COVID-19 epidemic, exploring Generation Z's green purchase intentions within this dynamic post-pandemic recovery assumes significance.

### 1. LITERATURE REVIEW AND HYPOTHESES

Understanding the psychological behavior and green purchase intentions among Generation Z is crucial for sustainable consumption, especially with Indonesia's tourism sector's key role. Environmental concerns such as waste, pollution, emissions, degradation, and climate change have received attention from academics and policymakers (Amalia et al., 2022; Verma & Chandra, 2018; Mohd Suki & Mohd Suki, 2015; Lee et al., 2010). This endeavor aims to avert adverse impacts on both health and the environment, curtail waste generation, and foster environmentally conscious lifestyles (Lee et al., 2010; H.-S. Lee & H.-J. Lee, 2015; Zainurossalamia et al., 2022; Musviyanti et al., 2022; Ramkissoon et al., 2013). Studies link these with eco-friendly consumption as solutions aligned with global sustainability goals and SDGs (Abraham et al., 2000; Han, 2020; Nekmahmud et al., 2022). Despite pandemic impacts (Achmad et al., 2023; Lestari et al., 2021; Riadi et al., 2022; Yudaruddin, 2023a, 2023b), tourism and creative sectors show resilience, with a 508.87% rise in foreign visits in Q1 2023, per Indonesia's statistics bureau (BPS, 2023). Understanding Generation Z's behavior aids policy and academic initiatives for sustainable consumption and environmental preservation.

Moreover, the extensive literature on attitude's role in individual behavior, drawing from the theory of reasoned action (TRA) and the theory of planned behavior (TPB), highlights the significance of attitudes and behavioral intentions in shaping personal actions, supported by numerous research showing a robust correlation between attitudes and behavior. Some literature addresses attitude as a pivotal factor in individual behavior (Kotchen & Reiling, 2000; Opoku et al., 2020; Fraj & Martinez, 2007). The TRA and the TPB are two prevailing theories in assessing attitudes and behavior (Armitage et al., 2000). The TRA establishes a fixed causal sequence linking personal attitudes, behavioral intentions, subjective norms, and behavior (Fischbein & Ajzen, 1975; Ajzen & Fischbein, 1980). Subsequently, TRA evolved into TPB, positing that individuals are generally rational and systematically utilize available information (Ajzen, 2001; Ajzen & Fischbein, 1980).

Numerous studies indicate that individuals hold favorable attitudes toward specific behaviors and consider them as societal norms. Consequently, people are more inclined to exhibit a behavior when they have greater control over it. These findings substantiate a correlation between intention and behavior (Weinstein, 2007; Webb & Sheeran, 2006; Conner & Sparks, 2005; Ajzen, 1985, 2001; Ajzen & Fischbein, 1980; Conner & Armitage, 1998; Chan & Lau, 1998). Moreover, research

has demonstrated a strong correlation between behavior and attitudes (D'Astous et al., 2005; Ouellette & Wood, 1998; Bentler & Speckart, 1981). Furthermore, extensive research delves into applying both TRA and TPB to pro-environmental behavior (Chan & Lau, 2002; Hamid & Cheng, 1995; Taylor & Todd, 1995; Kalafatis et al., 1999). Several studies propose a connection between ecological behavior and environmental attitudes (Axelrod & Lehman, 1993; Smith et al., 1994; Lynne & Rola, 1988; Chan & Lau, 2002; Mostafa, 2006). Chan and Lau (2002) discovered that subjective norms, attitudes, and perceived behavioral control exert a substantial influence on the intended purchase of green products across developed and developing nations. Moreover, the availability of resources and facilities supporting environmental advocates in promoting their green products further strengthens this influence.

Recently, multiple studies have demonstrated a connection between attitudes and behavioral intentions in shaping the purchase of environmentally friendly products. For instance, Dilotsotlhe and Akbari (2021) examined the impact of attitudes encompassing compatibility, relative advantage, complexity, and observability on the behavioral intentions of South African adolescents regarding green product purchases. The results revealed a favorable association between relative advantage, observability, and compatibility of the intention to engage in green product consumption. This suggests that teenagers, facing resource constraints in their environments, perceive green products as a potential solution to prevalent issues. Similarly, Opoku et al. (2020) and Khare (2015) established that attitude is a pivotal factor affecting the behavioral intention to purchase environmentally friendly products in Ghana.

Moreover, Amaro and Duarte (2015), alongside Ajzen (1991), asserted that attitude significantly determines an individual's behavior. A more favorable attitude catalyzes promoting positive conduct. Zabkar and Hosta (2013) underscored that pro-environmental behavior hinges on valuing and safeguarding the environment. Consequently, a higher level of favorable attitude contributes to positive behavior and fosters the intention to buy eco-friendly products. Subjective norms significantly influence intentions to purchase eco-friendly products, especially when reinforced by environmentally dedicated social circles. Drawing from Triandis (1995), Choi and Geistfeld (2004) depict subjective norms as guides for group actions, compelling individuals based on perceived obligations (Schepers & Wetzels, 2007). Opoku et al. (2020) further classify subjective norms as determinants of permissible actions, often linked with consequences. Moreover, these norms act as motivational drivers influenced by peers, family, and the environment (Kim et al., 2013). Recent studies underline the connection between subjective norms and green purchases (Opoku et al., 2020; Ritter et al., 2015; Biswas & Roy, 2015; Zhao et al., 2014), demonstrating how peer or family support bolsters confidence in eco-friendly buying (Opoku et al., 2020). Similarly, Biswas and Roy (2015) emphasize their role in influencing preferences for environmentally friendly products, while Wahid et al. (2011) affirm their impact on behavioral intentions.

Perceived behavioral control, an integral component of the TPB model, has been extensively researched in the context of sustainable behavior, revealing its positive influence on eco-friendly actions. However, its direct impact on intentions to purchase eco-friendly products remains inconclusive. Ajzen (1988, 1991) defines perceived behavioral control as an individual's belief in their capacity to control their actions based on their capabilities, shedding light on how behaviors manifest in controllable situations. Yeow et al. (2014), Albayrak et al. (2013), Moser (2015), Chen and Tung (2014), Jin Ma et al. (2012), Wang et al. (2018), Xu et al. (2020), Opoku et al. (2020), and Dilotsotlhe and Akbari (2021) have explored the relationship between intentions and perceived behavioral control to engage in sustainable practices. Some researchers, such as Joshi and Rahman (2016) and Dilotsotlhe and Akbari (2021), have identified a positive correlation between perceived behavioral control and consumer adaptation to green products, while others, including Xu et al. (2020) and Wang and Zhang (2020), have suggested that it might not significantly impact intentions to buy green products, indicating the complexity of this relationship.

Environmental knowledge significantly influences individuals' attitudes and intentions toward green



Figure 1. Conceptual framework

products and behaviors, with its role in moderating the relationship between environmental attitude, subjective norms, and perceived behavioral control warranting further investigation. Environmental knowledge, as defined by Golley (1998), encompasses understanding related to environmental preservation, valuing protection, recognizing vulnerabilities, and being aware of health risks, providing a fundamental basis for managers in devising environmental care strategies (Lo & Fryxell, 2003). Hasan et al. (2019) suggest that it serves as an informational resource for consumers, increasing the likelihood of purchasing environmentally friendly products, while Gautam (2020) argues that tourists with such knowledge demonstrate a positive connection with their surroundings, influencing their eco-conscious attitudes and behaviors (He & Filimonau, 2020; Eid et al., 2021). Nekmahmud et al. (2022) further highlight the beneficial impact of tourists' environmental knowledge on their inclination to buy green products, as it signifies their contribution to environmental preservation. Petty and Cacioppo's (1986) theory places significant emphasis on the role of environmental knowledge in moderating attitudes, norms, and behavioral control. Nekmahmud et al. (2022) reveal its limited effect as an interaction term in influencing tourists' green behavioral intentions. This study thus

revisits the moderating impact of environmental knowledge within the context of environmental attitude, subjective norms, and perceived behavioral control on tourists' green behavioral intentions, aligning with the findings of Wang et al. (2018) and Kumar et al. (2017) on the pivotal role of environmental knowledge in shaping green purchase intentions and reducing the consumption of unsustainable products (Hamzah & Tanwir, 2021; Cherian & Jacob, 2012).

In light of this, the study endeavors to comprehensively explore the nexus between environmental awareness, consumer psychology, and eco-friendly purchase intentions among Generation Z tourists, which can contribute significantly to the advancement of sustainable tourism practices and the preservation of natural resources. By emphasizing the pivotal role of environmental knowledge as a controlling factor, researchers and industry stakeholders can collaborate to devise tailored educational programs and targeted marketing strategies to foster environmentally conscious behavior and responsible consumption among Generation Z tourists. Furthermore, such research can fuel the expansion of innovative ecologically friendly products and services, catering to the evolving preferences of environmentally aware consumers while promoting sustainable business practices within

the tourism sector. Consequently, exploring these interconnected dynamics is instrumental in steering the global tourism industry toward a more sustainable and environmentally responsible future.

The study aims to analyze the effect of psychological consumer behavior and environmental knowledge on the green purchase intentions of Generation Z tourists in Indonesia.

The conceptual model is depicted in Figure 1. The literature review supports the formulation of the subsequent hypotheses:

- *H1: Attitude positively affects tourists' green purchase intentions.*
- H2: Subjective norms positively affect tourists' green purchase intentions.
- H3: Perceived behavioral control positively affects tourists' green purchase intentions.
- *H4: Environmental knowledge positively affects tourists' green purchase intentions.*
- H5: Environmental knowledge moderates the effect of environmental attitude on tourists' green purchase intentions.
- *H6:* Environmental knowledge moderates the effect of subjective norms on tourists' green purchase intentions.
- H7: Environmental knowledge moderates the effect of perceived behavioral control on tourists' green purchase intentions.

### 2. METHOD

Purposive random sampling was used to pick 543 participants in Indonesia between June and December 2021. Furthermore, preliminary processing was conducted to establish whether the responder inputs were inaccurate or inadequate. A two-section questionnaire was uploaded to Google Forms and circulated to participants. Table 1 comprises profile information such as gender, age, job status, and monthly expenses, and Table 2 contains variable values.

Table 1	. Samp	ole dem	ographic
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Characteristics	Group	Frequency	Percentage	
Condor	Male	211	38.86	
Genuer	Female	332	61.14	
	16-<20	144	26.52	
Age	20-<24	325	59.85	
	24 - <28	74	13.63	
	University/ College (Master)	20	3.68	
Education	University/ College (Bachelor)	489	90.06	
	Senior high school	34	6.26	
	Employee	70	12.89	
Employment	Student	366	67.40	
Status	Self-employed	96	17.68	
	Unemployed	11	2.03	
	<3	114	20.99	
Monthly	3-<4	276	50.83	
million rupiah)	4-<5	88	16.21	
	>5	65	11.97	

*Note: n* = 543.

This study originates from Indonesia and centers around the Generation Z demographic. As highlighted by Pandey and Yadav (2023), Generation Z plays a pivotal role in driving green purchases and can be effectively engaged by governments to promote sustainable consumption. The study comprises 543 respondents from Indonesia. The respondent characteristics are as follows: 211 (38.86%) identified as male and 332 (61.14%) as female. The majority of respondents belonged to the 20 - <24 age category, accounting for 325 (59.85%), followed by 16 - <20, with 144 (26.52%), and 24 -<28, with 74 (13.63%).

Regarding education, the respondents' distribution was dominated by those with University/ College (Bachelor) degrees, constituting 489 (90.06%) of the total, followed by those with Senior High School degrees, amounting to 34 (6.26%), and University/College (Master) graduates, totaling 20 (3.68%). Furthermore, the respondents' employment statuses are classified as follows: 70 (12.89%) were employees, 366 (67.40%) were students, 96 (17.68%) were self-employed, and 11 (2.03%) were unemployed. Lastly, when considering monthly expenditure (in million rupiah), the majority of respondents fell within the range of 3 – <4, accounting for 276 (50.83%). The expenditure <3 comprised 114 (20.99%) respondents, while 4 - <5 captured 88 (16.21%), and expenses exceeding 5 million rupiah represented 65 (11.97%) respondents.

Data collection was conducted throughout the dissemination of surveys. The description of the questionnaire is provided in Table 2. The questionnaire employed a 5-point Likert scale, with 1 indicating "strongly disagree" and 5 representing "strongly agree." The questionnaire encompassed several sections, which included: (1) inquiries regarding respondent characteristics encompassing gender, education, employment, and monthly expenses; (2) inquiries about tourists' purchase intentions for acquiring green products; and (3) inquiries about the influencing factors comprising environmental attitude, perceived behavioral control, environmental knowledge, and subjective norms.

The data were assessed using a variance-based analytical technique using SEM, especially partial least squares (PLS); this stands out as an analytical strategy that circumvents constraints because it does not necessitate a substantial several presumptions made during assessment and theoretical basis; PLS stands out as an analytical approach that overcomes restrictions (Hair et al., 2016). The data were examined using the external and internal models. The initial investigation comprises determining the variables' dependability and validity. The metrics used to evaluate this model are composite reliability and convergent and discriminant validity. The inner or structural technique is examined to determine the relationship between the study concept, the significance value, and the R-square.

### 3. RESULTS

The outcomes of the validity and reliability assessment for the outer model are presented in Table 3. Strong correlations were found between tourists' green purchase intentions (GPI) and its items, with loadings varying between 0.916 and 0.890. The

Variables	Item	References	
	When I travel, I choose eco-friendly tourist products/services (GPI1).	Nekmahmud et al.	
Tourists' Green Purchase	While traveling, I want to choose ecologically friendly items and services (GPI2).		
	During my travels, I want to seek out and purchase eco-friendly items and services (GPI3).	(2022), Mazhar et al. (2022), Wang	
Intentions (GPI)	I want to acquire products/services that have a lower environmental effect (GPI4).	et al. (2018), Chen and	
	At tourist sites, I will avoid from purchasing items and services that may harm the environment (GPI5).	Tung (2014)	
	I am more knowledgeable about recycling than the ordinary individual (ENK1).		
	I am well knowledgeable about environmental concerns (ENK2).	Nekmahmud et al.	
Environmental Knowledge (ENK)	The adoption of environmentally friendly items is an efficient strategy to minimize pollution (ENK3).	(2022), Mazhar et al. (2022), Wang et al.	
Choosing environmentally friendly products/services helps to conserve natural resources considerably (ENK4).		(2018), Gautam (2020)	
When I travel, I am more likely to purchase eco-friendly products/services (ENA1).			
	When I use eco-friendly items throughout my trips, I get a feeling of success. (ENA2).	Nekmahmud et al. (2022), Mazhar et al. (2022), Gautam (2020) Wang et al (2018) Che	
Environmental Attitude (ENA)	Using environmentally friendly items on my trips is beneficial since it aids in the conservation of natural resources (ENA3).		
	The usage of environmentally friendly products and services minimizes pollutants, hence enhancing the environment at tourism locations (ENA4).	and Tung (2014)	
When I travel, my family urges me to choose eco-friendly items and services (SUN1).		Nekmahmud et al	
Subjective Norms	My friends appreciate my decision to choose eco-friendly products/services while traveling (SUN2).	(2022), Mazhar et al. (2022), Gautam (2020),	
(5014)	Those that matter to me support my decision to adopt environmentally friendly products/services (SUN3).	Wang et al. (2018), Che and Tung (2014)	
Perceived	While traveling, I am well-informed enough to discover and acquire environmentally friendly products/services (PBC1).	Nekmahmud et al.	
Behavioral Control	I have enough information to find eco-friendly products/services when traveling (PBC2).	(2022), Gautam (2020),	
(PBC)	I like to choose eco-friendly tourist products/services (PBC3).	Wang et al. (2018), Che	
	I am prepared to pay a little more for environmentally friendly items (PBC4).	and Tung (2014)	

 Table 2. Measurement items

Variables	ltem	Item Loadings	Cronbach's Alpha	Composite Reliability	AVE
	GPI1	0.961			0.871
	GPI2	0.963		0.971	
Iourists' Green Purchase	GPI3	0.936	0.963		
	GPI4	0.915			
	GPI5	0.890			
	ENK1	0.969		0.982	0.933
Environmental	ENK2	0.977	0.070		
Knowledge (ENK)	ENK3	0.935	0.976		
	ENK4	0.982			
	ENA1	0.931	0.933	0.952	0.833
Environmental	ENA2	0.909			
Attitude (ENA)	ENA3	0.893			
	ENA4	0.918		_	
Subjective Norms (SUN)	SUN1	0.795			0.635
	SUN2	0.825	0.714	0.839	
	SUN3	0.770			
	PBC1	0.891			0.759
Perceived Behavioral	PBC2	0.894	0.904	0.026	
Control (PBC)	PBC3	0.853	0.894	0.926	
	PBC4	0.845			

Table 3. Validity and reliability

0.963 Cronbach's Alpha coefficient demonstrated great internal consistency. The average variance extracted (AVE) of 0.871 indicated the construct's convergent validity, and the composite reliability reached an exceptional level of 0.971. Similarly, environmental knowledge (ENK) produced impressive findings. Strong correlations between the latent concept and its indicators were shown by item loadings, ranging from 0.969 to 0.982. 0.976 is Cronbach's Alpha coefficient, demonstrating the construct's strong internal consistency. By exceeding the suggested criterion, the 0.982 composite reliability value was demonstrated, and its convergent validity was validated by the AVE of 0.833.

Furthermore, environmental attitude (ENA) produced interesting results. The range of item loadings, which showed a strong relationship between the latent construct and its items, was 0.893 to 0.931. A Cronbach's Alpha coefficient of 0.933 indicated a significant level of internal consistency. Robust convergent validity was demonstrated by the AVE of 0.833 and the composite reliability rating of 0.952. Results from the subjective norms (SUN) construct were consistent. The latent concept and its components showed significant connections, as evidenced by item loadings ranging from 0.770 to 0.825. The 0.714 Cronbach's Alpha coefficient demonstrated that internal consistency was strong. The AVE and the composite reliability – which both showed good convergent validity at 0.635 and 0.839, respectively – were above the suggested level. Finally, there were noteworthy findings for the perceived behavioral control (PBC) construct. The latent concept and its markers showed substantial correlations, as evidenced by the item loadings, which varied from 0.845 to 0.894. A Cronbach's Alpha coefficient of 0.894 indicated that internal consistency was strong. The AVE was 0.759, indicating the construct's convergent validity and the composite reliability were above the suggested level at 0.926.

Moreover, Table 4 lists the findings of the discriminant validity test. The Fornell-Larcker test outcomes reveal that the correlation score among items within the same construct surpasses the correlation score with items from other constructs. This is highlighted through the consistent findings. This underscores the indicators' adherence to the criteria for satisfactory discriminant validity.

Table 5 presents the results of the R-square that investigate the relationship between constructs and their significant values. These calculations reveal that tourists' green purchase intentions (GPI) have R-square values of 0.576, accounting for 57.6% of the variance. The remaining 42.4% is attributed to external variables beyond the study model's scope. This signifies that tourists' green purchase inten-

Measures	GPI	ENK	ENA	SUN	PBC
Tourists' Green Purchase Intentions (GPI)	0.933				
Environmental Knowledge (ENK)	0.566	0.966			
Environmental Attitude (ENA)	0.666	0.526	0.913		
Subjective Norms (SUN)	0.479	0.366	0.505	0.797	
Perceived Behavioral Control (PBC)	0.526	0.353	0.501	0.556	0.871

Table 4. Measurement model and discriminant validity

tions (GPI) are inclined to be impacted by environmental knowledge, perceived behavioral control, subjective norms, and environmental attitude.

Table 5. R-square results

Dependent Variable	R Square
Tourists' Green Purchase Intentions (GPI)	0.576

Table 6 and Figure 2 show that environmental attitude exhibits a correlation between green purchasing intents and a coefficient of 0.461, a statistical t-value of 8.188, and a p-value of 0.000. Subjective norms affect green purchase intentions, holding a coefficient of 0.090 with a p-value of 0.039 and a t-value of 2.067. Additionally, the influence of perceived behavioral control on intentions to make green purchases is shown by a coefficient of 0.152, a t-statistic of 2.959, and a p-value of 0.003. Concerning the intention to make green purchases, environmental knowledge exhibits a coefficient of 0.362, a p-value of 0.000, and a t-statistic of 5.975. These results lead to the H1, H2, H3, and H4 acceptance.

Furthermore, the study employs environmental knowledge as a moderating variable in assessing its influence on these three independent variables regarding tourists' green purchase intentions. As presented in Table 6, the moderation of environmental attitude by environmental knowledge yields a coefficient of 0.143, supported by a p-value of 0.009 and a t-statistic of 2.626. Conversely,



*Note:* GPI = green purchase intentions; ENK = environmental knowledge; EAN = environmental attitude; SUN = subjective norms; PBC = perceived behavioral control; ME = moderating effect.

#### Figure 2. Result of conceptual framework

Hypothesis	Path coefficient	T Statistic	P-Value	Result
H1: EAN  ightarrow GPI	0.461	8.188	0.000	Supported
<i>H</i> <b>2</b> : SUN → GPI	0.090	2.067	0.039	Supported
<i>H3</i> : PBC → GPI	0.152	2.959	0.003	Supported
<i>H4</i> : ENK → GPI	0.362	5.975	0.000	Supported
<i>H5</i> : EAN*ENK → GPI	0.143	2.626	0.009	Supported
<i>H6</i> : SUN*ENK → GPI	-0.003	0.047	0.963	Rejected
<i>H7</i> : PBC*ENK → GPI	-0.009	0.162	0.872	Rejected

Table 6. Summary of path coefficient and moderating effects

*Note:* GPI = green purchase intentions; ENK = environmental knowledge; EAN = environmental attitude; SUN = subjective norms; PBC = perceived behavioral control.

subjective norms moderated by environmental knowledge exhibit a coefficient of -0.003, a p-value of 0.963, and a t-statistic of 0.047. Lastly, perceived behavioral control moderated by environmental knowledge displays a coefficient of -0.009, with a p-value of 0.872 and a t-statistic of 0.162. In light of these outcomes, H5 is accepted, whereas H6 and H7 are rejected.

#### 4. DISCUSSION

Based on the findings, environmental attitude positively influences green purchase intentions among Generation Z individuals. In this study, environmental attitude indicators encompass the pleasure of purchasing green products while traveling, moral engagement, and the sense of responsibility for safeguarding the environment through eco-friendly consumption. These outcomes signify that Generation Z individuals who possess a caring attitude toward the environment are motivated to make environmentally conscious purchases, aiming to preserve the tourist destinations they visit. These outcomes are consistent with Opoku et al. (2020) and Dilotsotlhe and Akbari (2021), who identified attitude as a primary driver in determining the intention to purchase environmentally friendly products. Such attitudes incline Generation Z individuals to engage in activities like purchasing eco-friendly products, hoping to contribute to solving environmental issues within their communities.

Furthermore, this study demonstrated that subjective norms have a large and favorable impact on Generation Z's intentions to make green purchases. The subjective norms indicators utilized in this study involve the support received from family and close friends, which underpin decisions to buy eco-friendly products. This support motivates Generation Z buyers to opt for green products. This underscores that the encouragement from family and friends is a potent driving force for Generation Z consumers to choose environmentally friendly alternatives. These findings resonate with the observations of Opoku et al. (2020), Ritter et al. (2015), Biswas and Roy (2015), and Zhao et al. (2014), which underscored the substantial contribution of subjective norms in shaping green purchase intentions. These researchers discovered that the influence of friends and family could instill consumer confidence in choosing green products.

Moreover, the study documented that perceived behavioral control significantly and positively influences green purchase intentions among Generation Z. The indicators used to assess perceived behavioral control encompass the recognition of environmentally friendly products, ease of finding such products, preference for green options, and willingness to pay a premium cost. These findings suggest that Generation Z tourists possessing the ability to identify, locate, and prefer green products during their travels are more likely to intensify their intention to purchase eco-friendly items. Additionally, they demonstrate a willingness to pay a higher price to support environmental conservation through their purchases. These findings mirror the observations of Dilotsotlhe and Akbari (2021), Albayrak et al. (2013), Chen and Tung (2014), Yeow et al. (2014), and Moser (2015), which highlighted that individuals with strong behavioral control exhibit enhanced engagement in ecologically sustainable activities. This is aligned with Xu et al. (2020), who proposed that consumers tend to select environmentally friendly products when they have power over external factors.

Furthermore, this study demonstrates that environmental knowledge and green purchase intentions are positively correlated among Generation Z. In this context, environmental knowledge is assessed through indicators that measure understanding of environmental issues, recycling, and involvement in the consumption of eco-friendly products for environmental sustainability. These results suggest that Generation Z individuals with higher environmental knowledge are more driven to purchase eco-friendly products. This result is in line with Hasan et al. (2019), Gautam (2020), and Nekmahmud et al. (2022), who established a significant positive correlation between environmental knowledge and eco-friendly purchase intentions. Generation Z individuals who are well-informed about environmental concerns

tend to choose eco-friendly products to contribute to long-term environmental preservation.

Additionally, the paper emphasizes environmental knowledge as a moderator, influencing the connection between environmental attitudes and green purchase intentions among Generation Z. The study results underscore that Generation Z individuals with greater environmental knowledge tend to uphold attitudes that prioritize environmental conservation when purchasing eco-friendly products. These observations correlate with Kumar et al. (2017), who indicated that environmental knowledge enhances environmental attitudes toward green purchase intentions. Generation Z individuals with high knowledge are likelier to avoid purchasing non-eco-friendly products, as they prioritize environmental concerns (Hamzah & Tanwir, 2021).

## CONCLUSION

This study delved into the effect of psychological consumer behavior and environmental knowledge on the green purchase intentions of Generation Z tourists. With a research sample of 543 respondents from Indonesia, the study utilized the SEM method to analyze the relationships between the variables. The findings revealed significant positive effects of environmental attitude, subjective norms, perceived behavioral control, and environmental knowledge on tourists' green purchase intentions. Environmental knowledge emerged as a noteworthy moderator, strengthening the link between environmental attitude and green purchase intentions. This study underscores the importance of recognizing Generation Z's inclination toward environmentally friendly behavior and the pivotal role of their environmental knowledge.

The implications of these findings for marketing managers are highly significant in shaping strategies that align with the preferences and values of Generation Z regarding sustainable consumption behavior. Firstly, marketing managers must understand that positive perceived behavioral control, environmental attitudes, subjective norm, and environmental knowledge are crucial in influencing Generation Z's green purchase intentions. Therefore, marketing strategies should emphasize product attributes related to sustainability and their positive impact on the environment. Secondly, marketing managers should craft compelling narratives about the positive effects of eco-friendly goods and services for Generation Z. This can be achieved through marketing campaigns emphasizing sustainability values and communicating concrete steps brands take to support the environment. Moreover, marketing managers need to harness digital platforms and social media as tools to interact and communicate with Generation Z, presenting relevant and inspiring information about sustainability. To fully leverage the implications of these findings, marketing managers should also consider the pivotal role of environmental knowledge as both a driver and moderator of green consumption behavior. Integrating environmental knowledge into marketing communication can assist Generation Z in making informed and responsible decisions about the products and services they purchase. By aligning their marketing strategies with Generation Z's sustainability values and preferences, marketing managers can establish stronger and more sustainable connections with this market segment.

The limitations of this study arise from its specific focus on a particular demographic within a set timeframe, potentially constraining the generalizability of findings to broader contexts or other generations. Furthermore, the causal correlation between variables is limited by the cross-sectional design. To enhance future research's robustness, including a more diverse participant pool spanning various age groups and regions and employing longitudinal designs to capture changes over time is advisable. Incorporating mixed-method approaches and objective behavior measures could also provide a better grasp of the link between eco-friendly purchasing aspirations and Generation Z environmental consciousness.

# **AUTHOR CONTRIBUTIONS**

Conceptualization: Rizky Yudaruddin, Surahman, Dadang Lesmana, Dewi Naprida. Data curation: Dadang Lesmana, Bagus Rai Wibowo. Formal analysis: Dadang Lesmana, Dewi Naprida, Rizky Yudaruddin. Funding acquisition: Surahman, Dewi Naprida, Bagus Rai Wibowo. Investigation: Surahman, Dewi Naprida, Bagus Rai Wibowo. Methodology: Surahman, Rizky Yudaruddin, Dadang Lesmana. Project administration: Dadang Lesmana, Dewi Naprida, Bagus Rai Wibowo. Resources: Rizky Yudaruddin. Software: Surahman, Rizky Yudaruddin. Supervision: Surahman, Rizky Yudaruddin, Dadang Lesmana. Visualization: Surahman, Rizky Yudaruddin, Dadang Lesmana. Visualization: Surahman, Dewi Naprida, Bagus Rai Wibowo. Writing – original draft: Rizky Yudaruddin, Bagus Rai Wibowo. Writing – review & editing: Rizky Yudaruddin, Surahman.

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