

GREEN MARKETING STRATEGY AND BRAND IMAGE: THE ROLE OF THE BIG FIVE PERSONALITY TRAITS IN PANGANDARAN ECOTOURISM

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ABSTRACT

Background: Pangandaran nature tourism, one of the leading destinations in West Java, faces several challenges in maintaining environmental sustainability while providing a positive impression to tourists who are increasingly concerned about sustainability.

Purpose: This study aims to analyze the influence of green marketing strategies on brand image through the mediating role of The Big Five Personality Traits in Pangandaran nature tourism.

Methodology: This is an explanatory study using a quantitative approach conducted from May to December 2025 in several natural tourist destinations in Pangandaran. Data were collected through Likert questionnaires and structured interviews with 400 respondents aged 19–35 years who were determined using the Slovin formula and an incidental sampling technique. Data analysis used Structural Equation Modeling (SEM) based on Partial Least Squares (PLS).

Finding/Result: The results show that green marketing strategies have a significant effect on The Big Five Personality Traits and brand image, and that there is a mediating role of the Big Five personality traits in green marketing strategies and brand image.

Conclusion: This study concludes that green marketing strategies play an important role in building the brand image of Pangandaran nature tourism, both directly and through the mediation of The Big Five Personality Traits, so that the consistent application of green marketing practices is key to strengthening the image of a sustainable destination.

Originality/Value: The novelty of this study lies in examining the mediating role of the Big Five Personality Traits in the relationship between green marketing strategies and brand image in the context of nature tourism, which has rarely been studied.

Keywords: brand image, green marketing, the big five personality traits, tourism, Pangandaran

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INTRODUCTION

The diversity of natural tourist attractions can be used as a pillar of a country's economy (Manzoor et al. 2019; Rahayu et al. 2015). Pangandaran is a natural tourist destination on the west coast of Java that is famous for its beautiful beaches, surfing activities, and natural diversity. The Pangandaran Regency was established as a new autonomous region in Ciamis Regency on October 25, 2012, based on Law No. 33 of 2012 concerning the establishment of the Pangandaran Regency in West Java Province. This new autonomous status gives Pangandaran the opportunity to become an organized and sustainable tourism center in Indonesia. Based on data from www.data.go.id, in the last 3 years, the number of domestic and foreign tourist arrivals in Pangandaran has decreased. Although foreign tourist arrivals have seen a positive increase, this is not the case for local tourists, which fell by 9% in 2022-2023. These fluctuations reflect various influencing factors, which are important to develop to build the right strategy for developing tourism in Pangandaran and maintaining an increase in tourist visits. If the number of visitors to tourist attractions increases, this will have an impact on income (Tsetse et al. 2022). This makes it necessary for managers to have an effective marketing strategy to understand the shift in the travel map of tourists to Pangandaran. Based on the data in Table 1, business actors must know what factors can influence consumers so that they can understand their position in the competition and plan their marketing strategies (Novia et al. 2023).

Environmentally friendly marketing strategies can strengthen the relationship with the brand image of natural tourist destinations through the Big Five personality traits of visitors. By implementing this strategy, tourism management can communicate sustainability values to potential visitors, thereby influencing brand image perceptions. The integration of brand image, visitor personality, and environmentally friendly strategies forms the basis for promoting sustainable destinations. Based on the above background, the problem can be formulated as follows: How does an environmentally friendly marketing strategy affect the brand image of Pangandaran as a natural tourist destination, and to what extent do big personality traits mediate this relationship in shaping visitors' perceptions and behavior towards Pangandaran as a natural tourist destination? This study aimed to understand the factors that influence visitors' perceptions and behavior.

Fluctuations in the number of visitors to Pangandaran's natural attractions indicate problems or negative changes in the destination's image. Therefore, understanding changes in brand image can help identify the factors that influence the attractiveness of a destination for tourists. In the modern business and marketing world, consumers often consider their personalities and preferences when choosing products and services (Chieffi et al. 2022; Rahayu & Setiyadi, 2022). Therefore, a deep understanding of the Big Five personality traits is very important. The Big Five personality traits, also known as the OCEAN factors (Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism), are a psychological personality system that identifies and measures five main aspects of personality (Yu et al. 2023). The Big Five personality traits play a significant role in determining how visitors respond to nature tourism in the Pangandaran Regency and share their experiences. By understanding consumer personality factors, Pangandaran managers can adjust their marketing strategies and manage tourist destinations to be more satisfying and attractive to various types of tourists with different personality traits. Along with increasing awareness of environmental protection needs, many companies are now considering environmentally friendly or green strategies, which are not only an option but also a necessity (Meler & Ham, 2012). The government has also promoted sustainable tourism through Ministry of Tourism and Creative Economy Regulation No. 14 of 2016 on sustainable tourism. This regulation states that sustainable tourism development within the country can be carried out in a manner that is in harmony with the local culture, socially responsible, prioritizes local communities, is non-discriminatory, and environmentally friendly. According to Yousaf et al. (2021), a green strategy is one in which companies demonstrate concern for the environment. A green or environmentally friendly marketing strategy is a marketing plan for products and services that focuses on environmental factors or concerns for the environment (Umam & Widodo, 2022).

To effectively solve problems in the development of Pangandaran tourism, a strategic approach that is integrated, data-based, and centered on the visitor's experience is needed. Changes in the number of tourists should not be looked at alone, but should be studied in a broader context by looking at the main factors that affect how attractive the destination is, such as the image of the place, the characteristics of tourists, and the marketing

methods used (Chieffi et al. 2022). The process of solving problems starts with analyzing trends in tourism demand and understanding the changes in the behavior of both local and international tourists. At the same time, using insights from the Big Five personality traits helps destination managers divide visitors into different groups based on their psychological characteristics (Leri & Theodoridis, 2021). This allows them to create tourism products (Chieffi et al. 2022), experiences (Sheikh et al. 2023), and marketing messages (Duong, 2022) that suit different types of visitors. Alongside this, using green strategies and promoting eco-friendly marketing are important to meet the rising awareness of environmental issues and to follow government rules about sustainable tourism. It also helps build a positive image of the destination as responsible and sustainable. By combining the analysis of visitor behavior, personality-based grouping, and environmentally friendly marketing, destination managers can create solutions that improve competitiveness, boost tourist numbers, and support long-term economic, social, and environmental sustainability.

Based on previous research findings, it is evident that many of the research models in this study differ from previous research models, indicating the originality of this study. Previous research (Eneizan et al. 2019; Manzoor et al. 2019; Tsetse et al. 2022) discusses environmentally friendly marketing strategies in the field of tourism, with all three studies focusing on tourism performance. Research from Hafasnuddin (2017); Latif et al. (2016); Yu et al. (2023) and Chieffi et al. (2022) found that the Big Five personality traits influence consumer perceptions and attitudes toward environmentally friendly products. Meanwhile, studies conducted by Majeed et al.(2022) and Pancić et al. (2023) help marketers understand how to combine environmentally friendly marketing strategies with a strong brand image. Meanwhile, research by Kaur and Moktan (2022) and Sheikh et al. (2023) considers

consumer personality characteristics to increase their awareness of the brand image of environmentally friendly products. Currently, there is only one study using a three-variable approach conducted by Umam and Widodo (2022), which shows the relationship between environmentally friendly marketing strategies, brand image, and the Big Five personality traits in the context of consumer behavior.

Previous studies have focused on consumer products, whereas this study focuses on the natural tourism sector in Pangandaran, which has unique dynamics. This study uses the Big Five personality traits as a mediating variable in relation to environmentally friendly marketing strategies and brand image, providing a new perspective for developing sustainable tourism based on visitor personalities. This study discusses the variables comprehensively and uses Pangandaran nature tourism visitors as the unit of analysis, which has never been compared with the variables in previous studies, and is expected to produce novelty as an alternative strategic solution model for increasing the number of visitors. The results of this study are expected to produce novelty in management science in the form of an environmentally friendly marketing strategy model through brand image built on the personality characteristics of nature tourism visitors.

METHODS

This study is an explanatory study, which is a study to analyze the relationship between one variable and another variable or how one variable affects another variable (Boru, 2018). The data collection technique used primary data obtained from questionnaires distributed randomly to visitors to natural tourist attractions and secondary data obtained from literature. This type of research used a quantitative approach.

Table 1. Average arrivals of foreign tourists to Indonesia

Regency/City	International Tourists			Domestic Tourists			Total		
	2021	2022	2023	2021	2022	2023	2021	2022	2023
Pangandaran	15	1,291	3,93	3,604,113	4,286,894	3,893,635	3,604,128	4,288,185	3,897,565

This study will be conducted over a period of eight (8) months from the preparation of the proposal in May 2025 to the preparation of the report in December 2025. The research will be conducted at several natural tourist attractions in Pangandaran, namely, the east coast, west coast, nature reserve, Green Canyon, fish market, and cafes on the coast. The research subjects in this study were visitors or tourists in the Pangandaran area. Observations to gather information will also be conducted with informants living and working around Pangandaran.

The research population consisted of visitors to the Pangandaran Beach tourist attraction. Meanwhile, the research sample consists of tourists visiting the tourist destination, aged between 19 and 35 years. The reason for this is that, at this age, they are expected to understand and comprehend the questions in the questionnaire and are generally tech-savvy and effective. The sample size was determined using the Slovin formula. Based on the number of visitors in 2023, which was 3,897,565, the number of respondents was rounded to 400. The sampling technique used was non-probability incidental sampling, in which relevant respondents were selected when encountered (incidental).

In addition to the interviews, the author collected information through questionnaires distributed to visitors by students. The questionnaire used in this study was a structured interview (Ganiadi et al. 2021). Visitor attitudes were measured using a Likert scale.

The research is then analyzed using structural equation modeling (SEM). SEM modeling was performed using Partial Least Square (PLS) software. SEM is used to justify a cause-and-effect relationship based on experience using field observation data and not to establish a causal relationship (Amalia et al. 2021). The use of PLS is suitable for research with complex structural models that include many components, indicators, and model relationships. PLS is also used for research purposes to understand the complexity of development by finding extensions of existing theories (Kwong & Wong, 2019).

According to Anjani and Perdhana (2021), green marketing is a marketing strategy that emphasizes environmental sustainability while providing a rewarding experience for tourists. In nature tourism, every program, facility, and activity offered must focus on nature conservation, for example, by maintaining

cleanliness, reducing the use of single-use plastics, and using environmentally friendly energy (Camilleri et al. 2023). Nature tourism destinations must combine ecological aspects and tourist needs, for example, by offering environmental education packages, community-based ecotourism, and promotions that emphasize the authenticity and sustainability of ecosystems (Jaiswal et al. 2021). According to Kemper and Ballantine (2019), green marketing is a holistic and responsible management process that identifies, anticipates, and meets the needs of customers and society in a profitable and sustainable manner. By using this strategy, nature tourism not only attracts environmentally conscious people but also creates a positive image (Wibowo & Santoso, 2024), increases visitor loyalty (Pancić et al. 2023), and creates added value through their contributions to nature conservation and local community empowerment (Li et al. 2021).

Green marketing strategies in tourism can be explained through the six main aspects of Nassani et al. (2023): the use of eco-labels and identification of environmentally friendly products, green tourism and eco-labels that are in line with lifestyle, information about tourism products related to packaging and environmental impact, reuse and recycling of natural resources, environmental advertising and environmentally friendly consumption patterns, and attractive green tourism advertising. These aspects show that sustainable marketing efforts are not just about promotion but also related to a real commitment to protecting the environment, clear product information, and tourist involvement in sustainable practices. With eco-labels, tourists are assured that a practice is truly environmentally friendly, while the reuse and recycling of natural resources has an impact on the efficiency of use. Additionally, advertisements that highlight green lifestyles can shape tourists' positive perceptions of destinations, so that green marketing strategies are not just a means of communication but also a way to strengthen brand image and encourage more sustainable tourism behavior.

The psychological structure of personality known as the Big Five personality model, also known as the "Big Five Personality Traits," is widely used to understand differences in basic human traits. According to Watjatrakul's (2020) model, the five main dimensions are relatively stable and can be found across cultures and time. Srivastava et al. (2021) described it as the most comprehensive and empirical hierarchical structure of

personality traits. Therefore, it is very important for psychological and social science research. This model stems from a lexical approach and factor analysis, which found that human traits can be divided into five core factors. This helps researchers and practitioners understand a person's behavior, preferences, and interaction patterns in various situations, such as education, work, and daily life.

The Big Five personality traits consist of five main dimensions (Yu et al. 2023). The first dimension is openness to experience, which indicates creative, imaginative, and new-experience-seeking traits; conscientiousness, which indicates discipline, responsibility, and achievement orientation (Srivastava et al. 2021); extraversion, which indicates a friendly, energetic nature and enjoyment of interacting with others (Leri & Theodoridis, 2021); agreeableness, which indicates a friendly and sociable attitude (Duong, 2022). Each person has a different combination of these five dimensions; therefore, differences in scores on each factor can explain how people act and respond to different situations and environments (Wajtrakul, 2020).

According to Liu (2019), brand image is consumers' perception of a brand based on their experiences, beliefs, and associations embedded in their memory; therefore, brand image is the result of associations attached to consumers' memory of a brand. Michaelidou et al. (2019) also defines brand image as a set of consumer beliefs. In other words, brand image comprises marketing communication, consumers' actual experiences, product or service quality, and emotional interactions. All of these factors influence purchasing decisions and consumer loyalty.

Green marketing strategies in tourism can be explained through six main aspects (Bajada et al. 2022): the use of eco-labels and identification of environmentally friendly products; green tourism and eco-labels that are in line with lifestyle; information about tourism products related to packaging and environmental impact; reuse and recycling of natural resources; environmental advertising and environmentally friendly consumption patterns; and attractive green tourism advertising. These aspects indicate that sustainable marketing efforts are not merely promotional but also involve a genuine commitment to environmental preservation, clear product information, and tourist engagement in sustainable practices (Jaiswal et al. 2021). With

eco-labels, tourists are assured that a practice is truly environmentally friendly (Sewwandi & Dinesha, 2022), while the reuse and recycling of natural resources has an impact on efficiency (Suki & Suki, 2015). Advertisements that highlight green lifestyles can shape tourists' positive perceptions of destinations, so that green marketing strategies are not just a means of communication but also a way to strengthen brand image and encourage more sustainable tourism behavior (Wulandari & Widodo, 2018).

How an individual's views and actions toward environmental issues are influenced by their personality, demonstrating the relationship between green marketing strategies and The Big Five Personality Traits. Individuals with high levels of openness to experience are typically more receptive to green innovations, meaning that they are more likely to accept green advertising. Responsible and disciplined individuals tend to support environmentally friendly goods and services. However, conformity makes people care about social and environmental welfare; therefore, green marketing strategies are more likely to receive positive responses. However, due to dominant emotional and personal anxiety factors, the influence of green marketing can be inconsistent among people with high neuroticism. Therefore, green marketing strategies are highly dependent on a combination of customer characteristics. This relationship has been supported by numerous studies. Pittman et al. (2022) found that openness, agreeableness, and conscientiousness are positively correlated with environmental concern. According to research conducted by Sewwandi and Dinesha (2022), green marketing strategies are more beneficial to consumers with high levels of awareness because they value corporate social responsibility more. However, different findings have been reported. Duong (2022) found that the relationship between neuroticism and environmental attitudes may not be significant. Therefore, not all personality traits influence responses to green marketing. Suki and Suki (2015) emphasize that social norms and personal values have a greater influence on the acceptance of green innovations than personality. This suggests that while green marketing strategies may be suitable for certain individuals, the social context and consumer principles are crucial in determining their effectiveness.

H1: There is an influence between Green Marketing Strategy (GMS) and the Big Five Personality Traits (BFPT)

The relationship between green marketing strategies and brand image is strong because environmentally friendly marketing directly influences how consumers view a brand. When a company or tourist destination implements green marketing, such as using clean energy, reducing plastic waste, providing environmentally friendly facilities, or conducting promotions that emphasize concern for the environment, consumers perceive the brand as being responsible for social and environmental issues. This creates a positive impression that strengthens brand image, as consumers see not only the functional value of the product or service but also the symbolic value of environmental awareness. Thus, green marketing plays an important role in building a strong brand image, increasing consumer trust, and strengthening long-term customer loyalty.

Several studies have also shown this relationship, such as Chen (2010), who found that green marketing practices have a significant positive impact on the formation of an environmentally friendly brand image, where consumers perceive the brand as caring for the environment. Leonidou et al. (2013) also revealed that the application of green marketing in the tourism sector can enhance the image of environmentally friendly destinations, which in turn increases tourists' desire to return. However, other studies, such as Leonidou et al. (2013), show that the impact of green marketing on brand image is not always significant, especially if consumers feel that environmentally friendly practices are only used as a marketing tool (greenwashing) rather than real action. This shows that the effectiveness of green marketing strategies in shaping brand image is highly dependent on the consistency and credibility of their implementation. H2: There is an influence between Green Marketing Strategy (GMS) and Brand Image (BI)

The relationship between the five personality dimensions (The Big Five Personality Traits) and brand image occurs because the way a person's personal traits influence how they assess and view a brand. Consumers with a high level of openness to experience tend to prefer innovation and creativity from a brand; therefore, they are more likely to form a positive brand image of products or places that offer new experiences. Meanwhile, people who are bold and highly responsible usually value accuracy and quality more, so they are more likely to trust brands that consistently maintain their reputations and moral values. Extroversion makes a person more interested in brands that promote a positive and social lifestyle, whereas individuals who are friendly and

cooperative tend to form a positive brand image of brands that care about the environment or society. Conversely, people with high levels of neuroticism may find it more difficult to consistently assess brand image because they are influenced by unstable feelings. This shows that a person's personality traits greatly influence the formation of a brand image based on their personal values and preferences.

Previous studies have also supported this relationship. Sheikh et al. (2023) found that a person's personality often reflects the brand image they choose, so there is harmony between self-identity and brand image. In the context of tourism, research by Ekinçi and Kuo (2012) shows that tourist traits can influence how tourists perceive the image of a destination, which in turn affects their loyalty to that place. On the other hand, Kaur and Moktan (2022) found that not all aspects of personality significantly influence brand image; for example, neuroticism often does not contribute to positive perceptions of a brand. Thus, although the Big Five Personality Traits can be an important factor in building brand image, their effectiveness depends heavily on the extent to which brand traits align with consumers' personal values.

H3: There is an influence between the Big Five Personality Traits (BFPT) and Brand Brand Image (BI)

The relationship between green marketing strategies and brand image can be stronger due to the influence of five personality dimensions, namely The Big Five Personality Traits, as factors that connect the two. Green marketing strategies that focus on environmentally friendly products, services, or activities can strengthen brand image. However, consumer acceptance of these strategies depends on their personality traits. For example, consumers who are open to experience are more likely to accept green innovation and choose a brand as a good option. Consumers with conscientiousness value brand consistency when fulfilling environmental responsibilities. Meanwhile, agreeable consumers are more open to brands concerned about social and environmental issues. Conversely, consumers with high levels of neuroticism tend to form less stable perceptions of brand image, thereby reducing the positive impact of green marketing strategies. Thus, these five personality dimensions serve as psychological perspectives that determine how consumers understand green marketing strategies, ultimately shaping brand image more deeply.

Several studies have supported this relationship. Duong (2022) found that openness, agreeableness, and conscientiousness are positively correlated with environmentally conscious attitudes; therefore, individuals with these traits are more likely to respond positively to green marketing strategies. Chen (2010) showed that green marketing can enhance a green brand image if consumers see it as a genuine commitment from the brand. Wibowo (2023) emphasized that tourists' personalities influence how they form destination images. Studies by Leri and Theodoridis (2021) remind us that not all personality dimensions are influential; for example, neuroticism often does not contribute significantly to environmental perceptions and brand image. This means that the effectiveness of green marketing strategies in building brand image depends not only on the message conveyed but also on the personality traits of the target consumers.

H4: The Big Five Personality Traits can mediate the relationship between Green Marketing Strategy and Brand Image

The Figure 1 shows a conceptual model that explains how a green marketing strategy affects the image of a destination brand, both directly and indirectly, through the Big Five Personality Traits acting as mediators. Green marketing activities such as eco-labelling, green products, green tourism, environmentally friendly information and packaging, reuse and recycling efforts, green advertising, and green consumption influence

how tourists view the destination's brand image. This includes factors such as accessibility and transportation, available facilities and recreational options, digital infrastructure, and supporting infrastructure. The effect of green marketing on a destination's image is influenced by tourists' personality traits, such as openness, conscientiousness, extraversion, agreeableness, and neuroticism, which determine how individuals understand and react to green marketing messages. The model shows that the success of green marketing in improving the destination's brand image relies not only on the sustainability efforts themselves but also on the psychological traits of the tourists..

RESULTS

Table 1 presents the demographic characteristics of the 400 respondents based on gender, age, educational background, marital status, and income level. Most of the respondents were male (72%) and under 25 years old. The results of the analysis of respondent characteristics also show that most respondents earn less than 2 million per month (42%), followed by those earning 2–5 million (33%), and more than 5 million (25%). These data show that the respondents are relatively diverse but are dominated by women, young people, college graduates, and those with low to middle incomes.

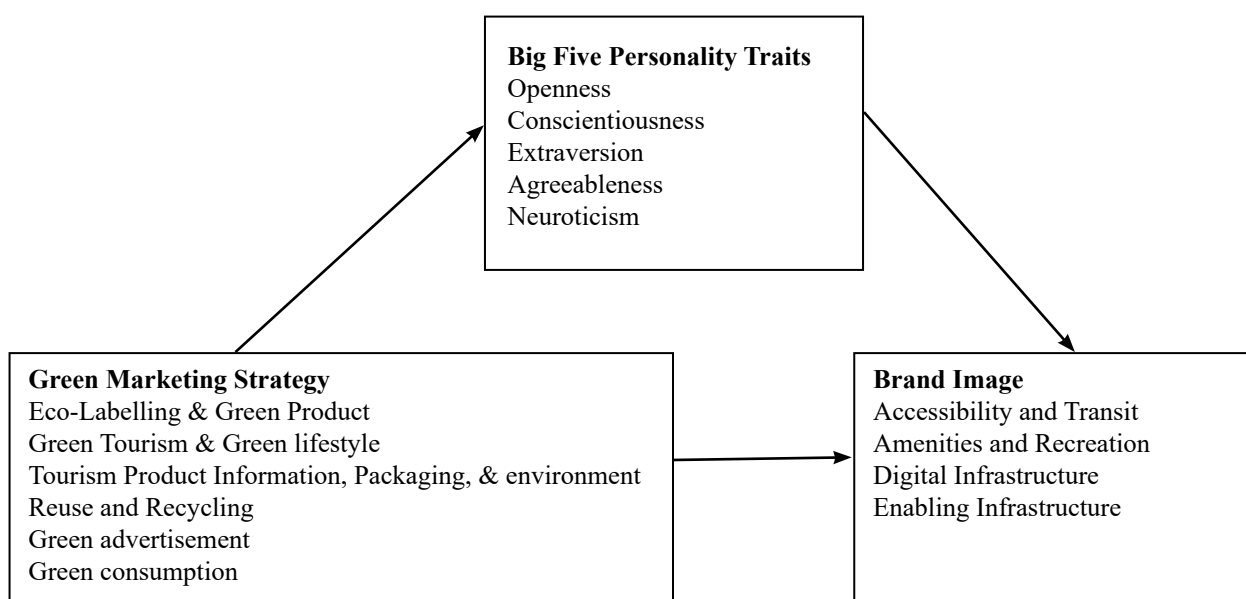


Figure 1. Conceptual framework of big five personality traits, green marketing strategy, and brand image

This study used the Smart PLS-SEM (Partial Least Squares-Structural Equation Modeling) application version 4.0. The evaluation of the path model based on the developed hypotheses, as shown in Figure 2, shows a hierarchical reflective-reflective component model (Hair Jr. et al. 2021). The model using 48 indicators was tested using Smart PLS-SEM. Table 2 confirms the validity and reliability of the variables measured using several indicators. The outer loading values exceeded the recommended threshold of 0.6, indicating a strong correlation between the indicators and their respective latent variables. Cronbach’s alpha and composite reliability (CR) values were consistently above 0.7, indicating internal consistency and construct reliability. The average variance extracted (AVE) values were almost all above 0.5, ensuring that each component explained a significant portion of the indicator variance and guaranteed convergent validity. All dimensions were classified as valid and reliable.

Table 2 shows the results of the hypothesis testing using the PLS-SEM method to examine the relationship between the research variables. The results show that H1 (GMS → BFPT) has a path coefficient value of 0.731, T value of 4.57, and p-value of 0.0000. This

means that green marketing strategy (SGM) has a significant positive impact on The Big Five Personality Traits (BFPT). Furthermore, H2 (GMS → BI) shows the direct influence of green marketing strategies on brand image with a coefficient of 0.308, a very high T-value of 27.27, and a p-value of 0.0000. Thus, it can be concluded that GMS makes a strong and significant contribution to shaping brand image. Meanwhile, H3 (BFPT → BI) shows a positive influence of BFPT on brand image, with a coefficient of 0.350, T-value of 5.25, and p-value of 0.0000. This indicates that consumer personality, based on the Big Five dimensions, influences their perception of brand image. Finally, H4 (GMS → BFPT → BI) shows the mediating effect of BFPT on the relationship between green marketing strategy and brand image. The path coefficient of 0.256, T-value of 4.93, and p-value of 0.0000 indicate that this mediating effect is significant. These results indicate that in addition to having a direct influence, green marketing strategies indirectly enhance brand image through consumer personality (BFPT). Therefore, this mediation was considered significant. Thus, all the research hypotheses (H1–H4) were accepted.

Table 1. Respondent Characteristics

Respondent’s Attribute	Description	Respondents	
		Total	%
Gender	Male	289	72
	Female	111	28
	Subtotal	400	100
Age Intervals (years old)	< 25	175	44
	26–30	134	34
	< 31	91	23
	Subtotal	400	100
Income	<2 million	169	42
	2-5 million	132	33
	<5 million	99	25
	Subtotal	400	100

Table 2. Summary of Hypotheses

Hypothesis	Path Coeff	T Value	P Value	Summary
H1 GMS → BFPT	0.731	4.57	0.0000	Significant+ Accept H1
H2 GMS → BI	0.308	27.27	0.0000	Significant+ Accept H2
H3 BFPT → BI	0.350	5.25	0.0000	Significant+ Accept H3
H4 GMS → BFPT → BI	0.256	4.93	0.0000	Significant+ Accept H4

Note: Green Marketing Strategy (GMS) and the Big Five Personality Traits (BFPT), Brand Image (BI)

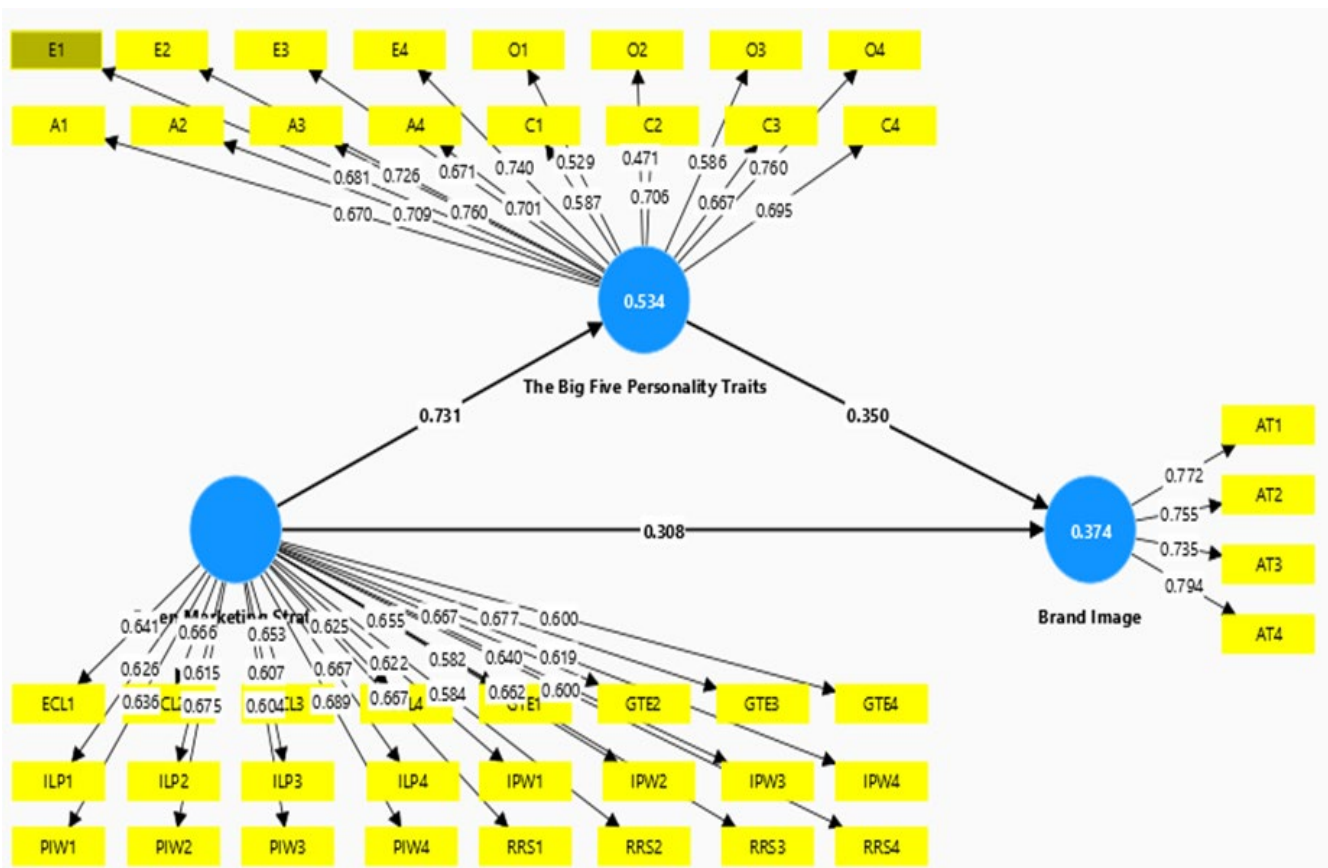


Figure 1. Path Coefficient

The Influence of Green Marketing Strategy on the Big Five Personality Traits

The results of the study indicate that green marketing strategies positively influence tourists' Big Five personality traits. In the context of nature tourism in Pangandaran, the implementation of green marketing, such as protecting coral reefs, managing waste based on the 3R principle (reduce, reuse, recycle), and ecotourism-based promotion, can influence tourists who are open-minded and environmentally conscious. This is in line with research by Kautish and Sharma (2019), which shows that tourists with high levels of openness and conscientiousness are more responsive to sustainable marketing messages. Thus, green marketing is not only a promotional tool but also a way to attract tourists who have sustainability values in line with their personalities.

The Influence of Green Marketing Strategy on Brand Image

Green marketing strategies have been proven to enhance the brand image of nature tourism in Pangandaran. Environmentally friendly promotions, the use of clean

energy in tourist areas, and ecotourism campaigns reinforce tourists' perceptions that Pangandaran is a sustainable destination. These results are in line with Chen's (2010) research, which states that green marketing improves green brand image because tourists associate sustainability with moral values and service quality. Thus, the implementation of green marketing strategies helps Pangandaran build an image that differs from that of other tourist destinations in West Java.

The influence between the Big Five Personality Traits and Brand Image

The Big Five personality traits also had a positive impact on Pangandaran's brand image. Tourists with an open personality (openness) appreciate new experiences in ecotourism more, whereas tourists with a responsible personality (conscientiousness) are more concerned about cleanliness, order, and safety in tourist areas. The results of this study are in line with Sheikh et al. (2023), who show that tourist personality can influence perceptions and attachment to brand image. Therefore, Pangandaran can use its understanding of tourist personalities to strengthen its brand image.

The Influence of Green Marketing Strategy on Brand Image Through the Big Five Personality Traits

This study also shows that the Big Five personality traits act as mediators between green marketing strategies and brand image. This means that, in addition to directly influencing brand image, green marketing strategies also indirectly enhance Pangandaran's brand image by changing sustainability values to match tourist personalities. This supports Duong's (2022) argument that tourists with certain personality orientations will more easily form a positive brand image when marketing strategies are in line with their values. Thus, establishing a relationship between green strategies and understanding tourist personalities can strengthen Pangandaran's competitiveness as a leading ecotourism destination.

Managerial Implication

The results of this study provide important lessons for managers and key players in the tourism industry in Pangandaran. First, the strong direct and indirect influence of green marketing on how tourists see the brand shows that environmental efforts should not just be part of promotion, but should be a main part of the overall strategy for managing the destination. Managers are advised to regularly include sustainability efforts, such as waste management, protecting the ecosystem, and using eco-friendly facilities in their tourism activities and promotional plans. Second, the role of the Big Five personality traits as a middle step suggests that marketing should focus on understanding people's personalities. This means creating messages and experiences that match the values of tourists, who care about being open-minded, environmentally responsible, and thoughtful. By matching green marketing messages with the personality traits of the people they target, managers can make their branding more effective and build a stronger emotional link with visitors. In addition, knowing how different personalities respond helps managers create unique tourism experiences that support a positive image of the destination and encourage tourists to return. These findings suggest that using data- and personality-based approaches in green marketing can help Pangandaran improve its position in the market, build a more sustainable image, and support long-term tourism growth that fits its environmental and social goals.

CONCLUSIONS AND RECOMMENDATIONS

Conclusions

This study shows that green marketing strategies have a positive impact on five aspects of tourist personality and brand image and indirectly enhance brand image through the influence of consumer personality. These results prove that the implementation of environmentally friendly marketing practices, such as waste management, nature conservation, and ecotourism-based promotion, not only strengthens the image of the destination, but also aligns with the personality of tourists who care about sustainability. Furthermore, these five personality traits also play an important role in shaping tourists' perceptions of brand image in the Pangandaran area. Thus, the combination of green marketing strategies and an understanding of consumer personality becomes an important factor in enhancing the competitiveness of the nature tourism image in Pangandaran.

Recommendations

This study has limitations in its scope of analysis, which focuses only on the natural tourist destinations of Pangandaran; therefore, the results may not be applicable to other destinations. In addition, the variables analyzed only involve green marketing strategies, five personality aspects, and brand image, whereas other factors, such as tourist satisfaction or loyalty, may also influence the results. Therefore, further research is recommended to expand the research object to different natural tourist destinations and add new variables, such as trust in sustainability or tourist satisfaction. A mixed research method can also be used to obtain a more complete picture. From a practical standpoint, this study recommends that tourism managers in Pangandaran continue to strengthen their green marketing strategies through environmental education programs and environmentally friendly facilities, as these have been proven to enhance brand image and attract tourists with a personality that cares about sustainability.

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REFERENCES

- Amalia, Z. N., Ulya, R. W., Hastuti, D. R., & Mardianto, M. F. F. (2021). Structural Equation Modeling in Motivation Analysis for Millennial Participation Related to General Elections in Indonesia. *ESTIMASI: Journal of Statistics and Its Application*, 2(1), 29–37. <https://doi.org/10.20956/ejsa.v2i1.12479>
- Anjani, S., & Perdhana, M. S. (2021). Green Marketing Mix Effect on Consumers' Purchase Decision: A Literature Study. *Diponegoro Journal of Management*, 10(4), 1–8. <http://ejournal-s1.undip.ac.id/index.php/dbr>
- Bajada, C., Agarwal, R., Skellern, K., Luff, S., Soco, S., & Green, R. (2022). Enablers of successful innovation precincts. *Regional Studies, Regional Science*, 9(1), 732–756. <https://doi.org/10.1080/21681376.2022.2144427>
- Boru, T. (2018). Chapter Five Research Design and Methodology. *CHAPTER FIVE RESEARCH DESIGN AND METHODOLOGY* 5.1. Introduction, 17(December), 1–41. <https://doi.org/10.13140/RG.2.2.21467.62242>
- Camilleri, M. A., Cricelli, L., Mauriello, R., & Strazzullo, S. (2023). Consumer Perceptions of Sustainable Products: A Systematic Literature Review. *Sustainability (Switzerland)*, 15(11). <https://doi.org/10.3390/su15118923>
- Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93(2), 307–319. <https://doi.org/10.1007/s10551-009-0223-9>
- Chieffi, V., Pichierri, M., Peluso, A. M., Collu, C., & Guido, G. (2022). Effects of Big Five personality traits and market mavenship on consumers' intention to spread word-of-mouth in the art context. *Arts and the Market*, 12(1), 17–31. <https://doi.org/10.1108/AAM-09-2021-0052>
- Duong, C. D. (2022). Big Five personality traits and green consumption: bridging the attitude-intention-behavior gap. *Asia Pacific Journal of Marketing and Logistics*, 34(6), 1123–1144. <https://doi.org/10.1108/APJML-04-2021-0276>
- Eneizan, B. M., Matar, A., Al-Zawahreh, A., Alkhawaldeh, A. M., & Eneizan, O. (2019). Effects of Green Marketing Strategy On Financial Performance: The Moderating Role Of Government Policy. *Business and Economic Horizons*, 15(2), 304–324. <http://dx.doi.org/10.15208/beh.2019.19>
- Ganiadi, F. L., Margianto, B. J., & Kristanti, M. (2021). Pengaruh Big Five Personality Traits Terhadap Niat Untuk Menginap Di Green Hotel Di Indonesia. *Jurnal Manajemen Perhotelan*, 7(1), 10–19. <https://doi.org/10.9744/jmp.7.1.10-19>
- Hafasnuddin. (2017). Effect of the quality of tourism objects and brand image of tourism aspects on the tourism city's image. The case of Banda Aceh, Indonesia. *Journal of Environmental Management and Tourism*, 8(8), 1604–1616. [https://doi.org/10.14505/jemt.v8.8\(24\).17](https://doi.org/10.14505/jemt.v8.8(24).17)
- Jaiswal, D., Kaushal, V., Singh, P. K., & Biswas, A. (2021). Green market segmentation and consumer profiling: a cluster approach to an emerging consumer market. *Benchmarking*, 28(3), 792–812. <https://doi.org/10.1108/BIJ-05-2020-0247>
- Kaur, H., & Moktan, P. (2022). Personality traits and global brand attributes: The mediating effect of consumer attitude. *SMART Journal of Business Management Studies*, 18(2), 69–78. <https://doi.org/10.5958/2321-2012.2022.00018.5>
- Kemper, J. A., & Ballantine, P. W. (2019). What do we mean by sustainability marketing? *Journal of Marketing Management*, 35(3–4), 277–309. <https://doi.org/10.1080/0267257X.2019.1573845>
- Kuo, H.-Y. (2012). Modelling the influence of green brand image on brand loyalty in technology products: Relationships among green brand image, brand identification, perceived value, and brand loyalty (Doctoral dissertation). Alliant International University.
- Kwong, & Wong. (2019). Mastering Partial Least Squares Structural Equation Modelling (PLS-SEM) with SmartPLS in 38 Hours (Issue March). Universe.
- Latif, W. B., Islam, M. A., Noor, I. M., Mohamad, M., & Kongsompong, K. (2016). Imagination of brand image for tourism industry. *Problems and Perspectives in Management*, 14(2). [https://doi.org/10.21511/ppm.14\(2-1\).2016.02](https://doi.org/10.21511/ppm.14(2-1).2016.02)
- Leonidou, L. C., Leonidou, C. N., Fotiadis, T. A., & Zeriti, A. (2013). Resources and capabilities as drivers of hotel environmental marketing strategy: Implications for competitive advantage and performance. *Tourism Management*, 35, 94–110. <https://doi.org/10.1016/j.tourman.2012.06.003>
- Leri, I., & Theodoridis, P. (2021). How do personality traits affect visitor's experience, emotional

- stimulation and behaviour? The case of wine tourism. *Tourism Review*, 76(5), 1013–1049. <https://doi.org/10.1108/TR-05-2019-0148>
- Li, G., Yang, L., Zhang, B., Li, X., & Chen, F. (2021). How do environmental values impact green product purchase intention? The moderating role of green trust. *Environmental Science and Pollution Research*, 28(33), 46020–46034. <https://doi.org/10.1007/s11356-021-13946-y>
- Liu, Y. (2019). A Study on Construction of Brand Image for Cultural Tourism Based on Visual Grammar --- Taking the Brand Image of “Mystery” of Xiangxi as an Example. *ITM Web of Conferences*, 25, 03003. <https://doi.org/10.1051/itmconf/20192503003>
- Majeed, M. U., Aslam, S., Murtaza, S. A., Attila, S., & Molnár, E. (2022). Green Marketing Approaches and Their Impact on Green Purchase Intentions: Mediating Role of Green Brand Image and Consumer Beliefs towards the Environment. *Sustainability (Switzerland)*, 14(18). <https://doi.org/10.3390/su141811703>
- Manzoor, F., Wei, L., Asif, M., & Rehman, H. ur. (2019). Strategic corporate social responsibility in tourism and hospitality. *International Journal of Environmental Research and Public Health*, 16(3785), 1–14. <https://doi.org/10.1002/sd.2059>
- Meler, M., & Ham, M. (2012). Green Marketing for Green Tourism. *Tourism & Hospitality Management* 2012, 130–139.
- Michaelidou, N., Micevski, M., Kadic-Magljalic, S., Budhathoki, T., & Sarkar, S. (2019). Does non-profit brand image mean the same across cultures? An exploratory evaluation of non-profit brand image in three countries. *International Marketing Review*, 36(6), 979–995. <https://doi.org/10.1108/IMR-10-2018-0284>
- Novia, N. H., Palestho, A. B., Noviany, H., Rahayu, I., Fithriani, M., Sukmadi, Kartikasari, S., Sahar, F., Dwiyono, G., Supriatna, E., Pramiasih, E. E., Putri, D. Y., Kanaidi, Nurrohmah, D., & Amran, K. M. (2023). Manajemen pemasaran.
- Pancić, M., Serdarušić, H., & Ćucić, D. (2023). Green Marketing and Repurchase Intention: Stewardship of Green Advertisement, Brand Awareness, Brand Equity, Green Innovativeness, and Brand Innovativeness. *Sustainability (Switzerland)*, 15(16). <https://doi.org/10.3390/su151612534>
- Pittman, M., Oeldorf-Hirsch, A., & Brannan, A. (2022). Green Advertising on Social Media: Brand Authenticity Mediates the Effect of Different Appeals on Purchase Intent and Digital Engagement. *Journal of Current Issues and Research in Advertising*, 43(1), 106–121. <https://doi.org/10.1080/10641734.2021.1964655>
- Rahayu, I., & Setiyadi, D. (2022). The Effect of Trust, Emotional Marketing, and Spiritual Marketing on Consumer Decisions To Choose Shopee Pay Digital Wallet Services. *Business Review and Case Studies*, 3(2), 162–169. <https://doi.org/10.17358/brcs.3.2.162>
- Rahayu, I., Nurrochmat, D. R., & Fachrodji, A. (2015). Marketing Mix Analysis of Natural Tourism Area “Kawah Putih” and Its Effect on Visitors’ Decision. *Indonesian Journal of Business and Entrepreneurship*, 1(2), 72–80.
- Sewwandi, J. P. N., & Dinesha, P. K. C. (2022). The impact of green marketing tools on green product purchase behavior: the moderation effect of consumer demographics. *Asian Journal of Marketing Management*, 1(01), 89–114. <https://doi.org/10.31357/ajmm.v1i01.5469>
- Sheikh, B. A., Ahmad-ur-Rehman, M., Hussain, Z., & Baig, S. A. (2023). Big Five Personality Traits and Attitude Towards Augmented Reality Advertisement: Mediating Role of Consumer Attitude and Moderating Role of Brand Image. *Qlantic Journal of Social Sciences and Humanities*, 4(3), 274–290. <https://doi.org/10.55737/qjssh.613928646>
- Srivastava, A., Dasgupta, S. A., Ray, A., Bala, P. K., & Chakraborty, S. (2021). Relationships between the “Big Five” personality types and consumer attitudes in Indian students toward augmented reality advertising. *Aslib Journal of Information Management*, 73(6), 967–991. <https://doi.org/10.1108/AJIM-02-2021-0046>
- Suki, N. M., & Suki, N. M. (2015). Consumers’ environmental behaviour towards staying at a green hotel: Moderation of green hotel knowledge. *Management of Environmental Quality: An International Journal*, 26(1), 103–117. <https://doi.org/10.1108/MEQ-02-2014-0023>
- Tsetse, E. K. K., Mahmoud, M. A., Blankson, C., & Odoom, R. (2022). The impact of stakeholder market orientation on sustainability performance at tourism destinations. *Management Research Review*, 45(7), 929–955. <https://doi.org/10.1108/MRR-04-2021-0290>
- Umam, G. C., & Widodo, A. (2022). How Green

- Marketing and Product Quality Influence Buying Interest Using Green Brand Image. *Jurnal Manajemen Bisnis*, 9(1), 01–11. <https://doi.org/10.33096/jmb.v9i1.995>
- Watjatrakul, B. (2020). Intention to adopt online learning: The effects of perceived value and moderating roles of personality traits. *International Journal of Information and Learning Technology*, 37(1–2), 46–65. <https://doi.org/10.1108/IJILT-03-2019-0040>
- Wibowo, A. J. I. (2023). How Do Personality Traits Influence the Behavioral Intentions of Gen-Z Tourists? *Market-Trziste*, 35(2), 145–163. <https://doi.org/10.22598/mt/2023.35.2.145>
- Wibowo, A., & Santoso, J. T. (2024). Bottled Water Purchase Decisions: A Study of Brand Image as a Green Marketing Medium in Purchase Decisions. *International Journal of Supply and Operations Management*, 11(1), 83–99. <https://doi.org/10.22034/IJSOM.2023.110194.2961>
- Wulandari, P., & Widodo, A. (2018). Pengaruh Green Marketing Mix terhadap Keputusan Pembelian Konsumen Produk Tupperware di Samarinda The Influence of Green Marketing Mix on Consumer Purchase Decision of Tupperware Products in Samarinda. *E-Proceeding of Management*, 5(1), 119–130.
- Yousaf, Z., Radulescu, M., Sinisi, C. I., Serbanescu, L., & Paunescu, L. M. (2021). Harmonization of green motives and green business strategies towards sustainable development of hospitality and tourism industry: Green environmental policies. *Sustainability (Switzerland)*, 13(12). <https://doi.org/10.3390/su13126592>
- Yu, S., Zheng, Q., Chen, T., Zhang, H., & Chen, X. (2023). Consumer Personality Traits vs. their Preferences for the Characteristics of Wood Furniture Products. *BioResources*, 18(4), 7443–7459. <https://doi.org/10.15376/BIORES.18.4.7443-7459>