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Article

Assessing consumer willingness to pay for sustainable products: An application of the extended theory of planned behavior

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Abstract: This study investigates the willingness of Indonesian consumers, particularly in West Java, to pay for green products by applying and expanding the Theory of Planned Behavior (TPB). It examines how perceived green product value and willingness to pay premiums influence consumer intentions and behavior toward green purchases. The research highlights the gap between consumers' willingness to pay for environmentally friendly products and the actual sales of such products. By incorporating perceived value and willingness to pay into the TPB framework, the study aims to find what factors that can address the gap particularly in a developing country context to contribute to shaping a pro-environmental socio-cultural community in Indonesia and mitigates country's significant environmental challenges. In the context of 251 young consumers in Indonesia, this study finds that subjective norms do not significantly influence purchase intentions. However, attitudes and behavioral controls do effectively encourage green behavior, suggesting that societal norms for green behavior may not be fully established. In addition, while willingness to pay a premium and perceived value of green purchases can influence green behavior, consumers are generally reluctant to pay higher prices for environmentally friendly products.

Keywords: green products; consumer behavior; perceived value; theory of planned behavior; environmental sustainability; green consumerism

1. Introduction

The increasing population is not accompanied by adequate environmental management, which is challenging for Indonesia. Public awareness is essential to addressing Indonesia's ecological problems, from disaster to biodiversity conservation. An informed and aware citizen can take action to address the environmental issues (The World Bank, 2014). According to Huamán-Pastorelli et al. (2020) and Yadav and Pathak (2017), green consumerism can effectively minimize the negative impact of consumption on the environment.

According to a WWF Indonesia and Nielsen survey, 63 percent of Indonesians are willing to pay a premium for environmentally friendly products (Firmansyah, 2018). Meanwhile, in the United States, sales of products featuring sustainable attributes constitute 22 per cent of the overall store sales, driven largely by organic, sustainable, and clean attributes within sustainable category (Nielson, 2018).

Moreover, analyzed from purchasing data on sales of over 71,000 products across 36 classifications of consumer-packaged goods, the Centre of Sustainable Business at New York University found that although the sales growth of sustainability-marketed products was 50% among all packaged goods between 2013 and 2018, the sector only accounted for less than 17% of the market share (Ho, 2021).

The current studies have used the Theory of Planned Behavior (TPB) to understand consumer behavior toward purchasing environmentally friendly products. TPB is considered one of the most valuable frameworks in explaining human behavior in various fields (Chen and Tung, 2014; Park and Ha, 2012; Yadav and Pathak, 2017b), and more specifically, it has excellent application in environmental psychology (Stern, 2005). However, these studies were carried out in the context of developed countries, not so much in developing countries (Khare, 2015). Based on the data gap, this research aims to understand consumer green purchase behavior using the TPB framework in the context of developing countries in Indonesia, especially West Java, as previous studies were conducted in developed countries. This study will also expand the TPB framework by including perceived green product value and willingness to pay premiums in the TPB to measure its impact on consumer intentions and green purchase behavior. Thus, this research is a media contribution of researchers to provide information related to green purchase behavior as a manifestation of a pro-environment society. Therefore, this research also has the prospect of developing a pro-environmental socio-cultural community where Indonesia is the second country producing plastic waste worldwide, has pollution levels that endanger health, and often experiences disasters due to other environmental problems (Nation Master, 2020). Moreover, the information regarding the determinants of green/environmentally friendly purchasing behaviour summarized in the TPB framework, hopefully, could assist green product business actors in formulating appropriate strategies to develop markets for environmentally friendly products.

The TPB model states the three considerations guide human behaviour: behavioural beliefs, normative beliefs (subjective norms), and perceived behavioral control, producing one of the attitudes towards the environment. These considerations that are perceived together can lead to the formation of behavioral intentions (Ajzen, 1985).

1.1. Attitude

Attitude results from behavioral beliefs (BB) and outcome evaluation (OE). Behavioral beliefs refer to an individual's beliefs about the consequences of a particular behavior, whereas outcome evaluation refers to appropriate or inappropriate judgments about the possible consequences of a behaviour (Ajzen, 1991). Subjective norms result from normative beliefs (NB) and motivation to comply (MC). Compliance with normative beliefs refers to the individual's perception of how others (those significant to the individual) want someone to behave in certain situations. In contrast, motivation to comply refers to the individual's desire to comply with the opinion of the significant other (Ajzen, 1991). Perceived behavioural control (PBC) results from control belief (CB) and perceived power (PP). CB can be defined as an individual's belief in the presence of certain factors that can facilitate or hinder the

performance of certain behaviours (e.g., time, money and opportunity). At the same time, perceived strength refers to a personal evaluation of the impact of these factors in facilitating or inhibiting certain behaviours (Ajzen, 1991).

1.2. Behavioral intention

Behavioural intention indicates the individual's readiness to perform certain behaviours (Ajzen, 2002). The more a person likes certain behaviours and subjective norms, the greater the perceived behavioral control and the stronger the individual's intention to perform the behavior (Yadav and Pathak, 2017). According to Steg and Vlek (2009) definition, pro-environmental behaviour is behaviour that benefits the environment or harms the environment to a minimum. Pro-environmental behavior includes using green or environmentally friendly/green products, goods and services related to the environment, organic products and waste disposal or recycling management (Park and Ha, 2012). A green product is designed to minimize environmental impact during its entire life cycle, from acquiring raw materials for production and distribution to purchasing and post-purchase activities (Albino et al., 2009). Previous literature shows that TPB has been used in a variety of environmentally friendly products and services such as energy efficiency products (Park and Ha, 2012), environmentally friendly hotels and restaurants (Chen and Tung, 2014), and green products (Liobikienė et al., 2016; Yadav and Pathak, 2016). Moreover, it proved its power and predictability in measuring pro-environment purchase intention and behavior. In most cases, TPB is fully supported (that is, all TPB variables; attitudes, subjective norms, and perceived behaviour control significantly influence consumers' green purchase intention) consumer intentions and behavior to choose environmentally friendly products and services. However, in some cases (Chou et al., 2012a; Kim et al., 2013a), TPB variables partially support consumer intentions and behavior. TPB shows that attitudes, subjective norms and perceived behavioural control can play an essential role in determining consumers' green purchase intention to buy environmentally friendly products (Yadav and Pathak, 2017).

1.3. Willingness to pay

A study on intentions to buy organic vegetables conducted in Klang, Malaysia found that the price factor for organic vegetables, in some ways affects consumer attitudes towards purchases (Rezai et al., 2011). Consumers who consider environmental conservation & supporting the environment more than comfortable living are willing to pay extra for green products & services (Shen, 2012a). A positive relationship has been found between environmental concern and willingness to pay for green products in several studies such as eco-labelled appliances and furniture (Shen, 2012a), eco-friendly food products (Moon and Balasubramanian, 2001) and eco-friendly hotels (Kang et al., 2012) which in turn affects consumer intentions to buy environmentally friendly products. According to Varah et al. (2021), in the context of Indian's consumers, they are willing to purchase products that are less harmful to the environment. In contrast, findings from (Ling, 2013) reveal that willingness to pay is more negatively correlated with the intention to buy environmentally friendly personal care products. Regarding price, environmentally friendly products are

generally priced higher due to the high costs involved in the manufacturing process (from raw materials to certification) (Ling, 2013). Understanding consumers' desire to buy socially responsible products at premium prices is essential for organizations because the price is the most critical barrier to green consumption (Gleim et al., 2013). Moreover, willingness to pay the initial price for green products may be considered pro-environmental behaviour (Ajzen, 1991).

1.4. Perceived value

Perceived value is an overall assessment of the usefulness of a product based on perceptions of what is received and given (Zeithaml, 1988). Companies can increase consumer purchase intentions by increasing product value because its perceived value is increasingly important (Steenkamp and Geyskens, 2006). After all, it is a significant predictor of customer purchase intentions (Zhuang et al., 2010). Perceived value plays an essential role in the consumer purchasing decision process; consumers will look for specific products with higher perceived value (Dodds et al., 1991). The perceived value of green is positively related to the purchase intention of green and environmentally friendly products (Chen and Chang, 2012; Chen et al., 2012; Rizwan et al., 2013). Moreover, Chiu et al. (2014) found that perceived value positively influences environmentally responsible behaviour.

In this study, respondents are classified according to the green behaviour segmentation to know the motivation for their green behaviour. According to the (Natural Marketing Institute, 2009), there are 5 (five) categories of green segmentation, including LOHAS, Lifestyles of Health and Sustainability, represents the group that has environmental awareness, is oriented toward holistic values and is the most active in green behaviour; Naturalites, represents groups that carry out green behaviour motivated by the green living trend that many people have started to implement; Drifters, represents groups that carry out green behaviour motivated by the green living trend that many people have started to implement; Conventionals, represents groups who behave green with the motivation to save living costs; and Unconcerned, shows a group that knows the importance of preserving the environment but does not have the intention to be responsible for the environment.

Based on the TPB framework and the previous literature discussed above, the conceptual model of this study portrays in **Figure 1**, and the hypotheses of this study include:

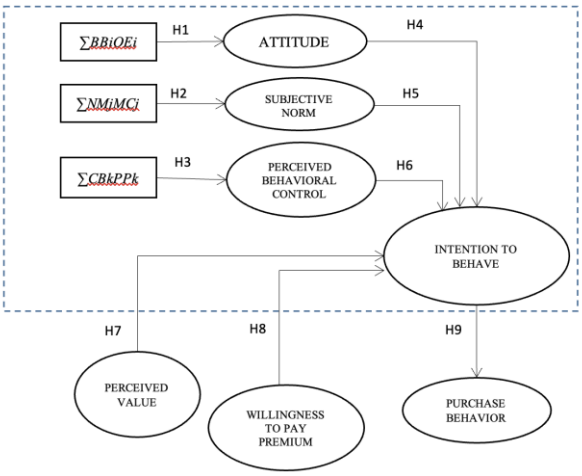

Figure 1. TPB model (Ajzen, 1985).

Note: ∑BBiOEi = behavioral belief (BB) ♦ outcome evaluation (OE), ∑NBjMCj = normative believe (NB) ♦ motivation to comply (MC), ∑CBkPPk = control believe (CB) ♦ perceived power (PP).

H1. Behavioural beliefs (∑BBiOEi) positively influence consumer attitudes towards environmentally friendly products.

H2. Normative belief (∑NBjMCj) positively influences consumers' subjective norms.

H3. Belief control (∑CBkPPk) positively affects perceived behavioural control.

H4. Attitudes significantly affect consumers' intentions to buy environmentally friendly products.

H5. Subjective norms positively affect consumers' intention to buy environmentally friendly products.

H6. Perceived behavioural control significantly influences consumers' intention to buy environmentally friendly products.

H7. The perceived value of green products positively affects consumers' intentions to buy environmentally friendly products.

H8. The willingness to pay a premium price significantly affects consumers' intention to buy environmentally friendly products.

H9. Intention to buy environmentally friendly products significantly influences consumers' actual buying behaviour.

2. Materials & methods

The data collection technique in this research uses a questionnaire survey design. First, the data collected were analyzed descriptively to classify the respondents' green segmentation. Next step was to ensure the validity and reliability of the instruments of this study. The survey instruments refer to the analysis of Yadav and Pathak (2016). The study results were analyzed using the Structural Equation Model (SEM). The measuring scale used in the questionnaire is a Likert consisting of 7 (seven) interval scales with the following details: Five items with a 7-point Likert scale (strongly disagree (1)/strongly agree (7)) are used for behavioural beliefs (BB). Furthermore, the follow-up outcome evaluation (OE) was also measured on a 7-point scale (not at all important (1)/very important (7). To measure normative trust (Subjective Norm) using a 7-point scale (strongly disagree (1)/strongly agree (7)). Furthermore,

respondents were asked about their motivation to comply with each referral (MC) using a 7-point scale (highly unlikely (1/very likely (7)). Finally, confidence control (CB) was also measured on a 7-point scale (strongly disagree (1)/strongly agree (7)) and perceived strength (PP) using a 7-point scale (strongly disagree (1)/strongly agree (7)). When conducting statistical analysis, this study will refer to the suggestions from Ajzen (1991b). It followed all items of each belief multiplied by their evaluative component (behavioural belief = behavioural belief (BB) * outcome evaluation (OE). Normative belief = normative belief (NB) * motivation to comply (MC). Control belief = control belief (CB) * perceived strength (PP).

Respondents who filled out the online link of the research questionnaire were 251 people who lived in West Java, as much as 83 per cent. The survey was distributed online through social media advertisements and chain text messages. By the time this study conducted, there was no ethics or institutional committee at the authors' institution. Thus, this study used anonymous questionnaire with no sensitive or personal information collected, but rather demographic information pertinent to the research, such as gender, age, which city they live, education level, and income range. Furthermore, the questionnaire included a statement from the researchers affirming that the data would solely be utilized for research purposes and would not be employed for any other intent and consented to the publication of survey results for research purposes in a collective format. From these data, the number of female respondents was more than male, with most educational qualifications currently undergoing undergraduate studies with an income of fewer than 1 million rupiahs because more than 50 per cent of the respondents are young consumers (17–30 years old) which 51 per cent of their occupancy are students and 74.5 per cent of them are single (Appendix).

Additionally, this study categorizes respondents according to the green segmentation classification. Respondents in this study predominantly fall into LOHAS and Drifters categories, each comprising 78% of the sample, followed by *Conventionals* with an average index difference of only 1% lower. This suggest that respondents engage in activities supporting environmental sustainability, likely driven by the current trend of eco-friendly lifestyles or by a desire to adopt frugal living practices to reduce living expenses.

In hypothesis testing, Structural Equation Modeling (SEM) is used. The stages involve testing the measurement model using Confirmatory Factor Analysis (CFA) while simultaneously testing the structural model based on multiple regression. In SEM, the first step is to ensure the model fits the empirical data before parameter estimation.

3. Results and discussion

The validity test was conducted simultaneously, using two methods. Correlational for a pre-test of 60 samples; confirmatory factor analysis for a test of 251 samples. This was done to avoid Common Method Bias (CMB). Confirmatory factor analysis is done by correlating the score of each indicator to the latent variable obtained from the sum of the scores of each indicator. A significant correlation score in **Table 1** indicates that these items are valid so that they can be used to measure each

of these latent variables. Based on the comparison correlation value (r-count) with the r-table, the r-count value greater than the r-table value is considered significant and valid.

Table 1. Validity test.

Item	Correlation with Total Score	Item	Correlation with Total Score
BB1	0,723	CB1	0,634
BB2	0,66	CB2	0,368
BB3	0,648	CB3	0,62
BB4	0,658	PP1	0,49
BB5	0,729	PP2	0,654
OE1	0,602	PP3	0,715
OE2	0,818	ATT1	0,774
OE3	0,731	ATT2	0,805
OE4	0,675	ATT3	0,704
OE5	0,718	ATT4	0,751
NB1	0,692	ATT5	0,75
NB2	0,551	ATT6	0,675
NB3	0,666	SN1	0,764
MC1	0,61	SN2	0,683
MC2	0,513	PBC1	0,478
MC3	0,546	PBC2	0,66
		PBC3	0,678

Calculated using IBM SPSS 24

Value Above 0.5 defined as acceptable validity judgement

Calculation of r-table is obtained by using the following formula:

$$r = \frac{t}{\sqrt{df + t^2}} \tag{1}$$

In obtaining the r-table value, this study uses Microsoft Office Excel application assistance with several stages. First, calculate the value of t using the =TINV (α; df) function, then implement the r-calculated formula above with a simple calculation operation using the Microsoft Office Excel application. With a tolerance value (α) = 5%, (one-tailed) and df = 60 − 2 = 58, the r-table value is 0.2542. Then the entire r-count value of each variable indicator can be assumed valid. However, this study pays attention to several indicators with a correlation coefficient value below 0.05 (CB2, PP1 and PBC1) which have a relatively weak correlation, significant, nevertheless. After assuming all indicators are valid, the final reliability score using Cronbach's Alpha can be determined in **Table 2**, and the Alpha coefficient value is 0.962 for 33 research instrument items.

Table 2. Reliability test.

Cronbach's Alpha	***N* of Items**
0.962	33

Calculated using IBM SPSS 24.

According to Sekaran and Bougie (2016), if it is greater than 0.6, then reliability can be accepted; in other words, all statements tested are reliable. Based on **Table 2**,

the value is greater than 0.6, so all statements in the questionnaire produce reliable answers.

Moreover, based on the measurement model, a valid factor loading is obtained (above 0.6), but there is one indicator with a loading value of 0.544, namely PBC1. However, this study still uses it because it falls within the acceptable range for a sample size of at least 100 (Hair, 1998). In addition, the indicators of CBPP2, CBPP3 and SN3 have relatively low values but are still acceptable in the weak category (**Table 3**).

Table 3. Loading values in measurement models.

Item indicator		Construct	*Standardized loading*	Item Indicator		Construct	*Standardized loading*
BBOE1	<---	BBOE	0,808	SN2	<---	SN	0,929
BBOE2	<---	BBOE	0,845	SN3	<---	SN	0,679
BBOE3	<---	BBOE	0,828	PBC1	<---	PBC	0,544
BBOE4	<---	BBOE	0,896	PBC2	<---	PBC	0,881
BBOE5	<---	BBOE	0,896	PBC3	<---	PBC	0,681
NBMC1	<---	NBMC	0,923	PV3	<---	PV	0,883
NBMC2	<---	NBMC	0,947	PV2	<---	PV	0,712
NBMC3	<---	NBMC	0,896	PV1	<---	PV	0,827
CBPP1	<---	CBPP	0,843	WPP3	<---	WPP	0,927
CBPP2	<---	CBPP	0,613	WPP2	<---	WPP	0,913
CBPP3	<---	CBPP	0,654	WPP1	<---	WPP	0,905
ATT1	<---	ATT	0,813	PV4	<---	PV	0,812
ATT2	<---	ATT	0,887	PV5	<---	PV	0,803
ATT3	<---	ATT	0,853	PI1	<---	PI	0,914
ATT4	<---	ATT	0,801	PI2	<---	PI	0,894
ATT5	<---	ATT	0,83	PI3	<---	PI	0,85
ATT6	<---	ATT	0,842	PB1	<---	PB	0,878
SN1	<---	SN	0,913	PB2	<---	PB	0,928
				PB3	<---	PB	0,801

This study uses Structural Equation Modeling (SEM) to test the hypothesis. The stage is to test the measurement model using the CFA and the structural model based on multiple regression. In SEM, the fit of a model with empirical data is the first step before estimating parameters. Based on the model's feasibility test, generally, the model can be accepted even though it is not perfect. The GFI Index of 0.768 and CMIN/DF of 2.2279 and RMSEA of 0.072 were obtained, which indicates an absolute fit level that is still acceptable. In addition, the measures of incremental fit, AGFI, TLI and NFI, which are close to 0.9, can be considered sufficient even though they are still insufficient to reach the excellent fit category **Figure 2**. Structural Model and Measurement Model in SEM.

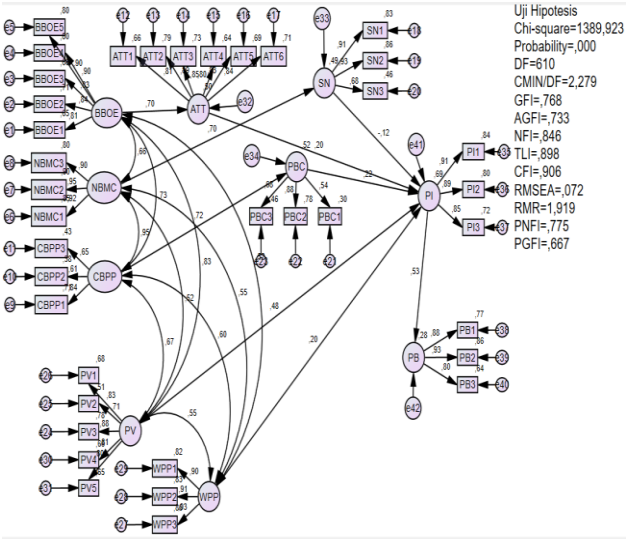

Figure 2. SEM structural and measurement model.

Based on model fitness testing (**Figure 2**), generally, the model is acceptable. The Goodness of Fit Index (GFI) obtained is 0.768, CMIN/DF is 2.2279, and RMSEA is 0.072, indicating an acceptable level of absolute fit (Hu and Bentler, 1999; Shevlin and Miles, 1998; Steiger, 2007). Additionally, incremental fit measures such as Normed Fit Index (NFI) approaching 0.9 (0.846) can be considered sufficient (Hooper et al., 2008), although they fall short of reaching the "good fit" category due to small sample size where the NFI value may suggest a lack of fit even though other statistics indicate a satisfactory fit (Tabachnick and Fidell, 2007). Nevertheless, the Comparative Fit Index (CFI) is 0.906. According to Hu and Bentler (1999), a value exceeding 0.90 is required to be indicate as a good fit.

According to the hypothesis testing this study (**Table 4**) found that behavioural beliefs (∑BBiOEi) positively influence consumer attitudes towards environmentally friendly products, normative belief (∑NBjMCj) positively influences consumers' subjective norms, and belief control (∑CBkPPk) positively affects perceived behavioural control. Moreover, attitudes significantly affect consumers' intentions to buy environmentally friendly products. Furthermore, perceived behavioural control, the perceived value of green products, the willingness to pay a premium price significantly influences consumers' intention to buy environmentally friendly products although the average score of willingness to pay a premium price is 5.2 or considered not high. Eventually, intention to buy environmentally friendly products significantly influences consumers' actual buying behaviour.

Table 4. Hypothesis testing.

Hypotheses				Est.	S.E.	Stdz. Est.	C.R.	P	Conclusion
H1	ATT	<---	BBOE	0.06	0.006	0.705	10.458	***	Supported
H2	SN	<---	NBMC	0.082	0.007	0.701	12.541	***	Supported
H3	PBC	<---	CBPP	0.051	0.007	0.72	7.262	***	Supported
H4	PI	<---	ATT	0.259	0.083	0.196	3.114	0.002	Supported
H5	PI	<---	SN	-0.092	0.044	-0.12	-2.078	0.038	Not Supported
H6	PI	<---	PBC	0.326	0.113	0.221	2.893	0.004	Supported
H7	PI	<---	PV	0.56	0.091	0.484	6.178	***	Supported
H8	PI	<---	WPP	0.167	0.048	0.198	3.46	***	Supported
H9	PB	<---	PI	0.683	0.082	0.529	8.334	***	Supported

However, this study also found that the subjective norm of consumers has a relatively low but significant effect on alpha 5 per cent on buying interest. The coefficient of this variable has a negative value.

The negative coefficient means that the more a person thought someone wants one to contribute to sustainable consumption, the lower the individual's intention to perform the behaviour. This study result contradicts the previous study in the context of developed country that found subjective norms positively impact consumers' purchase intention (Yadav and Pathak, 2017). Nevertheless, other findings in this study are in line with previous studies where TPB partially support consumers intention and behavior (Chou et al., 2012; Kim et al., 2013). This study found that behavioral change toward sustainability will be influenced by their change in attitude and perception of behavioral control. In addition, other findings that are also align with previous studies are consumers' willingness to pay and perceived value positively influence sustainable purchase intention (Shen, 2012; Varah et al., 2021).

4. Conclusion and recommendation

In the context of young consumers in West Java, Indonesia, this study concludes that among the 3 (three) factors in the TPB, subjective norms do not significantly influence consumers' purchase intentions. However, attitudes and behavioral controls can effectively encourage green behavior. These findings suggest that green purchase behavior in Indonesia is developing, with increasing awareness but still limited widespread adoption, including in West Java. Therefore, societal norms promoting green behavior may not be fully established or familiar yet in Indonesia. This can be considered a phenomenon that is interesting to be studied in further research.

Another conclusion drawn from this study is that the willingness to pay a premium price and the perceived value of green purchase can impact green behavior.

However, the willingness to pay a premium price for environmentally friendly product remains relatively low. This might show respondents price sensitivity. According to International Trade Administration, most Indonesian consumers are sensitive to prices and seek products that offer good value for their money (International Trade Administration, 2024). Therefore, to shape pro-environment consumption in West Java, Indonesia, pricing strategies should align with Indonesian consumers' purchasing power and their perceived value of the green purchases. Furthermore, there is already a high level of belief that green behavior benefits both the environment and individuals. Hence, green business entrepreneurs, particularly in West Java, can develop convincing communication strategies to enhance positive attitude so the consumers are truly motivated to engage in sustainable consumption. According to Agustini et al. (2021) cloth firm in Indonesia experienced struggles during promotion since a lack of acceptance was still existent. Additionally, they can also collaborate with influencers to promote green consumption trends, especially if the target consumers consist mainly of young people who belong to Drifter category, as in this study they tend to engage in practices driven by popular trends.

Author contributions: Conceptualization, TA and FFS; Methodology, TA and FFS; formal analysis and investigation, AV and WC; writing review and editing, MSCR,

TA, QC and HNK; investigation, HNK and ZM. All authors have read and agreed to the published version of the manuscript.

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Appendix

Table A1. Respondents' profile.

Gender	Male 33.8%	Female 66.2%			
Age	<17	17-30	31-45	45-60	>60
	1.9%	73.7%	15.1%	7.2%	1.9%
Educational qualification	Highschool	Bachelor	Master	PhD	
	22.7%	55.0%	18.3%	4.0%	
Occupation	Student	Employee	Entrepreneur	Others	
	51%	37%	4.4%	7.6%	
Income (monthly)	<1 mil.	1-5 mil.	5-10 mil.	10-15 mil.	>15 mil.
	41.8%	25.9%	19.9%	6.8%	5.6%
Status	Single	Married no children	Married with children		
	74.5%	4.4%	21.1%		

Table A2. Research instruments.

Variable	Indicators
Behavioral Belief (BB)	• BB1: Confidence in helping save the environment. • BB2: Confidence in being a responsible citizen. • BB3: Confidence in living in a better and cleaner environment. • BB4: Confidence in carrying out environmentally friendly activities. • BB5: Confidence in implementing "green" initiatives in my life.
Outcome Evaluation (OE)	• OE1: Able to help save the environment. • OE2: Able to be responsible to society. • OE3: Being able to live in a better and cleaner environment. • OE4: Able to carry out environmentally friendly activities. • OE5: Can implement "green" initiatives in life.
Normative Belief (NB)	• NB1: My family thinks I should buy green products instead of conventional ones. • NB2: My friends think that I should buy green products instead of conventional products. • NB3: My colleagues think that I should buy green products over conventional products.
Motivation to comply (MC)	• MC1: How likely is it for you to do what your family thinks you should be doing? • MC2: How likely is it for you to do what your friends think you should be doing? • MC3: How likely is it for you to do what your colleagues think you should be doing?
Control belief (CB)	• CB1: The location should be convenient when buying green products. • CB2: Buying green products takes time and effort. • CB3: My office/my school/or another institution pays for my basic needs to use green products.
Perceived power (PP)	• PP1: Location is critical for buying green products. • PP2: The time and effort spent are crucial to buying green products. • PP3: The expenses that occurred to me were critical when deciding to buy green products.
Attitude (ATT)	Buy green products: • ATT1: Very bad (1)/very good (7) • ATT2: Very unwanted (1)/very wanted (7) • ATT3: Very unenjoyable (1)/very enjoyable (7) • ATT4: Very unreasonable (1)/very wise (7) • ATT5: Strongly disliked (1)/strongly liked (7) • ATT6: Very unpleasant (1)/very pleasant (7)

Table A2. (*Continued*).

Variable	Indicators
Subjective norm (SN)	• SN1: Most people I think are essential to me wish I could buy eco-friendly products. • SN2: Most people I think are important to me will think I should buy eco-friendly products. • SN3: Most essential people in my social circle understand the importance of preserving the environment.
Perceived value (PV)	• PV1: The functionality of eco-friendly products has value. • PV2: Environmentally friendly product performs as expected. • PV3: Purchase of environmentally friendly products is motivated by environmental concerns. • PV4: Environmentally friendly products do not harm the environment. • PV5: Environmentally friendly products have more environmental benefits than conventional products.
Willingness to pay premium (WPP)	• WPP1: Willingness to pay more for green products • WPP2: Willingness to pay extra from a percentage of green products to support the organization/the product to be environmentally sustainable. • WPP3: Willingness to pay more to obtain environmentally friendly products.
Perceived behavioral control (PBC)	• PBC1: Purchasing eco-friendly products is an option. • PBC2: I have the resources, time, and opportunity to buy green products. • PBC3: If there is a desire, purchasing green products can occur in place of conventional products.
Purchase Intention (PI)	• PI1: Certainty of buying green products for personal use. • PI2: Desire to buy green products for personal use. • PI3: Efforts to buy green products.
Purchase behavior (PB)	• PB1: There is a plan to purchase green products regularly. • PB2: There is a desire to buy green products daily. • PB3: Purchases green products for the last six months.