Green Marketing Mix and Brand Equity Among Consumers of Green Products in Davao City, Philippines

Minard Gonzales Jr., Liza May Butaslac, Jericho Cablores,
and **Maria Teresa Bulao***

College of Business Administration Education, University of
Mindanao, Davao City, Philippines
*Corresponding email: eerzah73@yahoo.com

ABSTRACT

This study investigates the influence of the green marketing
mix on brand equity among consumers of green products in
Davao City, Philippines. The research identifies significant
relationships between green marketing practices, specifically
focusing on green products, pricing, distribution, and
promotion, and the key determinants of brand equity, such as
brand loyalty and brand image. The findings indicate that
consumers in Davao City respond positively to green
marketing efforts, with green promotion identified as the
most influential factor in shaping consumer purchasing
decisions and enhancing brand equity. The study also reveals
that brand loyalty is a critical outcome of effective green
marketing, with respondents demonstrating a strong
commitment to repurchasing and recommending green
products. This suggests that green marketing strategies are
not only essential for attracting environmentally conscious
consumers but also for fostering long-term brand loyalty and

strengthening overall brand equity. The research highlights the importance of aligning marketing practices with consumer values, particularly in the context of sustainability. Overall, this study contributes to the growing body of literature on green marketing and brand equity, providing insights for businesses looking to enhance their market position through sustainable practices. The findings support the notion that a well-implemented green marketing mix can significantly improve brand equity by fostering stronger customer relationships and loyalty, which are crucial for sustaining competitive advantage in the marketplace.

Keywords: *green marketing mix, brand equity, descriptive-correlation analysis, Davao City*

INTRODUCTION

Brand equity has long been a focal point in marketing research due to its profound impact on a firm's success. Recognized as a critical intangible asset, brand equity enhances operational effectiveness and fosters stronger relationships with stakeholders, which in turn drives business performance (Esfahani, 2019; Jeon, 2017). The academic exploration of brand equity spans several decades, continuously evolving to capture its complex nature and various dimensions, including consumer perception and financial outcomes (e.g., Narteh, 2018; Sankaran & Chakraborty, 2023; Taylor, Hunter & Lindberg, 2007). Despite the ongoing investigation into these areas, understanding the full scope of brand equity remains an important objective for scholars and practitioners alike.

In the extensive body of literature on brand equity, a dichotomy between financial-based and consumer-based perspectives has emerged. Financial-based brand equity (FBBE) focuses on the monetary valuation of brand equity, often linked to stock market performance and profitability (Schmitz, & Villaseñor-Román, 2018). On the other hand, consumer-based brand equity (CBBE) emphasizes the consumer's role in building and sustaining brand value through perceptions, loyalty, and emotional connections (Chatzipanagiotou, Christodoulides & Veloutsou, 2019). However, the literature is still developing a comprehensive understanding of how these consumer-driven factors, such as brand image and loyalty, contribute to the overall strength and value of a brand (Park & Ha, 2021). This gap suggests a need for further investigation into how consumer perceptions influence brand equity, particularly in varying market contexts.

The integration of green marketing into brand strategy has introduced new dynamics into the study of brand equity. As consumers become more environmentally conscious, they increasingly expect brands to adopt sustainable practices and reflect these values in their marketing efforts (Tsai et al., 2020; Astuti et al., 2021). This shift has led companies to incorporate green products, pricing, distribution, and promotion strategies into their operations, which has the potential to enhance brand equity by aligning with consumers' growing preference for sustainability (Cuesta-Valino et al., 2021). However, the impact of these green marketing strategies on brand equity is still a developing area of research, requiring more in-depth studies to understand their long-term effects fully.

Despite the growing body of research, there is still a notable gap in understanding how green marketing influences

brand equity across different demographic and geographic markets. Most existing studies have focused on specific industries or regions, leaving a significant opportunity for comparative studies that examine these dynamics across diverse populations (Deniz & Onder, 2017). Addressing this gap is crucial for developing a more comprehensive model of brand equity that accounts for the influence of green marketing in various contexts. By expanding the scope of research to include a broader range of demographic and geographic settings, scholars can provide more actionable insights for companies looking to enhance their brand equity through sustainable practices. More attention needs to be paid to the Philippines, specifically Davao City, regarding green marketing and its impacts on brand equity. Over time, businesses in the Philippines are expected to utilize green marketing strategies; in contrast, 75% of Filipinos prefer sustainable and eco-friendly brands (Abeysekera et al., 2022; Bautista et al., 2023; Chico et al., 2023). It suggests that many individuals purchase green products, but only some companies tend to incorporate a green marketing strategy into their business activities. Hence, this study will fill the gap in green marketing awareness in the Philippines and provide insights into how firms can utilize green marketing.

This study determines the relationship between the green marketing mix and the determinants of brand equity in Davao City. This study only discusses the elements of the green marketing mix and the elements of brand equity: brand image and brand loyalty. However, this research needs to cover the other aspects of brand equity, such as brand trust, awareness, or perceived quality. Furthermore, the primary intent of this investigation is to determine the significant relationship between the green marketing mix (green product,

green price, green place, and green promotion) towards the determinants of brand equity in Davao City. Specifically, this study sought to determine the level of perception of the respondents toward the green marketing mix in terms of green products, prices, places, and promotions. Subsequently, it determines the level of influence on the elements of brand equity in terms of brand loyalty and brand image. Finally, it measures the significant relationship between the green marketing mix towards the aspects of brand equity. This research utilizes the null hypothesis claiming that no significant relationship exists between the green marketing mix and determinants of brand equity.

METHOD

Respondents. The respondents for this study were specifically chosen from Davao City, Philippines, focusing on individuals aged 18 and above with the financial capability to purchase green products. This demographic was targeted based on their higher likelihood of buying green products, thereby providing relevant insights into consumer-based brand equity influenced by green marketing. The selection of these respondents employed a convenience sampling method, which is characterized by selecting participants who are readily accessible to the researcher and willing to participate (Gall, Borg, & Gall, 1996). This nonprobability sampling approach was deemed suitable for the study due to its practicality and efficiency, particularly in a setting like Davao City where the researchers aimed to gather data from a manageable yet representative sample of the population.

To ensure a robust analysis, the researchers used Raosoft, an online tool, to calculate the necessary sample size, which was determined to be 400 participants. This size is considered sufficient to achieve statistical relevance and accuracy in the results, reflecting the general behavior and preferences of the population regarding green products. By utilizing convenience sampling, the study leverages the practical accessibility of respondents while acknowledging the limitations of this method, such as potential biases and less control over the representativeness of the sample compared to probability sampling techniques. This methodological choice supports the study's goals to efficiently explore the impacts of green marketing on brand equity within the specific urban context of Davao City.

Instruments. The survey questionnaire utilized in this study was adapted from one originally developed by Esfahani (2019), ensuring relevance and specificity to the context of green marketing's impact on brand equity. The instrument underwent minor modifications to align more closely with the objectives of the current research, enhancing its effectiveness in capturing the necessary data. This customized questionnaire consisted of 30 items, structured on a five-level Likert scale ranging from "strongly agree" to "strongly disagree," designed to gauge the respondents' perceptions and attitudes comprehensively.

To ensure the reliability and validity of the questionnaire, it was subjected to a rigorous validation process. Two field experts reviewed the questionnaire, providing feedback on its content, clarity, and relevance to the study's goals. The validation process yielded a high mean

score of 4.00, indicating strong expert consensus on the instrument's suitability for this research.

The scale used is a five-point Likert-type with choices ranging from very high to very low. The level of responses was then classified and analyzed as follows:

Scale	Range	Description	Interpretation
5	4.20 - 5.0	strongly agree	When the statement embodied in the item is at all times observed.
4	3.40 - 4.19	agree	When the statement embodied in the item is frequently observed.
3	2.60 - 3.39	neutral	When the statement embodied in the item is sometimes observed.
2	1.80 - 2.59	disagree	When the statement embodied in the item is rarely observed.
1	1.0 - 1.79	strongly disagree	When the statement embodied in the item needs to be observed.

Design and Procedure. This study employed a quantitative research design to investigate the relationship between the green marketing mix and brand equity determinants in Davao City. The quantitative approach was selected for its effectiveness in quantifying data and uncovering patterns through statistical analysis, allowing for a systematic examination of correlations and hypothesis testing (Aliaga & Gunderson, 2002). Additionally, a non-parametric method was incorporated to assess the influence of the green

marketing mix on brand equity, catering to data that may not normally be distributed.

The data collection process was meticulously structured to ensure comprehensive and reliable data. Researchers directly administered the survey to participants selected via convenience sampling, a non-probability method chosen for its practicality and efficiency in reaching a readily available subset of the target population. Participants were given ample time to complete the questionnaire, ensuring thoughtful and honest responses. Once collected, the surveys were systematically compiled and prepared for analysis.

Data analysis was conducted using the Spearman's rho correlation coefficient, chosen for its suitability in measuring the strength and direction of association between non-normally distributed variables. This analysis was pivotal in evaluating the correlations between various elements of the green marketing mix (green products, green price, green place, and green promotion) and the key determinants of brand equity (i.e., brand loyalty and brand image.

RESULTS AND DISCUSSION

The results in Table 1 indicate that the extent of green marketing practices in Davao City is high, as reflected by the overall mean score of 3.97 (SD = 0.13). This suggests that businesses in the region are actively engaging in green marketing strategies, emphasizing the importance of environmentally friendly practices in their operations. The consistency of the responses, as indicated by the low standard deviation, further reinforces the widespread adoption of these practices among the surveyed companies.

Table 1. *Extent of green marketing practices*

Variables	Mean	SD	Description
green product	3.99	1.03	high
green price	3.77	0.77	high
green place	3.97	0.89	high
green promotion	4.14	0.90	high
Overall	3.97	0.13	high

Examining the individual indicators, green promotion received the highest mean score of 4.14 (SD = 0.90), highlighting the strong emphasis on promoting environmentally sustainable products and practices. This was followed closely by green product and green place, with mean scores of 3.99 (SD = 1.03) and 3.97 (SD = 0.89), respectively, indicating that companies are focusing on the development and accessibility of green products. The green price also scored high at 3.77 (SD = 0.77), reflecting the companies' efforts to price their green products competitively while still maintaining their environmental values.

These findings align with existing literature on green marketing, which underscores the growing importance of environmental sustainability in consumer decision-making (Sdrolia & Zarotiadis, 2019; Kaur, Gangwar & Dash, 2022). The emphasis on green promotion supports previous studies suggesting that effective communication of green initiatives is crucial for building consumer trust and loyalty (Esfahani, 2019). Moreover, the consistent focus on green products and places highlights the ongoing shift towards sustainable practices in product development and distribution, as noted by Goyal and Pahwa (2018) and Kaur et al. (2022). These results suggest that green marketing is not only a trend but a

critical component of competitive strategy in the current market landscape.

The descriptive results, as shown in Table 2, reveal that the respondents perceive brand equity to be significantly positive, with an overall mean score of 4.07 (SD = 0.07), indicating a high level of agreement. Among the indicators, brand loyalty received the highest mean score of 4.13 (SD = 0.89), reflecting a strong commitment to brands that implement green marketing practices. Conversely, brand image, while still high, had a slightly lower mean score of 4.00 (SD = 0.88), suggesting that there is still room for improvement in how green marketing efforts translate into a brand's perceived image.

Delving deeper into the individual indicators, the high score for brand loyalty underscores the respondents' readiness to advocate for and remain loyal to brands that practice environmentally friendly policies. Notably, aspects such as encouraging others to use green products and remaining loyal despite price increases also received strong agreement, highlighting the powerful influence of green marketing on customer loyalty. On the other hand, the Brand Image scores reflect a positive but slightly less robust perception of the brands, with respondents particularly appreciating innovative design and trustworthy environmental promises, though there was slightly less agreement on the superior quality of green products compared to non-green ones.

These findings align with prior research, such as the studies by Keller (1993) and Aaker (2001), which emphasize that strong brand equity, particularly in the context of green marketing, can significantly enhance customer loyalty and improve brand image. The high levels of agreement across

Table 2. *Extent of brand equity*

Variables	Mean	SD	Description
brand loyalty	4.13	0.89	high
brand image	4.00	0.88	high
Overall	4.07	0.07	high

both brand loyalty and brand image indicators suggest that while green marketing effectively strengthens customer relationships, continuous efforts are needed to enhance the perceived quality and reputation of green products. This reinforces the importance of developing and refining green marketing strategies to sustain and grow brand equity in a competitive market.

Table 3 in the study presents a robust Spearman's rho correlation coefficient of 0.781 ($p < .01$), indicating a strong and significant relationship between green marketing practices and brand equity. This finding underscores that as green marketing practices are enhanced, brand equity improves correspondingly. The strong correlation emphasizes the critical influence of green marketing elements—such as environmentally friendly products and sustainable practices—on how consumers perceive and value a brand. This finding is echoed by Wanninayake and Randiwela (2008) who noted that different aspects of the marketing mix, including product, price, place, and promotion, significantly impact a company's brand equity. Further, the research underscores the importance of a positive company image in enhancing consumer intentions towards environmentally friendly products.

In addition, supporting literature enhances these findings by detailing how green marketing strategies

Table 3. *Spearman's rho correlation between green marketing practices and brand equity*

Variable	Correlation Value	Strength	Sig. (2-tailed)
green marketing practices ↔ brand equity	.781	Strong	< .01

Note: p < .01 indicates a significant relationship at the 99% confidence level.

contribute not just to brand image but also to competitive advantage, market exploration, and increased product value (Chen, 2010; Chen et al., 2020; Polonsky, 1995). These strategies are validated by Putripeni (2014) and Aldoko (2016), who observed significant influences of green marketing on brand equity, particularly through cases such as The Body Shop and Tupperware Corporation. The positive effects of these green marketing initiatives on brand equity are crucial in a business environment increasingly focused on sustainability.

However, this study also presents a contrasting viewpoint from Chen and Lin (2011), suggesting that not all green marketing strategies directly enhance a company's reputation, hinting at the complexities and challenges within green marketing initiatives. Overall, the significant relationship affirmed by the research underscores that a well-implemented green marketing strategy is crucial for fostering strong brand equity, aligning with Yan and Yazdanifard (2014) who highlighted the long-term benefits of integrating sustainable practices into business strategies.

CONCLUSION AND RECOMMENDATIONS

Conclusion

The findings from this study suggest that respondents have a favorable perception towards green marketing practices, with green promotion identified as the most impactful on their purchasing decisions. This highlights the significant influence that well-executed promotional strategies have on consumer behavior, particularly in the context of environmentally friendly products. The respondents' strong responses toward green promotion suggest that clear and engaging communication of green values can profoundly affect consumer choices.

Additionally, the research indicates that brand loyalty is a pivotal outcome of effective green marketing, with respondents expressing a high likelihood to repurchase and recommend green products. This positive consumer behavior underscores the role of green marketing in enhancing brand loyalty, which in turn, strengthens brand equity. The observed strong correlation between the green marketing mix and the elements of brand equity aligns with the foundational principles of the Stakeholder Theory. This theory posits that aligning a company's operations with the values and expectations of key stakeholders, such as consumers, enhances loyalty and supports the company's broader objectives.

In conclusion, this study supports the hypothesis that a strategic green marketing mix can significantly boost a company's brand equity. By adopting green marketing practices, companies not only align with the environmental values of their consumers but also enhance their market standing and consumer loyalty. This alignment suggests that

companies that integrate environmental concerns into their business strategies are likely to achieve a competitive advantage and sustain long-term success.

Recommendations

For business owners and professional marketers, the study underscores the importance of integrating green marketing strategies to foster positive brand equity. It recommends that business owners enhance the quality and performance of their green products. This could be achieved by sourcing high-quality, eco-friendly materials that are cost-effective, avoiding substandard eco-friendly products which have been negatively received by consumers. Additionally, reassessing pricing strategies to align with consumer purchasing power is advised, particularly cautioning against overpricing which can exceed traditional goods by more than 10%.

Regarding the physical distribution of products, known as green places, businesses should optimize their logistics to ensure eco-friendly practices and customer satisfaction. This might involve partnering with logistics providers known for lower carbon footprints and fewer customer complaints or establishing in-house delivery systems to guarantee same-day deliveries. For green promotion, the recommendation is to revamp marketing strategies to draw more consumer interest, possibly by collaborating with eco-conscious celebrities or employing unique, environmentally friendly promotional materials like street art or recycled art mediums.

Future researchers are encouraged to delve deeper into unexplored areas of green marketing and brand equity. The recommendation is to identify and study additional

relevant variables and theories to enrich understanding and provide a broader context to the interplay between green marketing practices and brand equity. This could involve exploring the impact of various green marketing elements on different aspects of brand loyalty and image, thereby offering a more granular analysis of how these strategies affect consumer perceptions and company performance.

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