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**The Influence of Green Marketing Environmentally
Friendly Bags on Green Behavior of Modern
Mini-market Retail Consumers in Yogyakarta**

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Abstract

Environmental and ecosystem damage can be caused by residual waste or waste originating from industry and households. Plastic bag waste is increasing in Indonesia every year, and the environmental conditions are very concerning. Starting in 2009, several supermarkets and hypermarkets in Indonesia have begun to promote eco-friendly campaigns, namely the use of eco-friendly cloth shopping bags (green bags) as a substitute for plastic bags which tend not to be environmentally friendly. This study is conducted in the Special Region of Yogyakarta with a sample of 200 respondents from the DIY population, namely the City of Yogyakarta, Sleman, Bantul, Kulon Progo, and Gunung Kidul. Through a quantitative approach, the respondents in this study were 52.7% of the Z generation, 23.9% of the Y generation, and 23.4% of the X generation. This study examines the variables Attitude/AT (X1), Subjective Norms/SN (X2), Perceived Behavioral Control/PC (X3), Green Marketing/GM (Y1), and Green Behavior/GB (Y2). Through the logic of

Theory Planned Behavior (TPB) as a grand theory. Results of data analysis processed using SmartPLS 3 with path data analysis results explaining the research hypothesis proved that attitude has a significant positive effect on Green Marketing. Subjective Norms significantly positively affect Green Marketing. Perceived Behavioral Control has a significant positive effect on Green Marketing. Green Marketing has a significant positive effect on Green Behavior.

Introduction

September 2015, world leaders at the United Nations unanimously adopted a new global development agenda, Transforming Our World: The 2030 Agenda for Sustainable Development, one of the most ambitious and critical global agreements in recent history. The agenda, which entered into force on 1 January 2016 with the 17 Sustainable Development Goals (SDGs) at its core, is a guide to addressing the world's most pressing challenges, including ending poverty and bringing about economic prosperity, social inclusion, environmental sustainability, and peace. To all countries and all people by 2030 (Setó-Pamies & Papaoikonomou, 2020).

Environment and ecosystem damage can be caused by various things, including accumulating residual waste or waste originating from industry and households. Natural conditions have changed significantly over the last 30 to 40 years since the introduction of synthetic materials such as plastics (Azaria *et al.*, 2014). According to Jambeck *et al.* (2015), Indonesia is the second largest country producing waste into the sea after China (Novianti & Kartika, 2017). In a time of rising inequalities, climate change, and a range of major societal challenges, a crucial challenge facing education is how best to equip citizens, scholars and leaders to implement meaningful change and avert future crises (Storey *et al.*, 2017).

Increasing the earth's temperature became the main topic at the Conference of Parties 21 (COP 21), which was held in December 2015. COP21 in Paris adopted the Paris Agreement, which aims to

keep the average temperature rise not reaching 2⁰ C above the temperature before the Revolution. Industry and continue until the temperature increase is no more than 1.5⁰ C (Witoelar, 2015). The conference involved 195 countries worldwide, including Indonesia, to jointly maintain the earth's temperature so that it does not exceed 2⁰ C. The Paris Agreement is an implementation to achieve the Sustainable Development Goals (SDGs), which were approved by UN member states in February 2015. The SDGs have seventeen goals, one of which is climate action which is the 13th goal in the SDGs of members (Novianti & Kartika, 2017).

Based on news released by the United Nations Environment Program (UNEP) in November 2012, quoting a World Bank report entitled "What a Waste a Global Review of Solid Waste Management, 1 stated that the volume of world waste reaches 1.3 billion tons per year. Solid waste in big cities will continue to increase by 70%, which is expected to reach 2.2 billion tonnes in 2025. If this condition is not resolved immediately, it will cause a substantial environmental impact (Nursimah et al., 2020).

Plastic bag waste has become a common problem across continents, countries, waterways, and oceans. Many countries and cities worldwide are now acting against using plastic bags to reduce waste and pollution. However, previous experience has shown that controlling plastic bag waste will only be successful if the right instruments are selected and applied effectively and continuously (He, 2012).

Plastic bag waste is increasing in Indonesia every year, and the environmental conditions are very concerning. Based on data obtained from the Ministry of Environment and Forestry (KLHK), it is known that the amount of waste per year in urban areas is close to 38.5 million tons. Its growth is estimated to increase by 2 to 4% per year. The data shows that 17% of the 200,000 tons of waste per day is plastic waste. Then 62% is disposable shopping bag waste (Kusuma, 2018; Almuhammad et al., 2022).

The use of eco-friendly shopping bags needs to be encouraged to reduce the use of plastic bags. Awareness of the environment to switch to using or carrying their shopping bags needs encouragement and behavior that supports the ban on the use

of plastic bags or support for banning plastic bags, with this encouragement will undoubtedly influence student behavior to use environmentally friendly shopping bags (Almuhaymin et al., 2022).

Starting in 2009, several supermarkets or supermarkets and hypermarkets in Indonesia have started to promote eco-friendly campaigns, namely the use of eco-friendly cloth shopping bags (green bags) as a substitute for plastic bags which tend not to be environmentally friendly. (Rani, 2016). This is one form of the company's contribution to implementing green marketing. According to Polonsky (2011), green marketing is defined as all activities designed to enable change to meet the wants and needs of humans while minimizing adverse effects on the environment (Utomo & Dwiyanto, 2022).

Therefore, consumers need to contribute to environmental sustainability through pro-environmental behavior (pro-environment). Pro-environmental behavior, such as environmentally conscious consumer behavior, is considered a prerequisite for solving environmental problems and has been emphasized in many studies. Pro-environmental behavior is defined as actions aimed at reducing negative impacts on the environment. According to Stern (2000), impact and Intention can determine pro-environmental behavior. When defined by impact, pro-environmental behavior can positively change the use of energy materials or ecosystem dynamics (Nguyen, 2022).

The novelty of this research is that the Intention realized through Green Marketing influences the behavior that occurs in Green Behavior using eco-friendly shopping bags, which is the first time it has been carried out in the Special Region of Yogyakarta. There are still many areas for improvement in this study. Further research can provide further evidence for other influences that continue to be developed from the Theory of Planned Behavior (TPB).

Literature Review

Theory of Planned Behavior (TPB)

The theoretical approach used in this study is the Theory of Planned Behavior (TPB) as the Grand Theory of research. Ajzen developed this theory in 1985 and 1991. The theory of Planned

Behavior is a theory designed to predict and explain human behavior in certain contexts (Ajzen, 1991). TPB is based on three constructs or drivers, namely attitude, subjective norms, and perceived behavioral control, which, when combined, can explain consumer intentions as a green marketing influence on the use of environmentally friendly bags on the green behavior of consumers in modern mini-market stores. TPB was proposed by Ajzen (1985, 1991) and derived from TRA (*theory of reasoned action*). Both theories assert that behavior is a direct function of behavioral Intention. TPB is similar to TRA in postulating that behavioral Intention is a function of attitudes and subjective norms (Tucker et al., 2020).

The Theory of Planned Behavior postulates three conceptually independent determinants of Intention. The first is the attitude towards behavior/attitude refers to the extent to which a person has a favorable or unfavorable evaluation or assessment of the behavior in question. The second predictor is social factors called subjective norms; it refers to perceived social pressure to perform or not perform a behavior. The third antecedent of Intention is the degree of perceived behavioral control, referring to the perceived ease or difficulty in performing the behavior and is assumed to reflect the experience and anticipated obstacles and obstacles. As a general rule, the more favorable the attitudes and subjective norms concerning the behavior, and the greater the perceived control over the behavior, the stronger the individual's Intention to perform the behavior under consideration. The relative importance of attitudes, subjective norms, and perceived behavioral control in the prediction of Intention is expected to vary between behaviors and situations. Thus, in some applications, it can be found that only attitude significantly impacts Intention. In others, attitude and perceived behavioral control are sufficient to explain Intention, and in others, all three predictors make independent contributions. (Ajzen, 1991).

Green Marketing

Today's market is becoming increasingly attractive to marketers of environmentally friendly products. With consumers doubling their spending on "green" products, which is expected to reach \$500 billion in 2009 (CBS News, 2008), many consumers are

willing to pay a premium for these products. (Wu stenhagen, 1998; Vlosky et al., 1999; Veisten, 2007). Green marketing includes various activities such as product modification, production process modification, packaging modification and even advertising modification (Polonsky, 1994) Similarly, Peattie (1995) and Welford (2000) in (Devi Juwaheer et al., 2012). Green marketing has become a significant approach for the firms to survive in the market and to sustain the market competitive advantage. Mu et al. (2009) remarked that firms adopting the phenomena of green marketing can improve their market position and enhance their brand name and organisational performance (Chahal et al., 2014).

According to Polonsky (2011), Green Marketing can be defined as a company's effort to design promotion, price, and distribution by considering environmental protection. Meanwhile, according to Sheikh et al (2014), green marketing is product marketing that is assumed to be safe for the environment. Green marketing can be done through 5 (five) processes, namely knowing the customer, empower customers, be transparent, reassure the buyer, and consider pricing (Ottman, 2010).

One of studies in green marketing was conducted by Haoran in China in his article entitled Effects of environmental policy of Consumption: Lessons from the Chinese plastic bag regulation. This study explains that China introduced a national regulation requiring all retailers to charge fees for plastic shopping bags on 1 June 2008 to reduce plastic bag waste, using policy implementation as a natural experiment and collecting individual data before and after implementation. The findings show that Chinese consumers in the two cities surveyed reduced their overall plastic consumption by 49% and the consumption of bags surveyed in supermarkets and open markets by 64%. This shows that the potential for success in controlling plastic bag waste occurs in China, the country with the most significant consumption of plastic bags in the world (He, 2012).

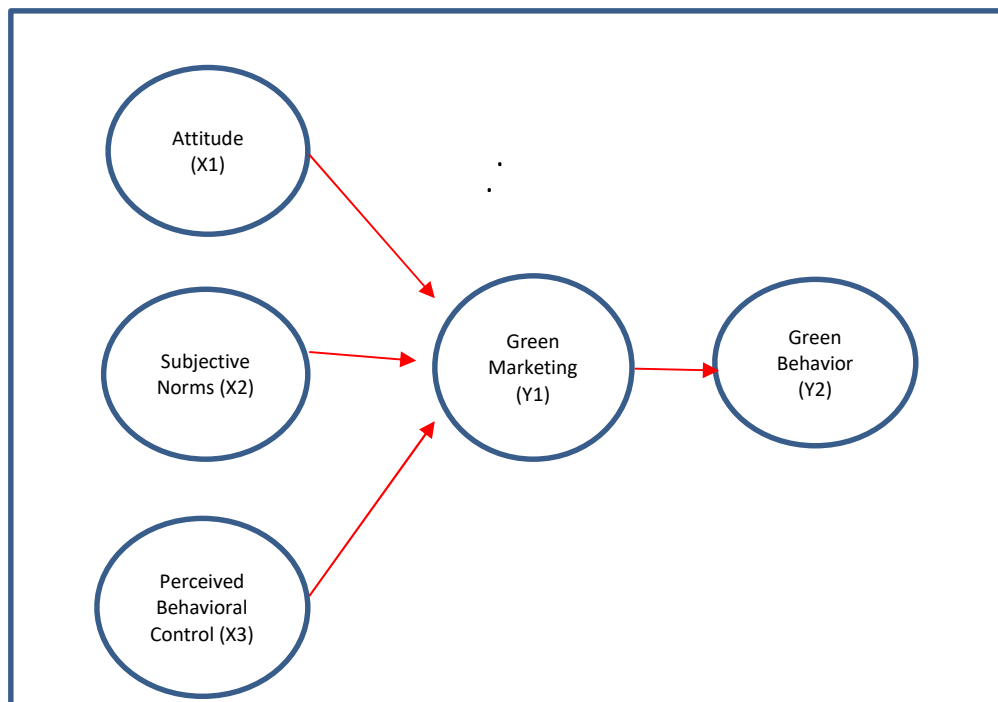
Environmentally/Eco Friendly Bags

According to Isaacs (2015) life cycle or products that do not harm the environment whether in their production, use, or disposal. Recently, the consumption of eco-friendly products is growing

compared with normal products in all product categories (Formichelli, 2007). The availability and preference for eco-products have increased; however, the understanding of consumers' choice for eco-products is still insufficient (Seo et al., 2016) in Susanty et al., (2022).

This study focuses on environmentally shopping bag which refers to bags that are environmentally friendly that is not made of plastic, the shopping bags brought by consumers themselves or shopping bags provided by retail stores in the green marketing efforts carried out by the mini market. The aim of green marketing efforts by providing eco-friendly shopping bags is to shape green consumer behavior so that they get used to carrying shopping bags they care for the environment.

Figure 1. Research Scheme based on the Theory of Planned Behavior (TPB)



Attitude

Attitude can be defined as an individual's overall evaluation of a particular behavior (Ajzen, 1991). Attitude is recognized as a

crucial factor that affects hotel consumers' purchase intentions (Kang et al., 2010; Ladhari, 2009; Nickson et al., 2005). (Sukhu & Scharff, 2018). Attitude refers to "the degree to which a person has a favorable or unfavorable evaluation or appraisal of the behavior in question" (Ajzen, 1991). Schultz and Zeleny (2000, p. 368) argue that "attitudes of environmental concern are rooted in a person's concept of self and the degree to which an individual perceives him- or herself to be an integral part of the natural environment." (Taufique & Islam, 2020). It was Ellen et al. (1991) that first argued that attitude toward the general environment is a strong predictor of green consumption behavior/GCB. As a result, many studies have confirmed the strong positive influence of attitude toward the general environment on green consumption behavior/GCB (Akehurst et al., 2012; Laroche et al., 2001; Zhao et al., 2014; Zsoka, 2008).

Attitude is "a psychological tendency that is expressed by evaluating a particular entity with some degree of favor or disfavor" (Chakravarti et al., 1997). Attitude has been identified as a predictor of behavior (Casaló & Escario, 2018). Green attitude concentrates precisely on an individual's attitude as regards the environment, which contributes to conserving the environment, protecting natural resources or minimizing environmental degradation (Casaló & Escario, 2018). Environmental degradation is usually connected to the behavior of humans (Deborá Indriani et al., 2019). Subsequently, an attitude has been identified as a significant predictor of environmental behavior (Ojo et al., 2019) in (Amoako et al., 2020). The third research is a study by Desiderio Gutierrez Tano, Janet Hernandez Mendez, and Ricardo Diaz-Armas titled An Extended Theory of planned behavior model to Predict Intention to use bioplastics. This study analyzes the background factors that explain consumer intentions to use bioplastics to guide corporate and government social marketing campaigns to encourage such behavior. The results of the variables "attitude towards bioplastic," "subjective norms," and "activity to reduce plastic use" show a significant effect on the Intention to use bioplastics. This paper will also discuss the implications for government and environmental

managers to consider when developing social marketing campaigns (Gutiérrez Taño et al., 2022).

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H1: There is a significant and positive effect of attitude on green marketing environmentally bags.

Subjective Norms

Ajzen (1991, p. 188) defines subjective norm as "the perceived social pressure to perform or not to perform the behavior." (Taufique & Islam, 2020) According to Ajzen (1991), Lan and Hsu (2006) research show that individuals engage in specific behaviors if they believe that their outcomes are valuable to their significant referrals (family, friends, etc.) and norms Subjective factors in Cardano's (2011) study were found to be important in predicting pro-environment consumer behavior. Therefore, subjective norms have also been included in the proposed model. Subjective norms form a framework within which individuals engage in behavior that is socially acceptable and appreciated by significant others in their lives. According to Joshi and Rahman (2015), green purchases are influenced by social influence as consumers tend to attract society and people important to them. Consumers' intention to return is influenced by subjective norms (Han et al., 2010); (Han et al., 2011); (J. S. Lee et al., 2010). in (Joshi & Rahman, 2015). Welsch and Kühling (2009) argue that consumers tend to be influenced by their subjective norms/reference groups when putting pressure on consumers. Meanwhile, according to Lee (2014), social influences of proximity,

such as parents and co-workers, can influence individuals to purchase environmentally friendly products (K. Lee, 2014) in (Sukhu & Scharff, 2018). These previous studies underlie the second hypothesis:

H2: There is a significant and positive effect of subjective norms on green marketing environmentally bags.

Perceived Behavioral Control

The importance of actual behavioral control is self-evident: The resources of opportunities available to a person must some extent dictate the likelihood of behavioral achievement. Of greater psychological interest than actual control, however, is the perception of behavioral control and its impact on intentions and actions. Perceived behavioral control plays an important part in the theory of planned behavior. In fact, the theory of planned behavior differs from the theory reasoned action in its addition of perceived behavioral control. Before considering the place of perceived behavioral control in the prediction of intentions and actions, it is instructive to compare this construct to other conceptions of control. Importantly perceived behavioral control differs greatly from Rotter's (1996) concept of perceived locus of control. Consistent with an emphasis on factors that are directly linked to particular behavior, perceived behavior control refers to people's perception of the easy or difficulty of performing the behavior of interest. (Ajzen, 1991). These previous studies underlie the third hypothesis: H3: There is a significant and positive effect of perceived behavioral control on green marketing environmentally bags.

Intention and Green Behavior

If consumers have a good understanding of green products and green product marketing is done well, then they will be encouraged to carry out green behavior and people who are aware of the environment will become more environmentally friendly (Pickett-Baker & Ozaki, 2008). According to Steg and Vlek (2009), Green behavior is a consumer habit that minimizes damage to the environment as much as possible. Green behavior is also a behavior that is generally considered in society to protect the environment and is dedicated to a healthy environment (Krajhanzl, 2010). According to Schultz and Zeleny (2000), attitudes toward the

environment and perceptions that indicate that a person is part of the environment are embedded in the individual's self-concept. When considered as a whole, individual and household behavior has a considerable impact on the environment (Kollmuss & Agyeman, 2002). The role of government, private sector, and activist's environment is urgently needed for socialization and campaigning for this environmental preservation issue, to increase public knowledge more comprehensively and equitably in all circles (Waskito & Harsono, 2012) in (Novianti & Kartika, 2017).

Thi Phuong Linh Nguyen (2022) conducted the first previous research, entitled *Intention and Behavior toward bringing your own shopping bags in Vietnam: Integrating the Theory of planned behavior and norm activation model*. The purpose of this study was to investigate the factors that influence the intentions and behavior of Vietnamese consumers towards "bringing your shopping bags" (BYOB) instead of using plastic bags based on integration theory: the theory of planned behavior (TPB) and the norm activation model (NAM). This study used a combination of in-depth interviews and a large-scale survey with 536 Vietnamese consumers. The findings of this study indicate that in developing countries such as Vietnam, attitudes and personal norms (PNs) have a more substantial impact on intentions toward BYOB than other factors, and this study also reveals a moderate relationship between Intention and actual behavior toward BYOB (Nguyen, 2022).

The research on green behavior in Indonesia has been conducted by Ayi Indah Novianti and Lindawati Kartika in 2017 entitled *The Effect of Green Marketing Paid Plastic Bag Policy on the Green Behavior of Bogor City Communities*. This study aimed to identify the public's response regarding the use of their shopping bags, consumer perceptions of paid plastic bag policies, and the effect of green marketing paid plastic bag policies on green behavior in the city of Bogor. The research results analyzed using the Structural Equation Model show that more consumers are willing to reduce the use of plastic bags and bring their shopping bags (Novianti & Kartika, 2017). The other study was conducted by Aziz Zulkifli Utomo and Bambang Munas Dwiyanto with the title *The Influence of Green Marketing in the Socialization of "Plastic Bag*

Diet" on Purchasing Decisions on Alfamart Eco Bag Products (Environmentally Friendly Shopping Bags) Through Purchase Intention as an Intervening Variable. This study aims to analyze the effect of green marketing in attracting purchase interest and persuading people to make purchasing decisions for Alfamart products. Eco-Bag as a substitute for plastic bags. The population used in this study is the people of Pati Regency who have shopped at Alfamart. The number of samples used in this study was 106 respondents selected by purposive sampling technique and collected using the questionnaire method, which had been tested for validity and reliability. This study used the Structural Equation Modeling (SEM) analysis technique with the AMOS analysis tool and the Sobel test used to answer the research hypothesis. The study results show that green marketing positively and significantly affects purchasing decisions for Eco Bag products. In addition, green marketing positively and significantly affects purchase intention. Meanwhile, purchase intention has a positive and significant effect on purchasing decisions for Eco Bag products. In this case, buying interest provides a significant influence in mediating the effect of green marketing on purchasing decisions (Utomo & Dwiyanto, 2022).

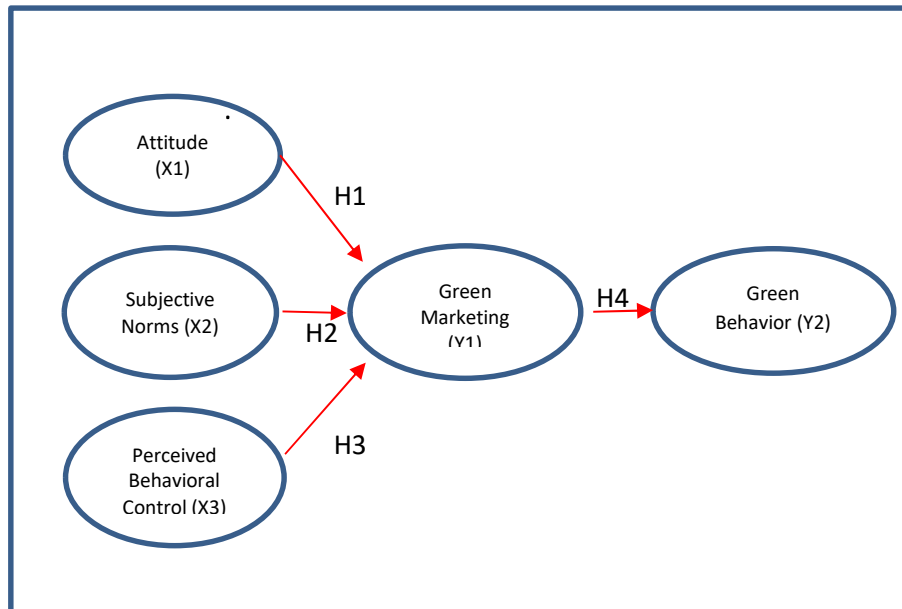
These previous studies confirmed that there is an effect of intention on green behavior, including in Indonesia. Based on the results of these studies, this research proposes the fourth hypothesis:

H4: There is a significant and positive effect of green marketing on green behavior on the usage of use environmentally bags.

Research Methods

This study uses quantitative approach which employs survey as data collection method and questionnaires as the instruments. According to Sugiyono (2010: 12) survey method is used to obtain data from certain places naturally in data collection, such as distributing, tests, structured interviews, and so on. Primary data are collected by distributing questionnaires to modern shop consumers in the Special Region of Yogyakarta both through online media namely Google doc and face to face with respondents in some modern shops.

Figure 2. Research Hypotheses



The research instrument is used to measure the value of the variables surveyed. Survey instruments, therefore, play a critical role in how and what needs to be done to collect data in the field. Because research tools are the most complex to obtain, detailed, accurate, and quantitative research tools serve two functions: alternative and complementary (Djollong, 2014). A questionnaire is a data collection technique using written questions for researchers to answer respondents (Wekke Suardi, 2019). The scale used is 5 points Likert scale.

This research was conducted in the Special Region of Yogyakarta where modern stores in national and local mini markets are widely available. Local mini markets also have a role in efforts to use eco-friendly shopping bags such as Pamella, Maga, Mirota, Gardena, etc. Of the 704 modern stores, it is estimated that 50% are mini-market formats, including Indomaret, Alfamart, Circle K, Alfamidi, and 50% are others. Sample of this study were taken from consumers who shop at modern mini-market format stores. The research was conducted from February to June 2023.

The respondents who were the target of the research were consumers of modern stores in DI Yogyakarta. Data obtained from the BPS website shows that in 2023 the population of DI Yogyakarta is 4,073,907 people, 69% of which are residents of productive age with an age range (of 15 to 64 years) (Kusnandar, 2021) up to 70.12% (source BPS, 2020) (Kelurahan Karang Sari, 2020) then taken an average of 70% of the productive age population is (4,073,907 x 70% = 2,851,735) with the distribution of modern retail in the city of Yogyakarta in 2023 of 704 units, with a 95% confidence level, the margin of error is 5%, then the number of samples in this study is:

$$N = 2,851,735 / 704 = 4,050$$

$$n = N / (1 + (N \times e^2))$$

$$n = 4,050 / (1 + (4,050 \times 0.05^2))$$

$$n = 364 \text{ respondent}$$

If the sample calculation is carried out at a 90% degree of confidence, the margin of error is 10%, then the calculation of the number of samples using the Slovin method is:

$$n = N / (1 + (N \times e^2))$$

$$n = 4,050 / (1 + (4,050 \times 0.1^2))$$

$$n = 97 \text{ respondent}$$

According to Sugiyono, 2004, a decent sample size in research is 30-500 respondents (Sugiyono, 2004). In this study, researchers believe that the margin of error is between 5%-10%, so the number of respondents is set at 200 respondents, more than 97 but less than 364, and between 30-500 respondents.

In collecting data, data sources are needed from populations and research samples. The population used in this study is modern shop consumers in DI Yogyakarta. Meanwhile, the sampling method used in this study is using a non-probability sampling technique with a purposive sampling method. The sample criteria determined in this study are modern shop consumers who live in DI Yogyakarta, with an age range between 18 to 58 years. The final calculation results of 200 respondents as the sample.

In this study, the analysis tool used is Partial Least Square (PLS), one of the Structural Equation Modeling (SEM) techniques. This analysis tool can analyze latent variables, indicator variables, and measurement errors that occur directly (Wiyono, 2011). The

variables of this study consist of the independent variables: Attitude (X_1), Subjective Norm (X_2), Perceived Behavior Control (X_3) and Dependent variables: Green Marketing (Y_1), Green Behavior (Y_2).

Results

This research use 200 respondents from the DIY population, namely the City of Yogyakarta, Sleman, Bantul, Kulon Progo, and Gunung Kidul. Respondents from Yogyakarta dominated the results at 39%, the second from Sleman at 31.7%, the third from Bantul at 21.5%, Gunung Kidul at 5.3%, and Kulon Progo at 2.4%. The Age category of respondents is those who are in the category of Generation X (43-58 years), Y (27-42 years), and Z (18-26 years), with the results of data acquisition dominated by Generation Z of 52.7%, generation Y of 23.9% and generation X of 23.4. While the answers to mini-market visits given by respondents were first Indomaret with 72.7% second Alfamart with 45.9%, The third was Mirota with 41%, Pamela with 33.2%, and the rest Alfamidi, Circle K, Maga, and others. The data obtained is then processed using the PLS SEM as follows:

The Loading Factor value with Outer Loading in this position shows that the data processed is reliable, with each value more than 0.7. The Average Variance Extracted (AVE) result of more than 0.5 indicates that the data is valid. At the same time, Cronbach's Alpha and Composite Reliability values are more significant than 0.7, strengthening the reliability value of the data. Thus, the research data on the variables AT, SN, PC, GM, and GB are stated to have good reliability and validity.

Table 1. Average Variance Extracted (AVE)

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
AT	0.849	0.857	0.898	0.688
GB	0.95	0.95	0.961	0.832
GM	0.838	0.841	0.886	0.608
PC	0.858	0.865	0.898	0.639
SN	0.832	0.834	0.888	0.665

The results of the AVE square root must be greater than the correlation between the constructs sideways and downwards, showing validity and estimating good reliability.

Table 2. AVE root (Fornell Larcker Criterion)

	AT	GB	GM	PC	SN
AT	0.829				
GB	0.666	0.912			
GM	0.644	0.657	0.780		
PC	0.643	0.696	0.717	0.799	
SN	0.588	0.622	0.725	0.756	0.815

Results from Cronbach Alpha AT= 0.849 > 0.7, SN = 0.832 > 0.7, PC = 0.858 > 0.7, GM = 0.838 > 0.7 dan GB = 0.95 > 0.7 and Composite Reliability AT = 0.898 > 0.7, SN = 0.888 > 0.7, PC = 0.898 > 0.7, GM = 0.886 > 0.7 dan Gb = 0.961 > 0.7. Point generated by Cronbach Alpha and Composite Reliability > 0.7 shows that the data has good reliability.

Table 3. Average Variance Extracted (AVE)

	Cronbach's Alpha	Rho_A	Composite Reliability	Average Variance Extracted (AVE)
AT	0.849	0.857	0.898	0.688
GB	0.950	0.950	0.961	0.832
GM	0.838	0.841	0.886	0.608
PC	0.858	0.865	0.898	0.639
SN	0.832	0.834	0.888	0.665

The Goodness of Fit (GoF) model testing phase

It is a testing phase that aims to test the predictive power of the model and the feasibility of the model.

Goodness of Fit (GoF) Q² Predictive Relevance

If the Q-square value is greater than 0, it can be said that the model has predictive relevance.

$$Q^2 = 1 - (1-R_1^2) (1-R_2^2) \dots (1-R_p^2)$$

$$Q^2 = 1 - (1-0.432) (1-0.626)$$

$$Q^2 = 1 - (0.568) (0.374) \quad Q^2 = 1 - 0.212432 \rightarrow Q^2 = 0.79$$

The result from $0.79 > 0$ means it has predictive relevance

Model fit is used to see the feasibility of the model and data in testing the effect of variables. The result of the Fit model used for the feasibility indicator is that the SRMR should be at most 0.10. The results of the model fit test yield a Saturated SRMR model of 0.067, proving that the model is fit because it is less than 0.10, and for an estimated model of 0.101, it is only slightly greater than 0.10 so that the model used is declared fit.

Table 4. Model Fit

	Saturated Model	Estimated Model
SRMR.	0.067	0.101
d_ULS	1.243	2.809
d_G	0.602	0.674
Chi-Square	664.846	716.007
NFI	0.812	0.797

The Value of R square (R^2) showed that the exogenous constructs (Attitude, Social Norms and Perceived Behavioral Control) had a simultaneous effect on endogenous construct, namely Green Marketing. It is proved by the R square of 0.626 with an adjusted R square of 0.620. Meanwhile, the effect of Exogen on the construct of Endogen GB is weaker with R Square 0.432 and R square adjusted of 0.429.

Table 5. R Square

	R Square	R Square Adjusted
GB	0.432	0.429
GM	0.626	0.620

Inner Model Testing Phase

This is the testing phase used to test the significance of the effect of exogenous variables on endogenous variables.

The Significance Test uses Bootstrapping Analysis which reflects the Path Coefficients, which are the results of direct effect testing with the following results:

Table 6. Path Coefficients

	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O/STD EV)	p Values
AT -> GM	0.248	0.247	0.074	3.367	0.001
GM -> GB	0.657	0.662	0.039	16.851	0,000
PC -> GM	0.279	0.283	0.085	3.281	0.001
SN -> GM	0.367	0.368	0.074	4.966	0,000

Based on path coefficient, the results are explained as follows:

AT → GM: Attitude has significant positive effect on green marketing environmentally bags with t statistic is 3.367 which is greater than 1.96 with p-value is 0.001 which is less than 0.05. Thus, H1 is supported.

SN → GM: Subjective norms has significant positive effect on green marketing environmentally bags with t statistic is 4.966 which is greater than 1.96 with p-value is 0,000 which is less than 0.05. Thus, H2 is supported.

PC → GM: Perceived behavioral control has significant positive effect on green marketing environmentally bags with t statistic is 3.281 which is greater than 1.96 with p-value is 0.001 which is less than 0.05. Thus, H3 is supported.

GM → GB: Green marketing has significant positive effect on green behavior for using environmentally bags with t statistic is 16.851 which is greater than 1.96 with p-value is 0,000 which is less than 0.05. Thus, H4 is supported.

As research conducted by Nguyen (2022) stated that the hypotheses derived from the original Theory of Planned Behavior (TPB theory) are accepted with the data of the study. Attitude, Subjective Norms, and Perceived Behavioral Control have positive

effects on consumers' intention toward "Bringing Your Own Shopping Bags" (BYOB), and Intention toward BYOB has a positive effect on consumers' behavior toward BYOB (Nguyen, 2022). In line with this research, Attitude, Subjective Norms and Perceived Behavioral Control have a significant positive effect on green marketing environmental bags, and green marketing has a significant positive effect on green behavior for using environmental bags.

While research conducted by Gutiérrez Taño (2022), it has been confirmed that attitude towards bioplastics has a considerable influence on the intention to use bioplastics, as was to be expected according to that put forward by the Theory of Planned Behavior (TPB) and according to numerous relevant studies within the scope of environmental behaviour and the use of bioplastics. Furthermore, the attitude towards bioplastics is explained by the variables "environmental issues", "interest in information about bioplastics" and also, although to a lesser extent, by "green consumer values" (Gutiérrez Taño et al., 2022).

The effect of green marketing on green behavior using environmental bags in this study shows a significant positive effect in line with research conducted by Novianti and Kartika (2017) in their research where the results of the analysis of the effect of green marketing on paid plastic policies on green behavior have a significant effect, namely through some of these variables, know your customer, empowering customers and convincing the buyers. Another green marketing process that has a direct and significant effect on green behavior is empowering the customer and assuring the buyer. It is proven that there is a positive influence of Green Marketing on green behavior (Novianti & Kartika, 2017).

Managerial Implications

Based on the research results obtained, the authors formulate a concept as managerial implications that can be used or applied by modern mini-market retail policymakers to provide important education in green marketing efforts so that consumers consciously practice green behavior by using environmentally friendly shopping bags when making transactions shop at modern mini-market retail. The policy of using environmentally friendly

shopping bags can be implemented more effectively by paying attention to the green marketing process. However, this retail store policy will have more power in suppressing consumers, of course, if it is accompanied by government policies that are more broadly carrying out environmental care campaigns through the use of environmentally friendly shopping bags. This government policy can be carried out from the local government to the central government because a healthy environment begins with massive concern that together will have a major impact on broad environmental protection.

Conclusion

This research was conducted in the Special Region of Yogyakarta with 200 respondents from the DIY population, namely the City of Yogyakarta, Sleman, Bantul, Kulon Progo, and Gunung Kidul. The age category of respondents is those who are in the category of Generation X, Y, and Z. While the answers to mini-market visits given by respondents were first Indomaret second Alfamart, the third was Mirota, Pamela, and the rest Alfamidi, Circle K, Maga, and others.

This study examines the variables Attitude, Subjective Norms, Perceived Behavioral Control, Green Marketing, and Green Behavior. The logic of Theory Planned Behavior (TPB) is the grand theory used in this study. Based on this popular grand theory, this study examines the effect of Attitude, Subjective Norms, and Perceived Behavioral Control on Intention and finally the effect of Intention on Behavior. The green behavior in this study refers to the usage of environmentally bag. The three proposed hypotheses area supported. It means that attitude, social norm and perceived behavior control has a positive significant effect on intention and intention has positive significant effect on the usage of environmentally friendly shopping bags.

The results of the analysis of respondent data were processed using SmartPLS 3 with the research path, namely that the validity and reliability of the data were fulfilled through the results of the Average Variance Extracted (AVE) indicates that all items are valid. The results of Cronbach Alpha and Composite Reliability values indicate that the items are reliable. Based on path analysis, all

hypotheses are supported: (1) Attitude has significant positive effect on Green Marketing environmentally bags, (2) Subjective Norms has significant positive effect on Green Marketing environmentally bags, (3) Perceived Behavioral Control has significant positive effect on Green Marketing environmentally bags, (4) Green Marketing has significant positive effect on Green Behavior for using environmentally bags. Some practical implications are suggested for modern markets to encourage customers to bring and use environmentally friendly shopping bags.

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