Green Marketing Resonance of Thai Consumers

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Abstract

The purpose of this paper is to explore and understand Thai consumers' attitudes and purchase intentions towards various shades of green marketing, alongside their environmental values and subsequent environmental lifestyle behavioral responses. Experimental research, through surveys, was conducted with 206 Thai consumers residing in Bangkok. The findings indicate that a green marketing offer that promotes higher levels of environmental commitment results in more positive attitudinal responses towards the offer and purchase intentions from Thai consumers. Additionally, the human-centered, egoistic values and social-altruistic values serve as the drivers towards environmental lifestyle behaviors. Moderately positive relationships were identified between consumers' attitudes towards the green marketing offer and their green purchase intentions; between consumers' environmental values, especially egoistic values, and their green purchase intentions; and between consumers' environmental values and environmental lifestyle behaviors. In addition, albeit weak, a positive relationship was detected between consumers' environmental lifestyle behaviors and their green purchase intentions.

Keywords: 1) Environmental Marketing 2) Green Marketing 3) Marketing Resonance 4) Sustainable Consumption 5) Thai Consumers

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Introduction

Society has been increasingly emphasizing concerns for the future of people and nature, with businesses being challenged to incorporate environmental concerns into their operations management (Chavalittumrong and Speece, 2022, p. 3). One of the damaging environmental footprints arises from the increasing consumption of electronic devices, resulting in an increase in the annual amount of electronic waste (e-waste) generated. Each year, approximately 44.7 million metric tons of e-waste are generated, equivalent to around six kilograms for each human on the planet (Baldé, et al., 2017, p. 4). Against the backdrop of rising concern over electronic wastes, the researchers of the current study are motivated to investigate the effectiveness of green marketing strategies for mobile phones.

Although consumers have become more environmentally conscious by purchasing eco-labeled products, sorting waste, recycling, and saving energy (Hengboriboon, et al., 2022, p. 3), not every consumer is sufficiently interested to shift to green products. Research reveals that environmental concern only sometimes leads to engagement in pro-environmental behaviors (Royne, Thieme and Levy, 2018, p. 53). There has been an increasing focus on green consumers' purchasing behavior in emerging countries (Carrete, et al., 2012, p. 471; Gonzalez, et al., 2015, p. 2; Roy, 2013, pp. 47-48). In Thailand, there are still few studies on green consumer behaviors, related to their purchase intentions (Wongsaichia, et al., 2022, p. 2). Recently, the presence of green-awakening customer attitudes on online platforms in Thailand has been detected (Srisathan, et al., 2023, p. 15), indicating an opportunity for additional research to explore Thai consumer responses towards green marketing strategies.

The objectives of the current study are twofold. Firstly, the objective is to explore the level of green values, detect motivation influences towards the retention of green values, and assess the level of green lifestyle behaviors exhibited among Thai consumers at a point of time, closely after Thais faced the worst of the COVID-19 biological pandemic. Secondly, the researchers aim to examine Thai consumers' support for two different green marketing offers for mobile phones, which differ on the level of environmental commitment by the firm.

Literature Review and Hypotheses Development

1. Green Values

Thiangtam (2016, p. 241). defined values as "an individual's structure of beliefs that are quite long-lasting and consistent; therefore, values affect the individual's attraction to, or rejection of, some phenomena."

Three distinct value orientations of people towards environmental protection have been identified (Stern and Dietz, 1994, p. 70). Egoistic values encourage people to protect aspects of the environment that impact them personally. Altruistic value orientations consider environmental problems that harm other people, beside oneself. The third, biospheric values, consider the impact on the larger ecosystem, or biosphere, beyond that of humans, solely. Research has confirmed that

consumers' environmental value has a positive influence on their intention to purchase environmentally friendly products (Yeon Kim and Chung, 2011, pp. 43-44).

2. Green Behaviors

Kollmuss and Agyeman (2002, p. 240) defined pro-environmental behavior as "behavior that consciously seeks to minimize the negative impact of one's actions on the natural and built world (e.g. minimize resource and energy consumption, use of non-toxic substances, reduce waste production)." Research on environmentally responsible behavior has employed different terms interchangeably, for instance, environmental behavior, green behavior, ecological behavior, environmentally friendly behavior, and sustainable behavior (Carrete, et al., 2012, p. 471).

Janmaimool investigated educated Thai people's engagement in five types of pro-environmental behaviors and found that educated Thais engage moderately towards pro-environmental behaviors (Janmaimool, 2017, pp. 796-798).

3. Green Marketing

Vilkaite-Vaitone, Skackauskiene and Díaz-Meneses (2022, p. 2) define green marketing as "the organization's participation in strategic, tactical, and operational marketing activities and processes that have a holistic objective of creating, communicating, and delivering products with minimal environmental impact." In the literature, general environmentally friendly products and service promotions are interchangeably termed as green marketing, environmental marketing, or sustainable marketing.

Firms have employed green marketing as an instrument to protect the environment. Green marketing tools help consumers perceive and become aware of green products more easily, encouraging them to choose environmentally-friendly options and reduce the impact of synthetic products on the environment (Rahbar and Wahid, 2011, p. 73). In return, firms have benefited in terms of stronger relationship with customers, increasing profits, achievement of organizational goals, stronger competitive advantages at the organizational level, decrease in cost, and enhancement of brand reputation (Vilkaite-Vaitone and Skackauskiene, 2019, p. 59).

Regarding consumer responses to green marketing, academic literature reveals mixed results. On one hand, from a review of 166 published studies, Skackauskiene and Vilkaite-Vaitone (2023, p. 16) found that green marketing impacts green purchase intention and purchase behavior.

On the other hand, there are some studies showing consumers' skepticism towards green marketing. Consumers' attitudes vary from mild skepticism to deeply held belief that firms and mass media deceive them about green products (Carrete, et al., 2012, p. 476). Some studies also convey the significant presence of an indirect relationship between green marketing and consumers' purchase behaviors. For instance, within an emerging market context, like Ghana, price is a mediator between green marketing efforts and purchasing behavior (Amoako, et al., 2022, p. 321). Meanwhile, some studies report incongruity between consumers' favorable attitude towards green

product and their actual purchase behavior (Joshi and Rahman, 2015, p. 129).

4. Green Purchase Intentions

Mohd Suki (2016, p. 2894) explains green product purchase intention as "a consumer's intention to buy a product that is less harmful to the environment and society at large."

More people have become concerned about environmental problems and have decided to spend their money in a way that is kinder to the planet (Siraphatthada and Thitivesa, 2020, p. 459). Several factors, both internal and external to the firm, contribute to consumers' green purchase behaviors. For instance, green brand positioning and green customer value are good predictors of green purchase intention (Wang, Zaman and Alvi, 2022, p. 10). A positive attitude towards green companies also enhances the likelihood of green purchase intention (Sony, Ferguson and Beise-Zee, 2015, p. 66).

In the current study, the researchers tested the effectiveness of two different green marketing offers that differ across two dimensions, namely the level of the firm's environmental commitment and the number of consumer benefits presented in the sales promotion framings. Both sales promotion framings, nevertheless, offer comparable monetary value to the consumer. The conceptual relationship of the two green marketing offers in this research is presented in Table 1.

Table 1 Two Manifestations of Green Marketing Offers

Relative Level of Firm's Environmental Commitment	Number of Consumer Benefits	
	Low (Only Trade-In)	High (Trade-In + Free Green Gift)
High (green mobile phone and accessory)	-	Company B
Low (green packaging and accessory)	Company A	-

Based on literature review and consumers' recent experiences with the COVID-19 pandemic, the researchers hypothesize that Thai consumers will now be more sensitive and discerning in evaluating various shades of green marketing offers.

H1: Consumers have stronger purchase intentions towards the offering of Company B that demonstrates higher environmental commitment (Darker green product + smaller financial value of the trade-in + free green gift) than towards that of Company A (Lighter green product + larger financial value of the trade-in).

H2: Consumers have more positive attitudes towards the offering of Company B that demonstrates higher environmental commitment (Darker green product + smaller financial value of the trade-in + free green gift) than towards that of Company A (Lighter green product + larger financial value of the trade-in).

H3: There is a positive relationship between consumers' attitudes towards the green marketing offer and their green purchase intentions.

H4: There is a positive relationship between consumers' green values and their green purchase intentions.

H5: There is a positive relationship

between consumers' green lifestyle behaviors and their green purchase intentions.

H6: There is a positive relationship between consumers' green values and their green lifestyle behaviors.

Research Methodology

1. Research Design

The current study employed a quantitative research methodology harnessing experimental design. Scenario-based experimental research, using two green marketing treatments in a between-subjects setting, was conducted. A cross-sectional study, using an online self-administered survey, was carried out to test the effectiveness of the two different green marketing offers, that differ specifically on the level of the firm's environmental commitment and the number of consumer benefits, though with comparable terms of monetary value to consumers.

The consumers' purchase intentions and attitudes towards the offering were measured and used as proxies for evaluating the effectiveness of the two green marketing offers. Descriptions of two hypothetical mobile phone manufacturers were developed to use as treatments for the experiment. Experimental design using scenarios have the advantage of preventing potential confounding effects from brand or retailer reputation (Chatterjee, 2011, p. 69)

The two scenarios describing alternative green marketing offerings were as follows:

Company A: Lighter green product (environmentally friendly packaging and accessory) + Larger financial value of trade-in

Our company manufactures consumer electronics. We focus on creating worthy products to ensure that our customers are satisfied with the quality of our products while also helping to improve environmental issues.

Our company has decided to produce all our packaging and mobile phone chargers from environmentally friendly materials. Moreover, to support the environment, our company has launched the following sales promotion campaign:

"When the customer brings an old phone to recycle with us, we will give a THB 5,000 discount that can be used for the next mobile phone purchase, which is priced THB 25,000 and above."

Company B: Darker green product (environmentally friendly mobile phone and accessory) + Smaller financial value of trade-in + Free eco-friendly accessory

Our company manufactures consumer electronics. We focus on creating worthy products to ensure that our customers are satisfied with the quality of our products while also helping to improve environmental issues.

Our company has decided to produce all our mobile phones from environmentally friendly materials. Moreover, to support the environment, our company has launched the following sales promotion campaign:

"When the customer brings an old phone to recycle with us, we will give a THB 3,500 discount that can be used for the next mobile phone purchase, which is priced THB 25,000 and above. Moreover, the customer will also receive a free eco-friendly power bank, which is worth THB 1,500."

2. Sample

Convenience sampling was used to collect data during August-September 2021 from 206 consumers aged from 18 to 62 years old. Bangkok, being the capital of Thailand, was selected as the location for conducting the survey, as it represents a substantial portion of the country's consumer activity. In the current year 2024, Bangkok, with approximately 11.2 million residents (Statistics Times, 2024), stands as the most populous city in Thailand.

To test the consumer reaction towards the two green marketing offerings, consumers were randomly assigned to one of the two hypothetical green marketing scenarios. Research designs with at least 30 cases assigned to each experimental condition are recommended (Hernandez, Basso and Brandão, 2014, p. 111). In total, 104 consumers responded to the first scenario (Company A), and 102 consumers responded to the second scenario (Company B). The same questionnaire was used for both groups of respondents, in order to be able to compare the responses of the two groups and assess the effectiveness of the two green marketing offers.

To conduct multiple regression analysis to investigate the influence of consumers' environmental values on their environmental lifestyle behavior, an appropriate sample size was calculated using the formula, $n \geq 50 + 8m$, where n = sample size and m = number of independent variables (Green, 1991, p. 499-504). The minimum sample size required for the current study was 74 [50 + (8 * 3)]. Therefore, the utilization of 206 samples in the current study was deemed adequate for multiple regression.

3. Survey Instrument

Regarding the research instrument, the questionnaire was organized as follows. First, consumer demographics were measured. Next, the individual's environmental value constructs, adopted also by Sony and Ferguson (2017, pp. 43-44), were evaluated. The statements were grouped into three value orientations, namely egoistic, social-altruistic, and biospheric value orientations, as presented in Table 2. Respondents were asked to rate how much they agreed with each of the 10 statements using a 5-point Likert scale.

Table 2 Environmental Value Measures

Egoistic Value Orientation	
1.	I think air pollution by industry is dangerous for me and my family.
2.	Pesticide in farming is dangerous for me and my family.
3.	The pollution of rivers, lakes, and streams is dangerous for me and my family.
4.	The rise in world temperature is dangerous for me and my family.
Social-Altruistic Value Orientation	
5.	I am willing to pay higher prices to protect the environment.
6.	I am willing to pay higher taxes to protect the environment.
7.	I am willing to accept a cut in living standards to protect the environment.

Biospheric Value Orientation	
8.	Change in nature makes things worse.
9.	Modern life harms the environment.
10.	Animals have the same moral rights as humans.

Following that, consumers' green lifestyle behaviors were measured by adopting the environmental lifestyle behavioral scales, also adopted by Sony and Ferguson (2017, p. 44). Respondents were asked to rate how often they participated in each of the environmental lifestyle behaviors illustrated in Table 3 using a 5-point Likert scale.

Table 3 Environmental Lifestyle Behavior Measures

1.	Recycle bottles, cans, or glass
2.	Recycle newspaper
3.	Compost garden waste
4.	Take your own bags to the supermarket
5.	Cut down on car use
6.	Contribute money to environmental causes
7.	Volunteer for an environmental group

Next, consumers' purchase intentions towards the green marketing offer were measured. Respondents were asked to rate how likely they were to purchase the marketing offer, using a 5-point Likert scale. To measure the consumers' attitudes towards the green marketing offers, consumers were asked to rate how much they agreed with each statement in Table 4 using a 5-point Likert scale.

Table 4 Consumer Attitudes towards the Green Marketing Offer Measures

1.	I am satisfied with the offer.
2.	I think this green marketing offer can support the environment.
3.	I feel that I am taking part in helping the environment through my purchase of this offer.
4.	I will recommend this offer to others.

4. Data Collection

The survey for the current study was conducted during August-September 2021, freshly after Thai people had faced varying degrees of lockdowns in different provinces throughout the country during 2020. Online surveys were administered to students across various classes and universities taught by one of the researchers, who is also a lecturer. Subsequently, students were encouraged to broaden the survey's reach by sharing the link to participate in the survey with their personal contacts, aiming to diversify the data collection across different age groups.

5. Data Analysis

SPSS was used to analyze the data. An independent sample t-test was used to compare the means of respondents' purchase intentions and attitudes towards each of the green marketing offers, so as to assess the effectiveness of the offers (H1 and H2). In addition, Pearson product-moment correlation coefficient was computed to assess the relationship between consumer attitudes towards the green marketing offers and their green purchase intentions (H3), green values and green purchase intentions (H4), green lifestyle behaviors and green purchase intentions (H5), and green values and green lifestyle behaviors (H6). Moreover, multiple regression analysis was conducted to evaluate how egoistic value, social-altruistic value, and biospheric value influence consumers' overall environmental lifestyle behavior.

Results

Male and female respondents each accounted for 48.1% of participants, with LGBTQ+ individuals comprising 3.8%. The convenience sampling method resulted in a predominantly younger group. Specifically, 69.4% of respondents were aged 18-24 years old, with the majority being singles (55.8%).

To measure the extent to which the questionnaire items could be treated as a single construct, Cronbach's α reliability test was performed. The test showed that all Cronbach's α coefficients had values between 0.668 and 0.878 as illustrated in Table 5. Most of the dimensions, except the biospheric value orientation, have attained the minimum threshold limit of 0.7 recommended (Torroba Diaz, et al., 2023, p. 1495). Meanwhile, Cronbach's α coefficient values of ≥ 0.60 (Biospheric Value Orientation) suggest acceptable levels of construct reliability (Thanasrivanitchai, et al., 2021, p. 59).

Table 5 Cronbach's Alpha Reliability Coefficient Values

Constructs (Number of Items)	Cronbach's Alpha
Environmental Value (10)	0.878
Egoistic Value Orientation (4)	0.839
Social-Altruistic Value Orientation (3)	0.778
Biospheric Value Orientation (3)	0.668
Environmental Lifestyle Behavior (7)	0.734
Consumers' Attitude towards Green Marketing Offer (4)	0.823

The overall mean for consumers' environmental values, along with the means for the three value orientations, namely egoistic, social-altruistic, and biospheric value orientations, is provided in Figure 1.

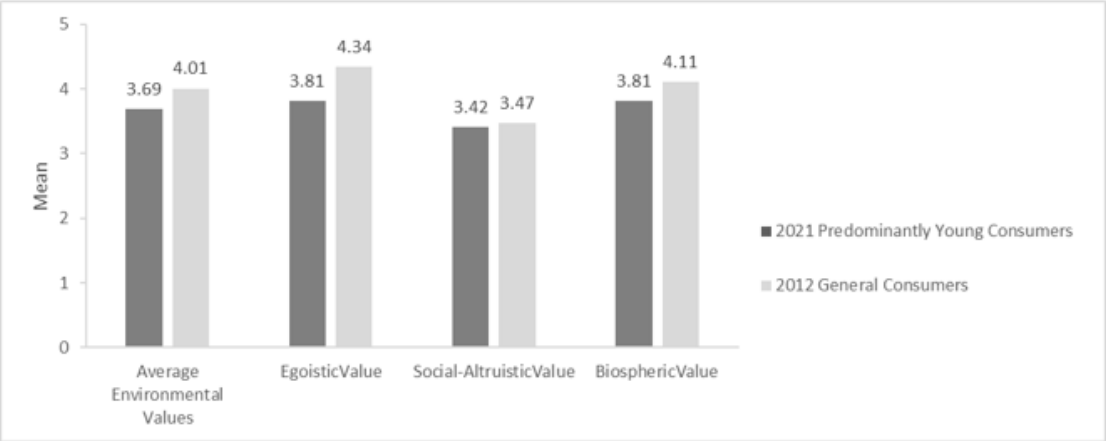

Figure 1 Observed Means of Consumer Value Orientations

Compared to consumers' environmental values in the researchers' previous study in 2012 (Sony and Ferguson, 2017, p. 45), the overall environmental values drop (mean = 3.69 in 2021 versus 4.01 in 2012). Egoistic and biospheric values are the relatively important drivers of environmental values in both years. It should be noted, however, that the research samples in 2012 and 2021 had different age distributions. In the 2012 study, the distribution of respondents' age was broadly equal among different age groups, 15-24 (25%), 25-34 (25%), 35-44 (25%), and 45-54 (25%) (Sony and Ferguson, 2017, p. 43), reflecting a more general population base. In the current study, 69.4% of the respondents surveyed were Generation Z (Gen Z) consumers, aged 18 to 24 years old, broadly a young consumer base.

The overall mean for consumers' environmental lifestyle behaviors, along with the means for the specific environmental lifestyle behaviors that Thai consumers engaged with, is provided in Figure 2.

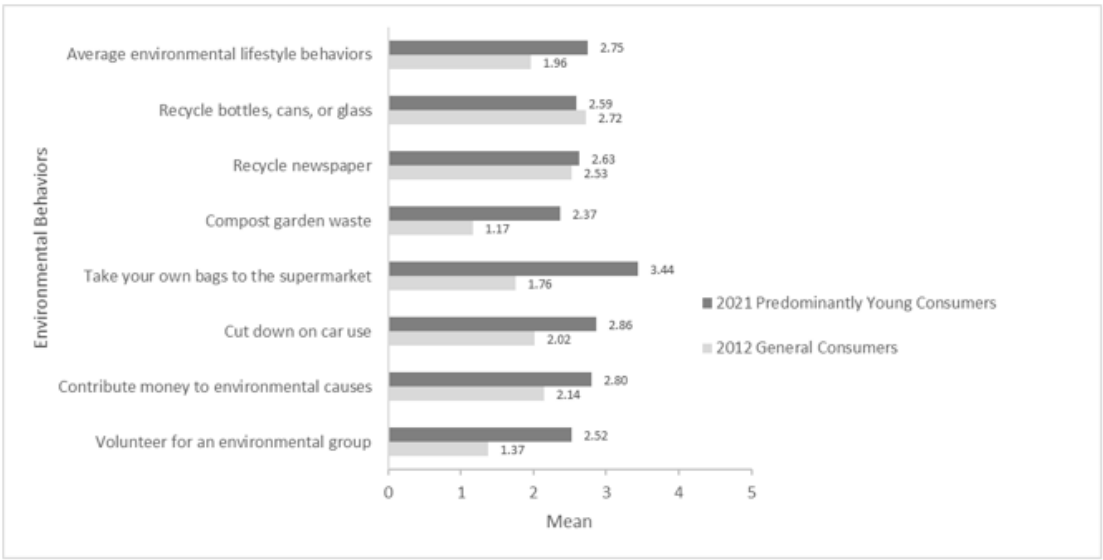

Figure 2 Observed Means of Consumer Environmental Lifestyle Behaviors

The overall mean for environmental lifestyle behaviors is 2.75, increasing from 1.96 in 2012 but is still considered low, as it is only slightly above the 2.5 midway engagement scale. Thai consumers in 2021 mainly engaged in carrying their own bags to the supermarket, followed by cutting down on car use, contributing money to environmental causes, and recycling activities. Consumers in 2021 participated the least in composting garden waste.

Figure 3 presents the observed means of the respondents' purchase intentions and attitudes towards the two green marketing offers of Company A and Company B.

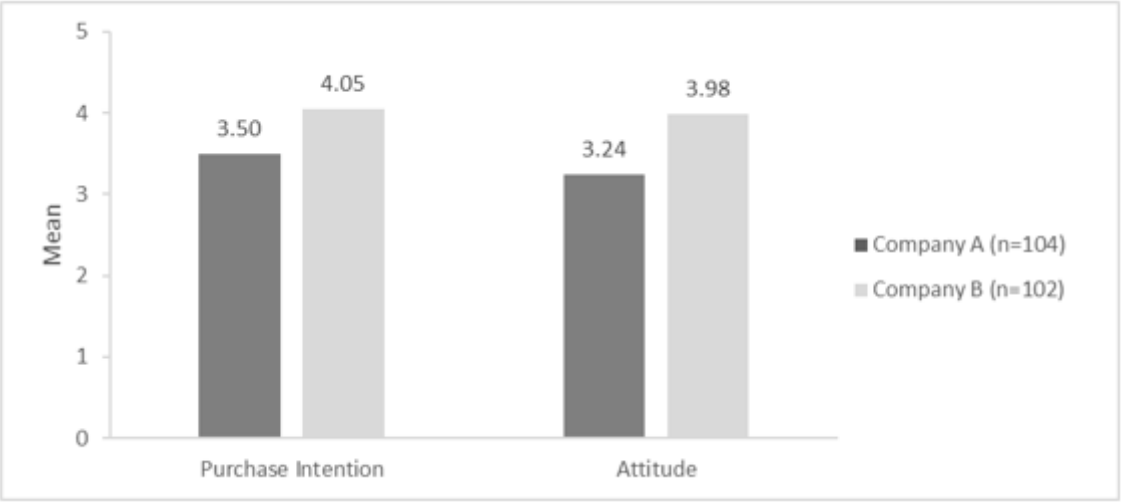

Figure 3 Observed Means of Consumer Purchase Intention and Attitude towards Green Marketing Offers

The observed means for both the purchase intention and attitude towards the green marketing offer of Company B (Darker green product with higher number of consumer benefits) are higher than those of Company A (Lighter green product with lower number of consumer benefits), despite both offerings giving equal consumer value in financial terms.

In addition, independent samples t-test was run to compare the purchase intention and attitude means for the green marketing offers of company A and company B. The current study found, at 95 percent confidence level, there was a significant difference in the mean score for purchase intention towards the offer of Company A (M=3.50, SD=0.95) and the mean score for purchase intention towards the offer of Company B (M=4.05, SD=0.98). In addition, there was a significant difference in the mean score for attitude towards the offer of Company A (M=3.24, SD=0.88) and the mean score for attitude towards the offer of Company B (M=3.98, SD=0.90). Thus, H1 and H2 are supported. The results of the independent sample t-test are shown in Table 6.

Table 6 Two Sample t-test of Consumer Responses to Different Shades of Green Marketing

Indepependent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means				95% Confidence Interval of Diffrence	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Diffrence	Std. Error Difference	Lower	Upper
Purchase Intention	Equal variances assumed	1.661	.199	-4.159	204	.000	-.55882	.13436	-.82374	-.29391
	Equal variances not assumed			-4.157	203.291	.000	-.5582	.13441	-.82385	-.29380
Attitude	Equal variances assumed	.247	.620	-5.935	204	.000	-.73770	.12429	-.98276	-.49263
	Equal variances not assumed			-5.934	203.729	.000	-.73770	.12431	-.98280	-.49259

* = p < 0.05, significant at 95% confident level

To test the relationship between consumers' attitudes and green purchase intentions (H3), green values and green purchase intentions (H4), green lifestyle behaviors and green purchase intentions (H5), and green values and green lifestyle behaviors (H6), Pearson correlation coefficients were computed. It has been broadly acknowledged that Pearson correlation coefficient > 0.7 indicates a strong linear relationship between X and Y, Pearson correlation coefficient < 0.3 signals weak relationship, and the rest is moderate (Rusakov, 2023, p. 94). The results of the Pearson correlation analysis are provided in Table 7.

Table 7 Pearson Correlation Tests of Variables

Variables	r	Strength of Correlation
Purchase Intention and Attitude	0.568**	Moderate
Environmental Value and Purchase Intention	0.413**	Moderate
Environmental Lifestyle Behavior and Purchase Intention	0.266**	Weak
Environmental Value and Environmental Lifestyle Behavior	0.350**	Moderate

** = p < 0.01, significant at 99% confident level

It has been detected that consumers' attitudes and purchase intentions are moderately, positively connected. In addition, there is a moderate positive relationship between environmental values and purchase intentions; and between environmental values and environmental lifestyle behaviors. Moreover, there is a weak positive relationship between environmental lifestyle behaviors and purchase intentions. The findings support H3, H4, H5, and H6.

Multiple regression analysis was performed to understand the impacts of egoistic value, social-altruistic value, and biospheric value on consumers' overall environmental lifestyle behavior. Multiple regression analysis using the following model was applied:

Overall Environmental Lifestyle Behavior = $\propto + \beta_1$ (Egoistic Value) + β_2 (Social-Altruistic Value) + β_3 (Biospheric Value) + e

The F value is 9.515 and is significant at 95 percent confidence level, meaning that the overall model is a reasonable fit, and a statistically significant relationship is detected between the consumers' environmental value orientations and their environmental lifestyle behavior. Nevertheless, the t values of none of the independent variables are significant. Therefore, to improve the model, the researchers ran the multiple regression using stepwise method, which inserted the independent variables one by one to find out the model in which relevant regressors would explain consumers' environmental lifestyle behavior. The results of the regression analysis are shown in Table 8.

Table 8 Stepwise Regression Analysis Showing Relationship between Environmental Values and Environmental Lifestyle Behavior

							95.0% Confidence Interval for B	
	Predictor	B	Std Error	β	t	Sig	Lower Bound	Upper Bound
Model 2	(Constant)	1.732	.202		8.569	.000*	1.334	2.131
	Egoistic Value	.145	.058	.196	2.477	.014*	.030	.260
	Social Altruistic Value	.135	.055	.194	2.453	.015*	.027	.244

a. Dependent Variable: Environmental Lifestyle Behavior

* = $p < 0.05$, significant at 95% confident level, R = 0.34, R^2 = 0.118, n = 206

When the biosperic value was removed from the model, both egoistic and social-altruistic value orientations explain the consumers' environmental lifestyle behavior better, suggesting egoistic value serves as a slightly stronger driver. Comparing the current findings to those of the researchers' previous study conducted in 2012 (Sony and Ferguson, 2017, p. 46), the environmental value drivers of Thai consumers' environmental lifestyle behavior have not changed.

From multiple regression analysis, it was found that consumers' environmental lifestyle behaviors are mainly driven by egoistic and social-altruistic values, coupled with the finding that environmental lifestyle behaviors have a weak relationship with purchase intentions, the researchers decided to test two additional pairs of relationship – between egoistic values and green purchase intentions and then between social altruistic values and green purchase intentions. Pearson correlation coefficients reveal, with a 99% confidence level, that there is a moderate positive relationship between egoistic values and green purchase intentions (r =0.403), whilst there is only a weak positive relationship between social altruistic values and green purchase intentions (r=0.270).

A summary of the hypotheses test results is provided in Table 9.

Table 9 Summary of Hypotheses Test Results

Hypotheses	Results
H1: Consumers have stronger purchase intentions towards the offering of Company B that demonstrates higher environmental commitment (Darker green product + smaller financial value of the trade-in + free green gift) than towards that of Company A (Lighter green product + larger financial value of the trade-in).	Support
H2: Consumers have more positive attitudes towards the offering of Company B that demonstrates higher environmental commitment (Darker green product + smaller financial value of the trade-in + free green gift) than towards that of Company A (Lighter green product + larger financial value of the trade-in).	Support
H3: There is a positive relationship between consumers' attitudes towards the green marketing offer and their green purchase intentions.	Support
H4: There is a positive relationship between consumers' green values and their green purchase intentions.	Support
H5: There is a positive relationship between consumers' green lifestyle behaviors and their green purchase intentions.	Support
H6: There is a positive relationship between consumers' green values and their green lifestyle behaviors.	Support

Conclusions and Discussion

The current study reveals that youthful Thai consumers can detect firms' varying levels of environmental commitment, with a greater attraction towards deeper green provisions. In the current study, 86.9% of the total sample were between 18-34 years of age, representing 23.03% of the total Thai population (National Statistical Office, 2021). Thus, business activities that demonstrate and promote a high commitment in supporting environmental sustainability can garner a greater notable support from the broadly younger consumer segment.

While countries around the world are increasingly concerned about sustainability, as reflected by the 17 sustainable development goals (SDGs) agreed globally (United Nations,

2023), the current study suggests that there is a possibility for achieving "SDG 12: responsible production and consumption" in Thailand through firms' engagement in green marketing within the electronics sector.

Thai consumers react more positively to sales promotion framings that offer a higher number of benefits. Consumers express more positive attitudes and purchase intentions towards a firm that offers both the trade-in option and a free gift, than to a firm that solely provides the trade-in option, despite the fact that the monetary value received from both offers is equal. Research indicates that promotional gifts constitute an effective alternative to discounts (Hudik, Karlíček and Říha, 2023, p. 312).

Consumers demonstrate only moderate environmental values, lower than in 2012, even though the survey was conducted in 2021, when the experience of COVID-19 pandemic was still fresh in the mind of consumers. Among the three value orientations, egoistic value orientation is the strongest.

It appears that the environmental lifestyle behaviors of Thais have risen from 2012, albeit still being low at an average of 2.75 on a 5-point Likert scale. In 2021, Thais engaged mostly in taking their own shopping bags to supermarkets, cutting down on car use, contributing money to environmental causes, and supporting recycling activities.

There is a moderate relationship between environmental values and environmental lifestyle behaviors. Similar to 2012, in 2021, egoistic value and social-altruistic values are still the main drivers of environmental lifestyle behaviors. The finding has implication for the government, firms, and charity organizations. In encouraging pro-environmental lifestyle behaviors, the strategies and communication should focus on how consumers and other humans can benefit and not solely on how the activities will benefit nature. This is because consumers do not behave environmentally friendly just for the sake of the environment, as reflected by the fact that biospheric value is not a significant driver of environmental lifestyle behavior.

Attitudes towards green marketing offers do appear to moderately drive the predominantly younger consumers' purchase intentions. To a lesser extent, environmental values drive purchase intentions, with egoistic values being the main driver of purchase intention. To an even lesser extent, environmental lifestyle behaviors drive purchase intentions. Therefore, marketers should focus on building positive attitudes towards the green marketing offer.

Limitations and Future Research

The current study is a cross-sectional study. Therefore, comparing findings to the researchers' earlier study in 2012 (Sony and Ferguson, 2017, pp. 37-53) has limitations. In addition, there is a potential for common method biases to influence the relationships between the constructs (Podsakoff, et al., 2003, pp. 881-883), as the data primarily came from university students in Bangkok. Moreover, while hypothetical Company B, integrating a green product with sales promotions, garners positive responses, this finding has limitations.

Although the current study's results clarify the overall effectiveness of the offer, they do not specify the individual impact of green products versus sales promotions on consumer responses. Furthermore, hypothetical firms rather than real-world companies were used in the current study. Clearly, the current study also has limitations in generalizing the findings to other countries and to product categories beyond mobile phones.

Several opportunities exist for future research. Consumers' real purchases of varying shades of existing green products could be investigated. In terms of experimental research design, there are several possibilities for conducting future studies. First, the influence of green products versus sales promotion could be investigated. Moreover, the impact of various types of promotional gifts on consumers could be examined. Besides, consumers' preference for different manifestations of green marketing, such as green process, green packaging, green accessories, green product, and green cause-related marketing, could be explored.

In addition to exploring the effectiveness levels of different shades of green marketing approaches at an individual country level, conducting comparative studies across countries would provide useful knowledge to marketers in understanding how much standardization and localization of the green marketing offer is necessary for a global firm. Furthermore, this pioneering research exploring the electronic waste product issue, common across the world, should surely benefit from evaluation and comparison across other Asian countries, and European Countries, with their more established e-waste regulation and waste management initiatives.

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