

Is Green Marketing Important? Analysis of Green Purchasing Behavior for Bottled Drinking Water Products in Indonesia

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Abstract— This research aims to fill the gap in the differences in previous research results regarding the influence of green marketing on green purchase behavior with environmental knowledge as a mediation variable. Attitude-Behavior Context (ABC) Theory is used in this research to fill the gap. This study tested 9 hypotheses of which 7 were supported and the other two were rejected. The results from PLS-SEM from the responses of 124 Indonesian consumers show that Green Marketing (GA and Eco-label) positively affects GPB. Directly. GA did not affect GPB. the mediating role of EK was found to have a positive effect on GPB. Apart from that, this study also found that there was no effect of GT on GPB..

Index Terms— Green Purchase Behavior; Green Advertising; Bottled Drinking Water.

I. INTRODUCTION

Concerns about increasing environmental degradation and sustainability for coming generations have surfaced in the last few years (Sivadasan et al., 2020). Issues about the environment also motivate people to buy more sustainably and to be more proactive about it (Akturan, 2018). The promotion of environmentally friendly consumption to ensure healthy living and environmental conservation is becoming more and more acceptable as a result of rising consumer knowledge of the environment (Dangelico & Vocalelli, 2017). Many businesses might use this situation as an opportunity to use green marketing to sell their products (Akturan, 2018).

To reduce negative environmental effects, green marketing is an ecological marketing strategy that promotes the exchange of ideas between consumers and product selections (Polonsky, 2011). Green marketing aims to minimize environmental damage through strategies that revamp product development and manufacturing (Ansar, 2013), aligning with Sustainable Development Goals 2030, particularly point 12 on sustainable production and consumption. This study focuses on two facets of green marketing: eco-labeling and green advertising. Eco-labeling facilitates communication between producers and consumers (Richey, et.al, 2014), aiding informed decision-making and fostering consumer interest in products. Similarly, past research suggests that green advertising effectively influences consumer behavior toward desired outcomes (Ali, 2021).

An individual needs to know the environment to change his behavior into green purchasing behavior (Ali, 2021). This research will be conducted in Indonesia where Indonesia is a developing country. Hasan & Ali (2015)

stated that consumers in developing countries have less knowledge than customers in developed countries (Hasan & Ali. 2015; Lata & Kumar, 2022). There needs to be further analysis for marketers to know the right customer niche in deciding on green purchases in developing countries.

Previous research conducted by Ali (2021) found that Environmental Knowledge (EK) has a significant positive influence on Green Purchase Behavior (GPB). This is consistent with the findings of earlier research by Naz et al., (2020), which found that GPB is influenced by EK. However, Zafar (2021) which discusses the green consumer behavior of teenagers in Pakistan found that the influence of EK on GPB is not significant. Previous research also found that EK could not mediate green marketing on GPB (Ali. 2021). Therefore, there is a need for further analysis regarding the gap in research results regarding the influence of green marketing and GPB which is mediated by EK.

To improve customers' intention to participate in environmentally friendly movements, it is also necessary to have green trust in the green marketing of a product (Flavián et al., 2005; Schurr & Ozanne, 1985). Furthermore, it was discovered that trust was a major factor in the decision to buy environmentally friendly products. (Gefen & Straub. 2004). Future market failure for the green industry might come from a failure to earn consumers' trust (Polonsky. 2011).

Many previous studies have researched green marketing in general and not specifically on one product (Amoako et al.. 2020). To get differing opinions, product specifications and an explanation of green purchasing behavior are required (Sio, 2022). In this research, researchers will specifically focus on bottled drinking water products. Based on the Indonesian Plastic Industry Association ((Inaplas), Bottled Drinking Water waste annually contributes 226 thousand tons of plastic waste out of the 3,2 million tons of plastic waste produced in Indonesia. The implementation of green marketing by companies is very needed to reduce the amount of plastic waste donated, especially based on the KHLK ministerial regulations, the Indonesian government targets to reduce the amount of waste generated by up to 30% by 2029 (detik.news.com).

Testing the influence of green marketing on green purchase behavior has been carried out using the Theory of Planned Behavior (TPB) and the Theory of Reasoned Action (TRA). There is a need to use other theories to be able to see how green marketing influences GPB one of which is by looking at how external factors and a person's attitude drive behavior (Ogiemwonyi et al.. 2023), therefore in this research, We used Attitude - Behavior Context (Ogiemwonyi et al.. 2023). ABC Theory to see the influence between green marketing and green purchase behavior. ABC theory, which posits that behavior (B) is the outcome of the combined influence of factors and attitude variables (Attitude, A), is the primary theory utilized to investigate how external context affects sustainable consumption behavior. This is a condensed form of the Stern and Oskamp (1987) model, called contextual (Context, C) (Guagnano et al., 1995; Qin et al., 2022).

This research aims to fill the gap in the differences in research results regarding the influence of green marketing on green purchase behavior which is mediated by environmental knowledge and answer the question How does green marketing influence green purchase behavior on bottled drinking water products in Indonesia? using Attitude-Behavior Context (ABC) Theory. This research has two implications, first, this research will enrich the literature about GPB using the Attitude-Behavior Context (ABC) Theory, and Second, this research suggests that the government and bottled drinking water companies can focus more on providing information about green knowledge so that efforts to reduce plastic bottle waste in Indonesia could decrease.

II. LITERATURE REVIEW

A. Green Advertising, Eco-Label, and Green Purchase Behavior

According to Papadas et al. (2019), green marketing refers to an organization's attempt to incorporate environmental considerations into all stages of the development of new products and services as well as to highlight these considerations in price and promotion strategies. Green advertising is one of a company's green marketing strategies (Ali, 2021; Nguyen-Viet, 2022). Green Advertising (GA) is defined as communications that aim to change consumer perceptions, attitudes, and behavior by highlighting environmentally friendly aspects of products from the point of production to the point of disposal and recycling (Matthes, 2019). Green advertising typically addresses pressing environmental issues and appeals to consumers (Kim et al., 2019).

Leonidou et al. (2011) state that the focus of green advertising is on product-oriented green claims that can be demonstrated, the demonstrated green claims have the characteristics of being easy to observe, easy to understand, and practically helping in protecting nature. The existence of green advertising can help build consumer values and realize these values in green purchases (Nguyen-Viet, 2022; Rahbar & Wahid, 2011). Existing literature also states that advertising is always considered a pioneer in mobilizing consumer opinion, this advertising acts as the final step in deciding to make an actual purchase (Ali, 2021). Other studies state that

green advertising through print media and social media plays an important role in attracting attention and causing consumers to make purchasing decisions and as a promotional channel with positive communication (Lata & Mittal, 2023; Ali, 2021; Kim et al., 2019). Thus, the external conditions (context) of green advertising can attract the attention of consumers to carry out green purchase behavior (behavior). Previous studies stated that green advertising had a positive effect on increasing green purchasing behavior among consumers (Ali, 2021). The hypothesis is obtained:

H1. GA has a positive effect on GPB.

Green marketing aims to achieve business financial objectives and strategies that reduce adverse effects on the environment (C. N. Leonidou et al., 2013; Nguyen-Viet, 2022). Eco-labeling is one green marketing tactic that businesses can use (Ali, 2021; Nguyen-Viet, 2022). According to Nguyen-Viet (2022), the International Standards Organization [ISO] (2012), eco-labels are a marketing or communication tool that provides customers with particular product information about the environment. The eco-label is obtained by carrying out certification from a third party. This certification provides a competitive advantage to the product by having the image of being environmentally friendly and safe to use (Rashid, 2009). The presence of eco-labels on products has an impact on green purchase behavior (Ali, 2021; Yenipazarli, 2015). Consumers are willing to pay a higher price to purchase a product than available alternative products, this is very profitable for the company (Delmas & Grant, 2014; Nguyen-Viet, 2022). Thus, the influence of external factors (context) from this eco-label can increase consumer behavior to participate in overcoming environmental problems by making green purchases. Existing literature states that the increasing number of eco-label certifications a product has can increase green purchase behavior for that product (Ali, 2021). Therefore, the hypothesis is obtained:

H2. Eco-labels have a positive effect on GPB, GA, Eco-Label, and EK.

B. Green Advertising, Eco-Label And Environmental Knowledge

The increasing prominence of social media and an increase of information have made it easier for consumers to learn about environmental issues (Ali, 2021; Narula & Desore, 2016). By utilizing environmental awareness among consumers and organizations, green advertising plays a significant role in communicating pro-environmental attitudes (Leonidou et al., 2011; Nguyen-Viet, 2022). Green advertising can raise consumer awareness of the value of green products and enhance the green image (Chin et al., 2018; Rex & Baumann, 2007). The ability to comprehend and assess how ecosystems affect society is known as environmental knowledge (Tan, 2011). Laroche et al. (2001) define environmental knowledge as a person's ability to identify or define several symbols, concepts, and behaviors related to ecology. Existing studies state that researchers in the environmental field agree with the findings which state that increasing knowledge about environmental issues (environmental knowledge) can lead to pro-environmental behavior (Ali, 2021). With green advertising as an external factor (context), consumers can increase and become aware of environmental knowledge, consumers can be aware of the impact of an activity carried out by an organization on the environment and how it influences attitudes (attitude) in consumers' personal lives. Existing studies state that by implementing green advertising companies can increase the EK that consumers have (Ali, 2021). Thus, the hypothesis is obtained:

H3. GA has a positive effect on EK.

Eco-labels can be used by consumers to make decisions regarding selecting environmentally friendly products and provide information to consumers regarding the production process that occurs (Rex & Baumann, 2007). With products that are given an eco-label, consumers can pay a higher price than available alternatives because they provide environmentally friendly product information (Delmas & Grant, 2014; Nguyen-Viet, 2022). This eco-label is used as a communication tool to provide information related to the product's impact on the environment, especially when the product has certification from a third party (Nguyen-Viet, 2022). The external factors (context) of this eco-label can influence consumers' attitudes by increasing information about what environmental problems have been overcome by the product. Eco-labels can increase consumers' environmental knowledge. Existing studies state that eco-labels have a positive effect on consumers' environmental knowledge (Ali, 2021). Thus, the hypothesis is obtained:

H4. Eco-labels have a positive effect on environmental knowledge.

C. Environmental Knowledge and Green Purchase Behavior

Previous studies conducted by Chang et al. (2015) show that providing a clear and detailed explanation of the benefits of green products can increase consumers' tendency to carry out green purchasing behavior. Another study also states that when consumers have low environmental knowledge it can result in low green purchase

behavior carried out by consumers Laheri et al. (2014). Thus, consumers' attitudes regarding environmental awareness seen from their environmental knowledge can influence green purchase behavior. Existing studies state that the rich environmental knowledge possessed by consumers can increase green purchase behavior (Ali, 2021). Therefore, the hypothesis is obtained:

H5. EK has a positive effect on GPB.

D. Green Advertising, Eco-Label and Green Trust

The literature currently defines Green Advertising (GA) as advertising that satisfies one or more of the following criteria: (1) discussing, either explicitly or implicitly, the relationship between a product or service and the biophysical environment; (2) promoting an environmentally friendly lifestyle; and (3) projecting the image of an environmentally conscious company (Banerjee et al., 1995; Pittman et al., 2022). By capitalizing on the growing social norms that promote environmental sustainability, green advertising can serve as an alternative to promoting environmental sustainability (Pittman et al., 2022; Segev et al., 2015). GA can provide consumer expectations regarding products. seen from green advertising which provides details of the environmental impact of their products and the business practices carried out by the company (context) thereby giving rise to an attitude of green trust in consumers towards the product. Green Trust (GT) is consumers' willingness to believe in the company's care, competence, reliability, and fairness towards the environment, they believe that the products they choose contribute to a better living environment (Boonlertvanich, 2019; Chen, 2013; Hameed et al., 2022; Muflih et al., 2023). Existing studies state that green advertising can increase consumers' green trust in products (Nguyen-Viet, 2022). Thus, the hypothesis is obtained:

H6. GA has a positive effect on GT.

Consumers who have a green trust believe in the capabilities of products or services based on trust or hope resulting from their credibility, benevolence, and ability to have an impact on the environment (Amoako et al., 2020; Chen, 2013). This attitude can emerge from the eco-label that the company uses on its products. Eco-label is an external factor (context) that is very useful for allocating information asymmetry between sellers and buyers (Nguyen-Viet, 2022; Rahbar & Wahid, 2011). Eco-labels are used to guarantee consumers the environmental quality of products or services by ensuring the authenticity of environmentally friendly claims (Nguyen-Viet, 2022; Sun et al., 2021). Existing studies state that the existence of an eco-label can create a high level of green trust (Nguyen-Viet, 2022). Therefore, the hypothesis is obtained:

H7. Eco-labels have a positive effect on GT.

E. Green Trust and Green Purchase Behavior

Trust is described as consumer confidence that a product or company will act as expected when consumers have good expectations of the company's intentions and behavior. it will produce an attitude of consumer trust in the product and create behavior to use the product (Amoako et al., 2020; Hart & Saunders, 1997; Wang et al., 2019). The existence of a green trust attitude that appears in consumers can encourage green purchase behavior. Existing studies prove that if consumers have good green trust in the product, it will lead to green purchase behavior (Sh. Ahmad et al., 2022) (Sh. Ahmad et al., 2022). Gefen & Straub (2004) in Sh. Ahmad et al. (2022) stated that trust is one of the drivers in purchasing green products. Thus, the hypothesis is obtained:

H8. Green trust has a positive effect on green purchase behavior.

F. Mediation

Based on the ABC Theory, the mediating role of environmental knowledge can be developed. The external factors contained in green advertising can increase the environmental knowledge that consumers have so that consumers are aware of environmental issues that occur and then consumers can behave to overcome the environmental problems they face by making green purchases. This is in line with a study conducted by Ali (2021). from this study, it is known that in green marketing, green advertising plays a role in influencing green purchase behavior, with environmental knowledge as a mediator in this influence. Thus, the hypothesis is obtained:

H9. Green advertising has a positive influence on green purchase behavior through environmental knowledge.

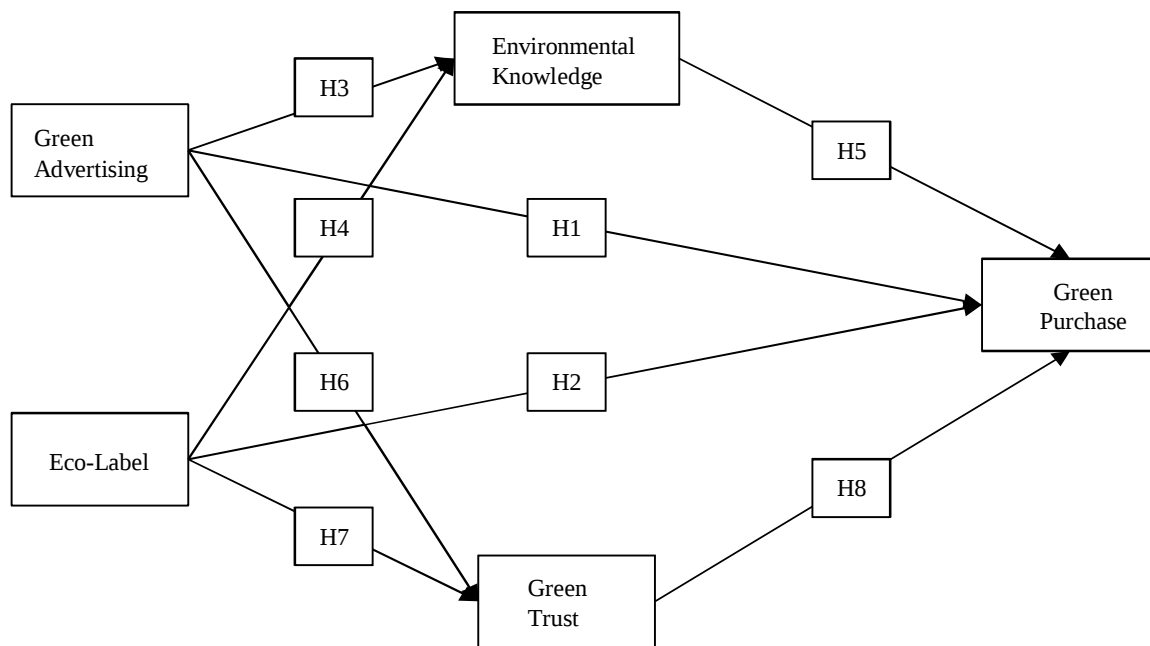


Figure 1. Research Framework

III. RESEARCH METHOD

A. Research Design

This research is research objective, namely to see the cause-and-effect relationship between existing variables. so this research is explanatory. Neuman (2014) defines explanatory research as a research approach that aims to explain the cause-and-effect relationship in observed variables. Explanations are used to understand the factors that influence a particular phenomenon or event (Neuman, 2014). This research uses a quantitative method approach. Quantitative methods focus on measuring measurable variables and use statistical analysis techniques to test hypotheses, the result of this test can be generalized to a wider population.

Indonesian people residing in Indonesia who purchased bottled drinking water products are the population in this study. Non-probability sampling techniques are used because the number of the research population is unknown. For sampling this study used a purposive sampling technique. This technique is defined as a method of gathering data from a target group that is a more specific and able to supply the needed information (Sekaran and Bougie, 2016). The criteria for the samples taken in this research were Generation Z (aged 17-28 years) and had purchased Bottled Drinking Water products that had a green campaign at least twice.

B. Data Collection

To collect data, this study used questionnaires (Sekaran and Bougie, 2016). A questionnaire is defined as a pre-formulated list of written questions, respondents will provide answers according to their preferences, usually in clearly defined scale alternatives (Sekaran and Bougie, 2016). This questionnaire is used by researchers because it can collect respondents in a short time and make it easier for respondents to provide answers. The questionnaire is considered efficient to use, researchers know exactly the variables to be measured and also know what can be expected from respondents. In this study, the type of questionnaire used was a closed questionnaire. The measurement of the questionnaire in this study used a likert scale of 1-5.

C. Operational Variables

TABLE I. OPERATIONAL DEFINITION OF VARIABLES

No	Variable Name	Variable Definition	Measurement Items
1	Green Advertising (Zinkha and Carlson, 1995).	Messages that try to influence consumer cognition, attitudes, and behavior by promoting green features throughout the product process, starting from the production stage to the disposal and recycling stage.	1. Green advertisements on bottled drinking water products increase my desire to consume them. (GA1) 2. Green advertising on bottled drinking water products conveys to consumers that the company supports environmentally friendly and sustainable behavior. (GA2) 3. Green advertising on bottled drinking water products improves the company's image. (GA3) 4. I think the green advertising on bottled drinking water products is effective. (GA4) 5. Bottled drinking water products with green advertising are safe for consumption. (GA5) 6. I have more confidence in Bottled Drinking Water products with green advertising compared to non-green advertising. (GA6)
2	Eco-labeling (Nguyen-Viet, 2022)	Products that have labels emphasizing environmental friendliness can bridge the knowledge gap about environmental friendliness between buyers and sellers. (Nguyen & Le, 2020).	1. The environmentally friendly label on bottled drinking water products are truly committed to environmental protection. (EL1) 2. I believe that the environmentally friendly label on the bottled drinking water product is correct. (EL2) 3. The presence co-labelling tells me which brands have eco-friendly features in the bottled water products I'm looking for. (EL3) 4. Eco-label is a valuable source of information about environmentally friendly bottled drinking water products. (EL4) 5. I prefer to get important information about the brand and model of environmentally friendly bottled drinking water products before purchasing them. (EL5).
3.	Environmental Knowledge (Mostafa, 2007)	The cognitive capacity to comprehend environmental or sustainability issues, particularly those about waste creation, energy consumption and efficiency, recycling, and air, water, and land pollution, as well as the implications for society and the physical environment overall (Chan, 2001; Mostafa.,2007; Tan, 2011).	1. I am very knowledgeable about environmental issues. (EK1) 2. I know how to choose bottled drinking water products with recyclable packaging. (EK2) 3. I understand environmentally friendly terms and symbols on bottled drinking water product packaging. (EK3) 4. I know that I am purchasing bottled drinking water products and packaging that is safe for the environment. (EK4)
4.	Green Trust (Nguyen-Viet, 2022)	Willingness to rely on a product, service, or brand based on beliefs or expectations resulting from credibility and environmental performance capabilities as well as a willingness to rely on transaction partners, inspired by trust in their environmental performance (Chen, 2010; Martínez, 2015).	1. I feel that the brand's environmental commitment to its bottled drinking water products is generally reliable. (GT1) 2. I feel that the brand's environmental argument for bottled drinking water products is generally credible. (GT2) 3. The brand's environmental awareness in this bottled drinking water product meets my expectations. (GT3) 4. The brand on this bottled drinking water product keeps its promise and commitment to environmental protection. (GT4)
	Green Purchase Behavior (Lee, 2008).	The reverse of purchasing sustainable or environmentally friendly products that are "recyclable" and "beneficial" to the environment and keeping away from goods that are harmful to society and the environment (Chan, 2001; Mostafa, 2007).	1. When I want to buy a Bottled Drinking Water product, I look at the label and see whether the product contains ingredients that are harmful to the environment or not. (GPB1) 2. I prefer products with green advertising over non-green ones if the product quality is the same. (GPB2) 3. I chose to buy environmentally friendly bottled drinking water products. (GPB3) 4. I bought bottled drinking water products with green advertisements even though they were more expensive than non-green ones. (GPB4)

D. Data Analysis Method

Measurements for PLS analysis results can be done using a two-step approach. The stage carried out is measuring the outer model and inner model which are used to test the hypothesis from path analysis. Outer model or what is called indicator test is carried out to test the reliability and validity of the research conducted, this test is carried out by evaluating convergent and discriminant validity and reliability by looking at the value of factor loadings, cross loading, AVE, HTMT, Fornell-Lacker criteria, CR (Composite Reliability), and CA (Cronbach Alpha). Meanwhile, the inner model is also known as the structural model. The structural model is carried out by path analysis to test the hypothesis.

Structural model analysis in this research uses bootstrapping and blindfolding techniques in Smart PLS 3.0 with a significance of 0.05. Because the hypothesis in this research is directional, one-tailed testing is used. If using two-tailed hypothesis testing, the t-statistic value must be above 1.96. Testing on Smart PLS 3.0 was carried out using a bootstrapping process. The magnitude of the direct effect is observed by looking at the path coefficient value, while for indirect effects by looking at the specific indirect effect value.

IV. RESULT AND DISCUSSION

A. Respondent's Profiles

Respondents were taken in Indonesia with the majority of samples taken in the Yogyakarta area (62 respondents, 50%), followed by Central Java (18 respondents, 14.5%), then Sumatera (13 respondents, 10.5%), West Java (11 respondents, 8.9%), East Java and Jakarta each had 5 respondents (4%), Bali and Nusa Tenggara 2.4% (3 respondents), then followed by Kalimantan and Sulawesi with 2 respondents each (1.6%) and Papua (1 respondent, 0.8%), but 2 respondents did not provide their area of residence. Respondents in this study consisted of 82 (66.1%) women and 42 men (33.9%). The majority of respondents were aged 23 to 28 years (71 respondents, 57.3%), followed by those aged 17 to 22 years (53 respondents, 42.7%). Most research respondents had a bachelor's degree (79 respondents, 63.7%), followed by a high school education (41 respondents, 33.1%). Most of the respondents' jobs were students (82 respondents, 66.1%), followed by private employees consisting of 29 respondents (23.4%). Most respondents had a monthly income of IDR 1,000,001 to IDR 3,000,000 as much as 51.6% (64 respondents), followed by a monthly income of less or equal to IDR 1,000,000 as much as 25% (31 respondents), then respondents who have a monthly income between Rp. 3,000,001 to Rp. 5,000,000 is 14.5% (18 respondents). Based on the characteristics of these respondents, the research results will relate to populations with the same characteristics, thereby limiting the generalizability of the research. Detailed information regarding the characteristics of respondents can be seen in Table 2.

TABLE II. DEMOGRAPHIC CHARACTERISTICS OF THE RESPONDENTS

Demographics	N	%	Demographics	N	%	Demographics	N	%
Gender			Age Range			Income Per Month		
Male	42	33.9	17 to 22 years old	53	42.7	≤Rp. 1,000,000	31	25
Female	82	66.1	23 to 28 years old	71	57.3	Rp. 1,000,001 to Rp. 3,000,000	64	51.6
Last Education			Occupation			Rp. 3,000,001 to Rp. 5,000,000	18	14.5
High School	41	33.1	Students	82	66.1	Rp. 5,000,001 to Rp. 7,000,000	6	4.8
University Graduate	79	63.7	Private Employee	29	23.4	≥Rp. 7,000,001	2	1.6
Diploma	2	1.6	Entrepreneur	3	2.4	Not Informed	3	1.6
Doctoral graduate	2	1.6	Other Occupations	10	8.1			

B. Measurement Assessment

To ensure the accuracy of the data, it is necessary to check for common method bias by seeing that the VIF value is below 3.3 (Kock, 2015). Based on the analysis, the VIF value known from the inner model showed results below 3.3 so the common method bias was not detected (see Table 3). Then to ensure the consistency of the measurement instruments, the researchers conducted validity and reliability analyses. The validity tests carried out were convergent and discriminant. When conducting a convergent validity test, it will be declared standardized when it produces a factor loading value greater than 0.5, with it being declared ideal at 0.7 (Hair et al., 2019). Apart from that, also looking at the AVE value, the AVE value must be above 0.5 to be considered

satisfactory in terms of convergent validity (Hair et al., 2019). From the test results (which can be seen in Table 4), it is known that the factor loading value obtained meets the requirements of having a value above 0.5 and the AVE results obtained for each variable meet the requirements above 0.5, thereby confirming convergent validity. The model will be said to be valid, when the discriminant validity seen from the square root of the AVE value is higher than the correlation value (Hair et al., 2014), as well as the HTMT value below 0.90 (Hair et al., 2019), and the cross-loading score is higher than the parent construct, testing can be carried out using the Fornell-Lacker criterion (Hair et al., 2014). It is known that the test results show that the square root of the AVE value is above the correlation value (see Table. 5) and the HTMT value is below 0.9 for all variables (see Table. 6), it can also be seen that the cross-loading score for all indicators is higher than the parent construct. Next, carry out a reliability test, if the cronbach's alpha value and the composite reliability value are above 0.7, the model used can be said to be reliable (Hair et al. 2014). Based on the test results, it is known that the cronbach's alpha value and the composite reliability value for all variables are higher than 0.7, so the measurement instrument is considered reliable (see Table. 4).

TABLE III. VIF RESULTS

Variables and Items	VIF	Variables and Items	VIF
Green Advertising		Environmental Knowledge	
GA1	1.869	EK1	1.666
GA2	1.472	EK2	2.627
GA3	1.488	EK3	1.956
GA4	1.631	EK4	1.935
GA5	1.363	Green Trust	
GA6	1.525	GT1	2.013
Eco-labeling		GT2	2.118
EL1	1.741	GT3	2.903
EL2	1.747	GT4	2.599
EL3	1.650	Green Purchasing Behavior	
EL4	1.996	GPB1	1.465
		GPB2	1.783
		GPB3	1.760
		GPB4	1.275

TABLE IV. VALIDITY AND RELIABILITY OF TEST RESULTS

Variables and Items	Factor Loading	Variables and Items	Factor Loading
Green Advertising (Alpha=0.809, CR=0.862, AVE=0.511)		Environmental Knowledge (Alpha=0.848, CR=0.898, AVE=0.687)	
GA1	0.804	EK1	0.805
GA2	0.670	EK2	0.881
GA3	0.664	EK3	0.810
GA4	0.753	EK4	0.817
GA5	0.676	Green Trust (Alpha=0.885, CR=0.921, AVE=0.744)	
GA6	0.712	GT1	0.845
Eco-labeling (Alpha=0.822, CR=0.876, AVE=0.585)		GT2	0.840
EL1	0.759	GT3	0.895
EL2	0.781	GT4	0.869
EL3	0.718	Green Purchase Behavior (Alpha=0.751, CR=0.843, AVE=0.574)	
EL4	0.807	GPB1	0.764
EL5	0.756	GPB2	0.792
		GPB3	0.811
		GPB4	0.654

Note: Estimated Model: SRMR=0.083, NFI=0.712, d_ULS=1.911, d_G=0.729, Chi Square=500.220

TABLE V. FORNELL-LARCKER CRITERION RESULTS

	OAK	EL	GA	GPB	GT
OAK	0.829				
EL	0.609	0.765			
GA	0.563	0.746	0.715		
GPB	0.614	0.703	0.626	0.758	
GT	0.489	0.696	0.679	0.599	0.862

TABLE VI. HETEROTRAIT-MONOTRAIT RATIO (HTMT) RESULTS

	OAK	EL	GA	GPB	GT
OAK					
EL	0.721				
GA	0.665	0.896			
GPB	0.754	0.889	0.791		
GT	0.561	0.812	0.786	0.728	

C. Hypotheses testing and Discussion

The next analysis is testing the inner model used to test the hypothesis in this research. The results of the regression weight test in this research are in Figure 2 and Table 7. Structural model analysis in this research uses bootstrapping and blindfolding techniques in SmartPLS 3.0 with a significance of 0.05. If using two-tailed hypothesis testing, the t-statistic value must be above 1.96 (Hair et al., 2019).

Table 7 shows that there is a direct positive influence of the environmental knowledge variable on green purchase behavior with a t-statistics significance value of $3.183 > 1.96$ and a p-value of $0.001 < 0.050$, so hypothesis 5 is supported. Apart from that, there is a direct positive influence of the eco-label variable on environmental knowledge with a t-statistics significance value of $3.448 > 1.96$ and a p-value of $0.001 < 0.050$, so hypothesis 4 is supported. Based on the results of this hypothesis testing, there is a direct positive influence of the eco-label variable on green purchase behavior with a t-statistics significance value of $3.612 > 1.96$ and a p-value of $0.000 < 0.050$, so based on the test results, hypothesis 2 is supported.

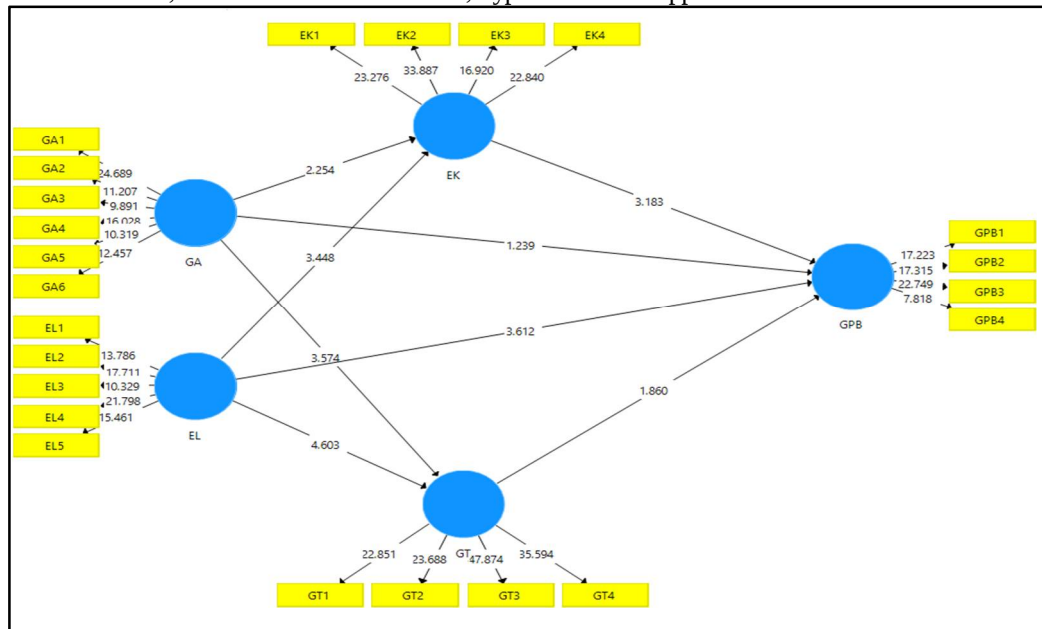


Figure 2. Model of Hypothesis Testing Results

In table 7 you can also see that there is a direct positive influence of the eco-label variable on green trust with a t-statistics significance value of $4.603 > 1.96$ and a p value of $0.000 < 0.050$, so based on the test results, hypothesis 7 is supported. The results of hypothesis testing in this research also show that there is a direct

positive influence of the green advertising variable on environmental knowledge with a t-statistics significance value of $2.254 > 1.96$ and a p-value of $0.024 < 0.050$, so based on the test results, hypothesis 3 is supported. There is a direct positive influence of the green advertising variable on green trust with a significance value of $3.574 > 1.96$ and a p-value of $0.000 < 0.50$, so based on the test results, hypothesis 6 is supported.

TABLE VII. HYPOTHESIS TESTING RESULTS (DIRECT EFFECT)

	Original Sample (O)	T Statistics (O/STDEV)	P Value
EK → GPB	0.261	3.183	0.001
EL → EK	0.425	3.448	0.001
EL → GPB	0.360	3.612	0.000
EL → GT	0.428	4.603	0.000
GA → EK	0.246	2.254	0.024
GA → GPB	0.113	1.239	0.216
GA → GT	0.360	3.574	0.000
GT → GPB	0.145	1.860	0.063

Table 8 shows that there is a mediating effect of green advertising on green purchase behavior through environmental knowledge with a t-statistics significance value of $2.540 > 1.96$ and a p-value of $0.011 < 0.050$, so that based on the test results, hypothesis 9 is supported.

TABLE VIII. HYPOTHESIS TESTING RESULTS (INDIRECT EFFECT)

	Original Sample (O)	T Statistics (O/STDEV)	P Value
GA → GPB	0.116	2.540	0.011

Several hypotheses are not supported, namely the direct influence of the green advertising variable on green purchase behavior with a t-statistics significance value of $1.239 < 1.96$ and a p-value of $0.216 > 0.050$, so hypothesis 1 is not supported. This is in line with previous literature which states that green advertising aims to build ecological awareness and encourage consumers towards environmentally friendly products may not always be successful in increasing green purchase behavior (Pancić et al., 2023). Limited cognitive influence, green advertising does not always reach consumers effectively because of their limited cognitive influence (Gu et al., 2022). In some cases, green advertising can cause a licensing effect, where consumers feel that they are already participating in environmentally friendly behavior and do not need to make further efforts. Table 7 also explains that the green trust variable is green purchase behavior with a t-statistic significance value of $1.860 > 1.96$ and a p-value of $0.063 < 0.050$, so hypothesis 8 is not supported. Factors such as skepticism towards green marketing can influence green purchasing behavior. In addition, consumers may not always trust the information conveyed in green advertising or may not understand how to contribute to their daily behavior regarding environmentally friendly products (Gu et al., 2022; Pancić et al., 2023). Therefore, although green trust can be an important factor, the existence of these obstacles can influence its relationship with green purchase behavior.

V. CONCLUSION

Concerns about increasing environmental pollution, depleting natural resources, and sustainability for future generations have been widely raised in recent years. These environmental issues have encouraged consumers to be more proactive and open to environmentally friendly consumption. To find out consumer perceptions on their behavior in purchasing environmentally friendly products, this study aims to fill the gap in the differences in research results regarding the effect of green marketing on green purchasing behavior mediated by environmental knowledge. The construction of this research framework uses Attitude-Behaviour Context (ABC) Theory to describe the flow of consumer behavior in making green purchases. This research focuses on bottled water products in Indonesia, some of which have green claims and conduct green marketing. This study uses Structural Equation Model-Partial Least Square (SEM-PLS) to conduct data analysis, obtained respondent data in this study as many as 124 respondents spread throughout Indonesia.

9 hypotheses were tested in this study, the results showed that 7 hypotheses were supported and 2 hypotheses were not supported. This result is very interesting because this study found that there is no direct effect of green advertising on green purchase behavior. This happens because green advertising carried out by companies has the potential to be biased and not targeted at consumers. The reason for this is that the content of green advertisements circulating in the community can be accepted if consumers have strong cognitive power or knowledge about green products. This is reinforced by other analyses conducted in this study that the effect of

green advertising on green purchase behavior is mediated by environmental knowledge. Thus, companies are right on target when consumers have environmental knowledge in doing green advertising to consumers. In addition, in this study it is known that green trust directly has no effect on green purchasing behavior. This happens because consumers have a skeptical attitude and do not believe in green claims made by companies, so this is a factor that must be considered when companies decide to do green advertising.

The results of this study contribute to two things, first theoretically, this study tries to fill the research gap regarding the effect of green advertising on green purchase behavior by focusing on everyday products that have the potential to contribute to large waste, namely bottled drinking water. Some studies that discuss green advertising focus on product purchase intention, not on the experience when buying products with green claims. On the other hand, it is still quite rare for studies to add the mediating role of environmental knowledge in analyzing the influence of green advertising on green purchasing behavior. Secondly, practically, the results show that companies should focus more on providing the right information and content to attract consumers' sympathy and gain their trust. This is done to increase consumer knowledge so that they can absorb information about green claims made by companies.

The results of this research contribute to two things both theoretically and practically. Theoretically, this research attempts to fill the research gap on the influence of green advertising on green purchase behavior by focusing on everyday products that have the potential to have a large waste contribution, namely bottled drinking water. Some of the research that discusses green advertising focuses on interest in purchasing products, not on experiences when purchasing products with green claims. On the other hand, it is still quite rare for research to add the mediating role of environmental knowledge in analyzing the influence of green advertising on green purchase behavior. Practically, the research results suggest that companies should focus more on providing the right information and content to attract consumer sympathy and gain their trust. This is done to increase consumer knowledge so that they can absorb information about the green claims made by the company.

This research has several limitations and suggestions for further research development. This research does not analyze in more detail related to green advertising where other variables need to be added in this research. Apart from that, this research only focuses on one theory, namely the ABC Theory. The suggestion for further research is that it needs to be analyzed more deeply regarding the potential role of environmental knowledge in analyzing green purchase behavior. Future research could consider green literacy which has the potential to provide better results. Apart from that, further research needs to discuss more deeply about green trust where there is still quite a bit of literature discussing it.

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