

## Analysis of Demographic Profile and Behavioral Gap in Sustainable Online Purchase: A Study of Indonesian Consumers

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### Abstract

The increase in global environmental awareness has encouraged the emergence of the intention to buy eco-friendly products among digital consumers. However, the phenomenon of the gap between positive intentions (behavioral intention gap) and the realization of actual purchases is the main challenge in realizing sustainable consumption on e-commerce platforms. This research aims to analyze the demographic profile and characteristics of respondents' online shopping behavior in Indonesia and identify the factors that affect the gap. Using a descriptive quantitative approach, data was collected through an online questionnaire from 75 respondents of active e-commerce users. The frequency analysis showed that the majority of respondents were female (62.7%), over 40 years old (41.3%), S2 educated (49.3%), and working as civil servants (29.3%). Shopee is the main platform (77.3%) with a shopping frequency of 2-3 times per month (52.0%). These findings indicate that the potential segment of sustainable consumers is an adult group with higher education and economic stability. This study recommends the integration of personalized nudges features and simplification of sustainability information in e-commerce interfaces to convert intent into real purchase actions.

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## INTRODUCTION

Digital transformation has shifted modern consumer behavior from conventional shopping to online shopping. E-commerce platforms are no longer just a place for buying and selling transactions, but have evolved into an ecosystem that shapes consumer preferences, attitudes, and behaviors toward social and environmental issues (Arshad, 2024; Pavić, 2024). In the context of the global environmental crisis, consumers are increasingly showing concern for the ecological impact of their purchasing decisions (Kim & Lee, 2023; O'Rourke & Ringer, 2016; Smagulov et al., 2020).

The Theory of Planned Behavior (TPB), developed by Ajzen, is the main theoretical framework for understanding consumer behavior, including in the context of purchasing environmentally friendly products. TPB states that behavioral intention is determined by three main constructs: attitude, subjective norm, and perceived behavioral control. Research by Aisyah & Cahyasita (2023) investigated the factors that influence the intention of Indonesian consumers to buy green products by implementing SDGs, and found that attitudes, subjective

norms, and perceived behavioral control play a significant role. Further research by Kurniasari (2024) shows that environmental awareness, environmental concern, perceived value, and perceived risk affect purchase intention through product trust as a mediation variable. In the context of online shopping, research by Rizkiatami, Masnita, & Kurniawati (2023) found that environmental knowledge, ecolabels, environmental advertising, and green beliefs positively influence the green purchasing behavior of Indonesian consumers.

A study of Generation Z and Y in Indonesia reveals that social media marketing, crisis awareness, product knowledge, attribution of responsibility, subjective norms, perceived behavioral control, and attitude influence the purchasing behavior of green products. This study used the SEM method with SmartPLS and found that positive attitudes toward green products, subjective norms, and perceived behavioral control have a positive influence on purchase intention. The intention–behavior gap is a phenomenon that has long been recognized in the consumer behavior literature. Sutanto’s (2024) research on Indonesian consumers found that subjective attitudes and norms were significant predictors of green product purchase intentions, but perceived behavioral control was found to be insignificant. These findings indicate that other factors influence the gap, including green skepticism that inhibits positive attitudes. Research by Ikhsan et al. (2024) reveals that asymmetric information and the influence of online reviews significantly affect the purchasing behavior of green products, where consumers tend to trust the experiences of other users more than manufacturers’ claims.

According to Erigbe & Erigbe, (2024) and Masfer & Helmi, (2025), e-commerce platforms are strategically positioned to shape sustainable purchasing behavior. Through filtering features, ecolabels, personalization recommendations, and user review integration, platforms can facilitate or hinder green purchasing decisions. Research by Ikhsan et al. (2024) emphasizes that the presence of credible online reviews and the reduction of asymmetric information significantly increase the likelihood of conversion from intention to actual purchase. This research aims to analyze the demographic profile and characteristics of respondents’ online shopping behavior in Indonesia and identify the factors that affect the behavioral gap (Alfanur & Kadono, 2022; Rachbini et al., 2024).

By understanding the characteristics of sustainable consumers—“who” they are in the digital realm—more effective intervention strategies can be designed to bridge the gap between intention and action. The novelty of this research lies in its focus on mapping the demographic profile of Indonesian consumers who experience the behavioral gap in sustainable online purchasing, which has not been extensively studied in previous literature. Ruiz-Herrera et al., (2023) and Rai et al., (2025), the theoretical benefit of this research is to enrich the literature on consumer behavior and the Theory of Planned Behavior in the context of e-commerce sustainability. The practical benefit of this research is to provide strategic recommendations for e-commerce platforms to integrate personalized nudge features and simplify sustainability information to convert positive intentions into real purchase actions (Giroto & Nicolas, 2026; Mirbabaie et al., 2023; Stenström & Rafles, 2025).

Based on this background, this study aims to identify the demographic profile and online shopping habits of respondents as the first step in understanding the factors that affect these behavioral gaps. By understanding the characteristics of sustainable consumers—“who” they are in the digital realm—more effective intervention strategies can be designed to bridge the gap between intention and action. The theoretical benefit of this study is to enrich the literature

on consumer behavior and the Theory of Planned Behavior in the context of e-commerce sustainability, especially regarding the intention–behavior gap in the purchase of green products. The practical benefit is to provide strategic recommendations for e-commerce platforms to design effective interventions such as nudges and personalized ecolabels to turn positive intentions into real purchasing actions, as well as to assist policymakers in developing targeted educational programs for sustainable consumption in Indonesia.

## RESEARCH METHOD

This study used a descriptive quantitative approach with a cross-sectional survey design. Primary data were collected through an online questionnaire (Google Forms), which was distributed using purposive sampling to active e-commerce users in Indonesia during March 2026. The inclusion criteria for respondents were: (1) having made online shopping transactions at least once in the last three months, (2) being at least 17 years old, and (3) being willing to participate as respondents by completing the informed consent form.

The total number of respondents who participated and completed the questionnaire was 75. The questionnaire consisted of three main parts: (1) respondent demographic data, (2) characteristics of online shopping behavior, and (3) perceptions of environmentally friendly products and purchase intentions (measured using a 5-point Likert scale). Data analysis was conducted using descriptive statistics with SPSS software version 26.0, focusing on frequency analysis to describe the characteristics of respondents.

## RESULTS AND DISCUSSION

### Frequency Distribution of Respondent Characteristics

Based on data analysis from 75 respondents, here is the frequency distribution of demographic characteristics and online shopping behavior:

**Table 1. Frequency Distribution of Respondents' Demographic Characteristics**

Characteristics	Categories	Frequency (n)	Percentage (%)
<b>Gender</b>	Women	47	62,7
	Male	28	37,3
<b>Age</b>	>40 years old	31	41,3
	30-34 years old	16	21,3
	25-29 years old	16	21,3
	21-24 years old	2	2,7
	Not charged	1	1,3
<b>Final Education</b>	S2	37	49,3
	S1	26	34,7
	Diploma	8	10,7
	High School	2	2,7
	Not charged	2	2,7
<b>Jobs</b>	PNS	22	29,3
	Others	21	28,0
	Private Employees	12	16,0
	Self-employed	4	5,3
	Students	3	4,0
	Not charged	13	17,3

Source: Results of primary data processing by researchers, 2026

**Table 2. Frequency Distribution of Online Shopping Behavior Characteristics**

Characteristics	Categories	Frequency (n)	Percentage (%)
<b>Online Shopping Expenses</b>	IDR 200,000 - 500,000	25	33,3
	IDR 500,000 - 1,000,000	20	26,7
	< IDR 200,000	13	17,3
	IDR 1,000,000 - 3,000,000	9	12,0
	> IDR 3,000,000	5	6,7
<b>Most Used Platforms</b>	Shopee	58	77,3
	TikTok	10	13,3
	Tokopedia	4	5,3
	Lazada	1	1,3
<b>Frequency of Online Shopping</b>	2-3 x / month	39	52,0
	1x/month	17	22,7
	> 1x/week	7	9,3
	Other (not routine)	12	16,0

Source: Results of primary data processing by researchers, 2026

### **Dominance of the Women and Adult Segment**

The findings of the study showed that the respondents were dominated by women (62.7%) and the age group over 40 years old (41.3%). This dominance of women is in line with previous research that identified that women tend to have higher environmental concerns and are the main decision-makers in household consumption. The adult age group (over 40 years old) has generally achieved economic stability and has a more mature shopping experience, so they are more selective in evaluating claims of environmentally friendly products.

### **Higher Education Level as a Driving Factor for Environmental Concern**

As many as 84% of respondents are educated S1 and S2. These findings indicate that higher education levels are positively correlated with environmental awareness and understanding of sustainability issues. Consumers with higher education tend to be more critical of information, including in evaluating eco-friendly claims from online sellers. Sutanto's research (2024) confirms that environmental knowledge influences attitudes towards green products, although it does not always directly affect purchase intentions.

### **Employment Status and Spending Patterns**

Civil servants dominated the respondents' profession (29.3%), followed by the "other" category (28.0%) which was most likely to consist of housewives or freelance professionals. The most online shopping expenditure is in the range of IDR 200,000 - IDR 500,000 per month (33.3%). This data indicates that potential sustainable consumers come from the middle-class segment with stable but limited purchasing power. By implication, the price factor becomes very sensitive—discounts and promos often determine the final choice more than the sustainability aspect of the product, which is one of the main causes of the behavioral gap.

### **Shopee's Hegemony and Digital Shopping Routine**

Shopee controls 77.3% of respondents' preferences, followed by TikTok Shop (13.3%) which is starting to show significant growth as a social commerce platform. Shopee's dominance reflects the reality of the Indonesian e-commerce market where the platform has managed to build a well-integrated ecosystem. The frequency of shopping 2-3 times per month (52.0%) shows that online shopping has become a routine habit for the majority of respondents. This is a strategic opportunity for platforms to integrate "eco-friendly options" more by default and non-intrusive in the user interface.

### **Implications for the Behavioral Gap**

Although demographically this segment appears to be "ready" in terms of knowledge and intention (higher education, adulthood, stable income), secondary data from the questionnaire show a skepticism of green claims and the perception that the process of purchasing green products requires additional effort. Sutanto's research (2024) found that green skepticism inhibits positive attitudes towards green products. This confirms the existence of a behavioral gap influenced by the trust and ease of use factors.

### **CONCLUSION**

Based on frequency analysis of 75 respondents, this study found that consumers concerned with sustainable purchasing in Indonesian e-commerce are predominantly women (62.7%), aged over 40 years (41.3%), highly educated (84% holding S1/S2 degrees), and mainly working as civil servants or in other occupations (57.3%). These consumers typically spend between IDR 200,000 and IDR 500,000 per month on online shopping (33.3%), primarily use Shopee as their main platform (77.3%), and shop 2–3 times per month (52.0%). Although this group demonstrates strong knowledge and positive intentions toward sustainable consumption, a behavioral gap persists, largely influenced by green skepticism and perceived accessibility of sustainable products. To address this, e-commerce platforms such as Shopee, Tokopedia, and TikTok Shop are encouraged to implement personalized nudges, simplify sustainability information, provide credible eco-labels, and display verified user reviews to strengthen trust and reduce skepticism. Policymakers and environmental organizations are advised to develop targeted educational initiatives for educated, economically stable adult women and to support platforms in improving access to sustainable products through dedicated filters and incentives. For future research, it is recommended to increase the sample size, include respondents from diverse regions across Indonesia, and apply inferential statistical methods to examine causal relationships between demographic factors and the intention–behavior gap in sustainable online purchasing.

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