Evaluating the Effects of Green Marketing on Brand Image and Consumer Purchase Intention

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Abstract

This research assesses the effect of Green Marketing Strategies on Brand Image and its impact on consumer purchase intention. As the environmental awareness is rising, businesses started to implement green marketing in order to attract environmentally conscious consumers. Based on data of 283 respondents and analysed using Structural Equation Modelling (SEM), the study further indicates that effective green marketing adds value to brand green image while also positively influencing consumer purchase intention towards eco-friendly products. Discovering consumer behaviour is to gain practical implications for companies that aspire to insert sustainability into their marketing strategy, as the result shows green brand image could play a very important role in shaping consumer purchase intention and actually build sustainable competitive advantage from here. The present study also emphasizes important and indispensable parts of green marketing and sustainable consumption, especially brand loyalty and trust.

Keywords: Green marketing, Brand Image, consumer purchase intention.

1. Introduction

An evolving attitude about the environment is reshaping consumer expectations everywhere, and a desire to only purchase sustainable products or services is on everyone's minds. Consequently, Business is being adapted to try out marketing practices as environmental responsibility, green strategy involving environmentally friendly approach. Put simply, green marketing is all about more than just the eco-friendly credentials of a product: it also looks at positioning an entire brand as one that takes sustainable action.

The main objective of this research paper is to investigate the impact which green marketing has on brand image and its subsequent effect upon the consumer purchase intention. More precisely, this research will address two main questions: (1) How does green marketing influence consumers' perceptions of a brand´s environmental responsibility? and (2) To what extent does a favourable green brand image lead to the purchase of environmentally friendly products?

As consumers are getting more conscious about environmental impacts, there arises the challenge for businesses to align their strategies with sustainability. Consumers are becoming increasingly more aware of environmental concerns and businesses need to make sustainable marketing a priority if they want to keep up. To address this gap, we focus on the impact of green marketing and investigate brand loyalty as mediator between positive dimensions of sustainability communication- duty fulfilment, information efficiency on purchase behaviour.

This research investigates the linkage among green marketing, green brand image and consumer purchase intention illuminating how companies can sharpen their environmental product to stimulate environmentally friendly buying other than purchasing effect.

The subsequent sections will present a literature review, disclose the investigative methodology, and results revealing that green marketing is influential for both brand image as well associated consumer behaviour. Towards the end, we will wrap up by giving a few strategic recommendations to businesses looking at including more of sustainability in their marketing approaches for better consumer engagement.

2. Literature Review

The growing worldwide consciousness on environmental issues spurred the rise in consumer demand for sustainable products and ways, paving way to businesses employing green marketing & sales efforts. Green marketing is one of the major strategies in promoting environmentally sustainable products, services and practices this day. In recent years, from an academic perspective and a managerial viewpoint alike, green marketing has become a topic of great interest when considering its effects on consumer behaviour in terms of brand image and purchase intention.

Existing literature has made it evident that green marketing is instrumental in building environmental credibility and corporate image of a company. View Green marketing as an effort to promote products or service that is supposed not spoil or damage environment, has been proven positively significant against consumer purchase intention as well the company overall corporate reputation. The reason for this is in large part that consumers are more socially and environmentally responsible nowadays, seeking companies who reflect those values. Consumers, as Kumar and Gupta (2022) argue, demonstrate a natural affinity towards brands that endorse sustainability because their beliefs are emotionally ingrained in the way they want to behave levering nature. The demand for sustainable brands is not only a fad but also in-built when it comes with the consumer purchase mechanisms.

This is also in line with a study conducted by Huang (2021), which ascertained that green marketing campaigns, could lead to an increase of consumers' perceptions and favorable attitudes toward sustainability when emphasizing environmentally friendly practices and principles. Brands who participate in green ways of working are also more likely to be recognised by customers (especially those with an eye on the environment). Such recognition frequently translates into brand loyalty, with their customers remaining faithful to the company, due its green credentials. These campaigns not only target the rational side of consumers but also resonate with their emotional and environmental inclinations to nature conservation and sustainability.

2.1 Green Marketing and Image of the Brand

Literature review on green marketing and Brand Image Such a brand impression is very important in affecting consumer attitudes toward that brand as well as the products for companies to create their "green" image through selling green, since literature has shown firms engaged with this type of marketing activity can achieve firm level success. In a highly competitive marketplace, you have an added advantage over rival brands if you are known for being eco-friendly and the image of saving planet earth will get those brownie points from environmentally conscious consumers making their purchasing decision. According to the literature of Chen and Chang (2013), doing green marketing allows customers distinguish that

brands are trustworthy. Larger than the product itself, these are brand experience perceptions and positioning. The positive link between practices of green marketing and brand trust points to the conclusion that environmental legitimacy is a significant factor in contemporary consumer-brand relationships. In addition, presenting this green image can lead to an increase in the brand at equity over time and into continued patronage beyond mere purpose-fit as we know that more consumers are willing to align their consumerism with what they feel it is valued by them.

2.2 Green marketing and purchase intention

It indicates the green marketing affect on consumer acquirement plan that exceeds the invention of an awesome identity image. In various studies done to check the impact of green marketing on consumer purchase will some factors like perceived value, trust or environmental consciousness help consumers in their green product choice. So, many researchers wish to explain eco-purchasing intentions from the following components: attitudes toward behavior, subjective norm and perceived behavioral control which are shown in Ajzen (1991) well known Theory of Planned Behavior. Greenproduct-buying behaviour, positive attitude towards green products, norms on sustainability by social influence can producedby this theory.

This internal motivation of consumers is further explored through Self-Determination Theory (Ryan & Deci, 2000) which can explain how personal values related to sustainability influence eco-friendly behavior. Drivers of this behavior are consumers who view their product purchases as a symbol for the degree to which they have engaged in promoting sustainability — so green products and brands become more attractive. This intrinsic motivation emphasises the need to build a deeper bond with brands by having marketing strategies reflect consumer eco-values.

The concept of PCE (Perceived Consumer Effectiveness), or the belief that an individual action makes a difference on environmental protection, is other relevant factor for consumer purchase intention. Similarly, Roberts (1996) noted that consumers with higher levels of PCE are more likely to be attributes green products -- such as light bulbs or other label-known environmental products -- in their purchasing decisions because they think what they do makes a difference. This feeling of efficacy manifests itself in pro-environmental consumption behaviors as consumer feel empowered by their ability to bring about environmental outcomes. Thus it can be seen that more green marketing strategies to increase consumers' sense of personal efficacy should be adopted as they could lead to a larger market for greeen products.

2.3 Brand Image and Purchase Intention

Various studies have conducted empirical tests on the link between green marketing, brand image and purchase intention. For instance, Kotler et al. For example, prior research by Elham & Ahmad (2010) and Eid & El-Gohary 2011 empirically explored green marketing influence on brand image with purchase intention for using the concept in different sectors. Rahbar and Wahid (2011) in their research paper have investigated the significant impact of explicit green marketing strategies on consumer attitudes towards brand leading them to purchase decision as well. The more the consumers associated a brand with Green, the higher their intent to purchase front that specific one. This concords with the general agreement that a positive green brand image increases consumer trust and positively affects purchase intent.

2.4 Impact of Green Marketing

Green Marketing and Brand Image: A literature Review There are abundant evidences on the effects of green marketing towards brand image, consumers purchase intention with numerous research arguing against While an increasing number of studies validate debates in favour right at article end.

Alamsyah et al. The findings of Öztig (2020) revealed that environmental packaging, as a component part of green marketing influence on consumer perceptions about brand credibility and purchase intention especially for millennial generation who would like to follow into market trends towards sustainability.

Nguyen et al. (2022) stresses the importance of transparency in green advertising and indicates that transparent communication concerning a company's environmentally friendly services will not only increase trust but also enhance consumers' bullish attitude towards purchasing behavior as well as strengthen further brand loyalty on long run.

Zhang & Zhao (2019) indicated that green labels influenced consumer purchasing profiles. Green labels are critical for helping consumers link their beliefs about the environment with the promised eco-benefits, encouraging purchase intention.

Li et al. Research conducted in China (2021) found that green marketing does not only improve brand image, but also reduces consumer price sensitivity. The results of this study and a previous one by Van Vogt et al. (2019) suggest that consumers are willing to pay higher prices for products with improved environmental attributes than those without them in order to become more responsible towards the environment.

Tariq et al. Literature on corporate social responsibility and green marketing (2020) highlighted that the incorporation of green marketers drives organization image in a positive direction thereby fostering more confidence for buyers, who are also loyal to the product brand.

Chaudhary & Bisai (2018) indicated that there is a mediating effect of green product knowledge on the relationship in between green marketing and purchase intentions. Those with more knowledge in sustainable products were not motivated to make green purchases over a consumer without the same base level of understanding, highlighting that efforts at educating consumers are vital.

Green marketing which is very useful to differentiate brands in a highly competitive market and the claim supported by Dangelico & Vocalelli (2017). Green marketing strategies are increasing market share while providing a competitive advantage in sectors where sustainability is an emergent issue.

Arslan et al. (2019) found that well-communicated green product attributes develop perceived product quality. This perception moderated brand evaluations and purchase intentions of the invested products, thus supporting the role marketing efforts which highlight environmental benefits (or consequences) accompany regarding product investments.

These studies came to an agreement with the effectiveness of green marketing in general as being a tool that had fairly strong impact on brand equity, consumer trust and purchase intention. With consumers increasingly eco-conscious, and legislative pressures on companies growing fiercer by the day, the influence that green marketing has over brand perception as well as direct impact upon purchase behaviour is only getting stronger. Time and time again,

marketing strategies with sustainability as a foundational element will have the advantage of meeting but also stimulating demand for environmental responsibility in this evolving marketplace.

2.5 Objective of the Study

The primary objective of this study is to evaluate the effects of green marketing on brand image and its subsequent influence on consumer purchase intention. Specifically, the study aims to:

- Assess the relationship between green marketing efforts and consumer perception of a brand's eco-friendliness.

- Examine how an enhanced green brand image influences consumer purchase intention towards eco-friendly products.

- Explore the role of green marketing strategies in promoting brand loyalty and consumer trust in the context of sustainable consumption.

2.6 Hypotheses of the Study

Hypothesis 1 (H1): Green marketing strategies have a positive and significant effect on a brand's green image.

Hypothesis 2 (H2): A positive green brand image has a significant and positive influence on consumer purchase intention towards eco-friendly products.

3. Research Methodology

Methodology The research is a quantitative survey, where the questionnaire has a structure that will be implemented in Quick Pulse from 283 Toes. It's a cross section of consumers from various demographic groups. Items associated with green marketing, brand image and purchase intention scale all used 5-point Likert scale. Structural equation modelling (SEM) is used to analyse the results and test the relationships theorized. Confirmatory Factor Analysis (CFA) will be used to measure the reliability and validity of constructs. Additionally, this technique guarantees that the data being collected is of high quality so as to check the reliability and validity in the support to test out research questions. Sampling methods, data collection procedures, and analysis using statistical tools are also part of this section.

4. Data analysis and results:

4.1 Demographic details of the respondents (N=283)

Table 1. Demographic details

Demographic Variable	category	frequency	Percentage
Gender	Male	120	42.4
	Female	150	53.0
	Non-binary/Other	13	4.6
Age	18-24 years	70	24.7

	25-34	110	38.8
	35-44	56	19.8
	Above 45 years	47	16.6
Education level	High school	30	10.6
	Undergraduate	145	51.2
	Post-graduate	70	24.7
	Professional	38	13.4
Occupation	Student	60	21.2
	Employed	160	56.5
	Freelance, Business	40	14.1
	Unemployed	23	8.1
Income (INR)	Less than 200000	50	17.7
	200001-400000	100	35.4
	4,00,001 - 6,00,000	80	28.3
	Above 6,00,000	53	18.7

Source: Primary source

Table 1 on the demographic profile of respondents (N = 283) is a balanced distribution by gender Sex was as follows: Women 53% and Men 42.4%. Most of the respondents (38.8%) are aged between 25-34, followed by 24.7% in age group 18-24. The age-wise breakup of respondents was 19.8% in the age group of 35-44 and people aged more than or equal to45 years were tabulated at16.6%. Nearly half of the respondents are undergraduates (approximately 48.9%), and postgraduate-level graduates account for an even smaller percentage13%. Another group, just 13.4%, are professional and the third larger with a high school education at 10.6%.

Occupation wise, most of the respondents (56.5%) are employed and 21.2% being students. Freelancers or self-employed account for 14.1% followed by unemployed at 8.6%. Regarding income distribution, 35.4% of the respondents fall in ₹2, 00,001 — ₹4lakhs range followed by those who earn between₹400001-600000 i.e28.3%. A total of 17.7% and 18.7% had incomes below ₹2,00,000/-and above₹6,00,000/-. This range of demographics gives a wide snapshot into various consumer segments that vary by socioeconomic status, education level, and career title.

4.2 Reliability and Validity: The items in the model exhibited factor loadings exceeding 0.70, thereby reinforcing the reliability of the constructs. AVE values exceeding 0.50 validated

convergent validity, indicating that the constructs effectively represent their intended characteristics. The values of Maximum Shared Variance (MSV) were observed to be lower than those of AVE, which suggests the distinctiveness of the constructs and confirms discriminant validity (Fornell & Larcker, 1981). The findings indicate that the measurement model exhibits reliability and robustness, ensuring that the data and its interpretations are precise.

Table 2: Reliability and validity of constructs

Construct	Items	Factor loadings	CR	AVE	MSV
Green marketing	GM1	.889	0.889	0.727	0.370
	GM2	.782			
	GM3	.849			
Green brand image	GBI1	.845	0.911	0.720	0.411
	GBI2	.792			
	GBI3	.765			
	GBI4	.880			
Green purchase intention	GPI1	.846	0.921	0.744	0.411
	GPI2	.825			
	GPI3	.849			
	GPI4	.803			

Table 2 provides a summary of evaluations based on factor loadings, Composite reliability (CR), Average variance extractors, and Maximum shared variances for both the constructs used in this study to assess their reliabilities and validities. For the item loadings of Green Marketing, except for whatever one other mechanical assembly which is 0.782 but still passes away from good reliability, however at that point crisis face levels are taken care off; through a CR relating to 0.896, making this abnormal grade about anybody becomes > 7. The convergent validity of the construct is further proved by its high AVE value (0.727), suggesting that green marketing was properly measured (that items did effectively capture other observed indicators in that particular concept).

The Green Brand Image construct demonstrate factor loadings from 0.765 to 0.880 with a CR of.911 which suggests internal consistency, reliability and very good revelation of the construct. Construct validity is verified by an AVE of 0.720, supporting that the items as a whole are measuring what they claim to measure.

In the same way, high reliability is shown for Green Purchase Intention construct (factor loadings from 0.803 to 0.921 and CR = 0.921). AVE of 0.744 is greater than established threshold value (i.e.,>.50) it shows that items are valid measure to construct. Moreover, AVE values are substantially above the MSV for all constructs indicating convergent validity as well

as demonstrating that each construct falls under its own category. Taken together, these results suggest that the measurement model is both reliable and valid concurrently supporting both our data collection and interpretations made in this study. Figure 1 shows the measurement model for women employee
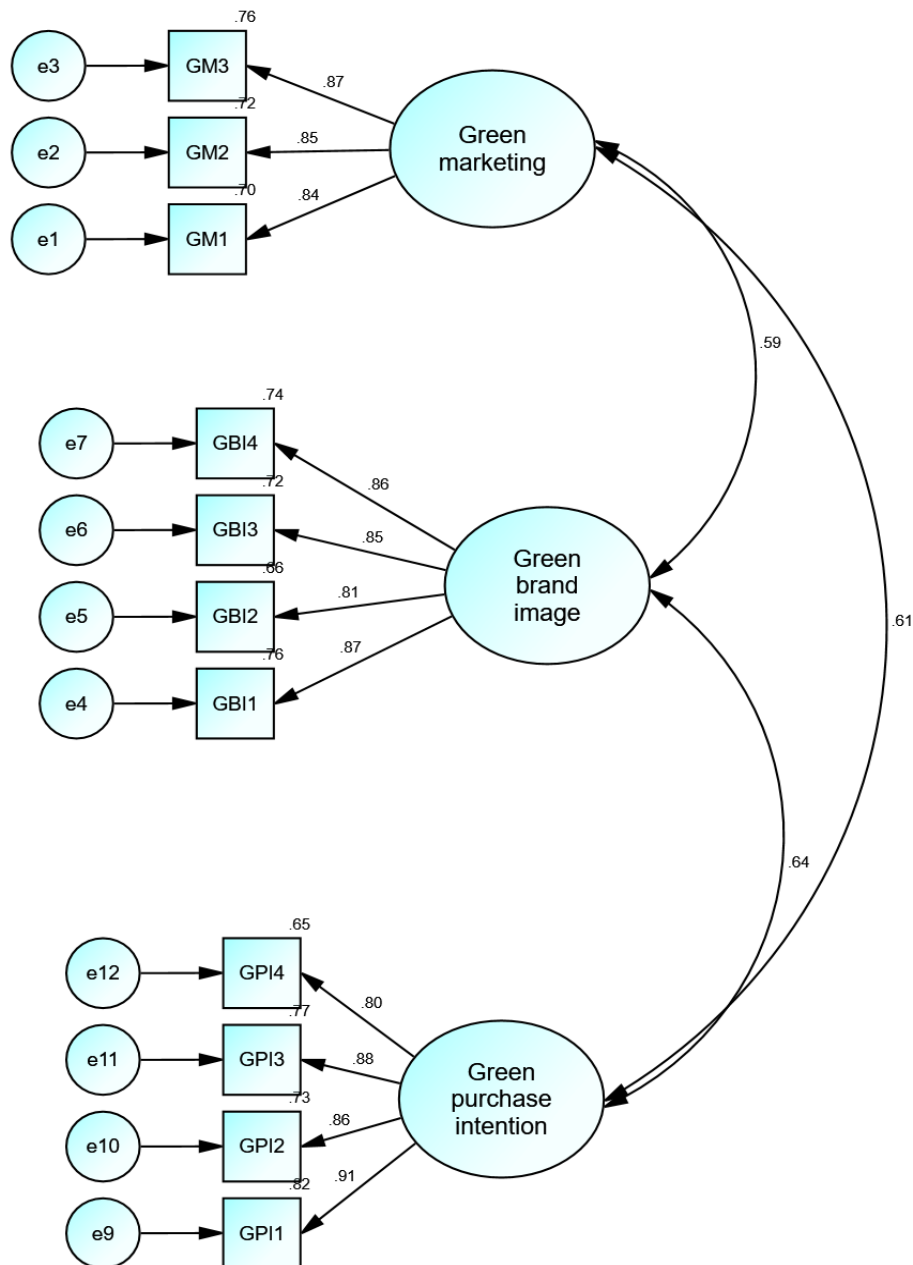

Figure 1. Measurement model for women employee well-being

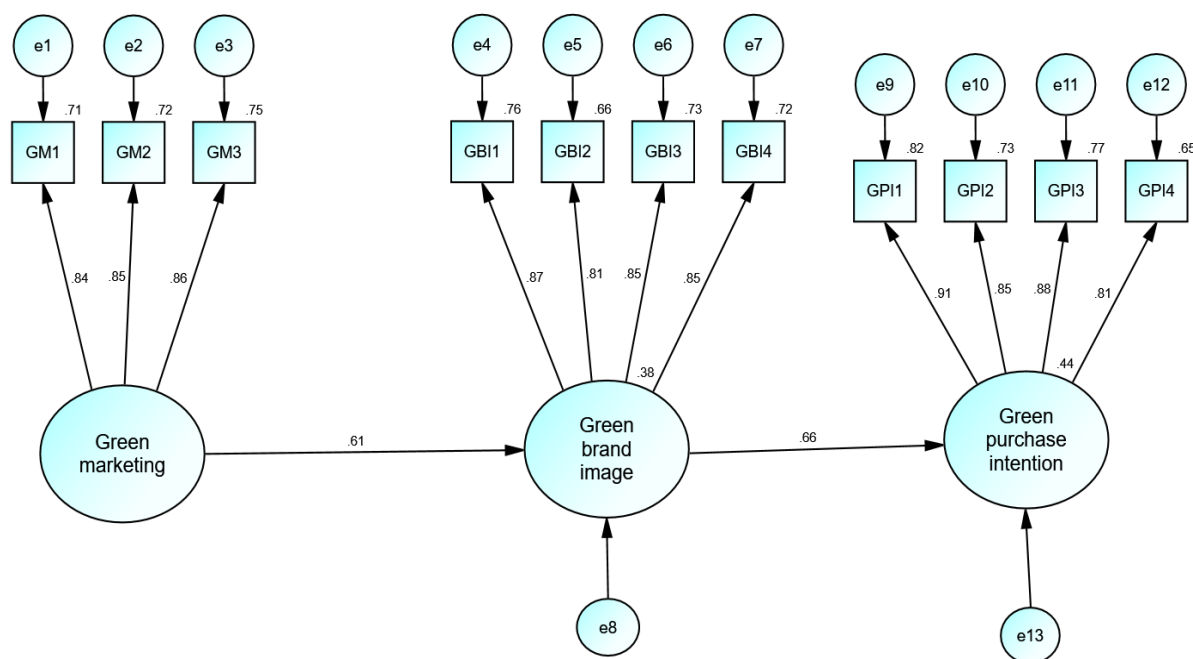## 4.3 Hypothesis testing using SEM

Figure 2: Structure model for women employee well being

Figure 2 shows the Structure model for women employee well being

Table 3. Hypothesis results

Hypothesis	Standardized regression weights	Standard error	Critical ratio (t value)	P	Result
Green marketing→ Green brand image	0.582	0.067	8.783	0.000	H1 supported
Green brand image→ Green purchase intention	0.636	0.057	10.352	0.000	H2 supported

Table 3 results show that green marketing positively affects the image of green brands, with a standard deviation of 0.067 and a standardised regression weight (β) of 0.582. A p-value of 0.000 and a critical ratio (t value) of 8.783 are presented. With a t-value higher than the critical threshold and a p-value lower than 0.05, we can conclude that Hypothesis 1 (H1) is correct. A

more positive impression of a green brand can be achieved through well-executed green marketing campaigns.
Furthermore, there is a positive and statistically significant correlation between consumers' perception of environmentally friendly brands and their intention to buy such products. The data shows a standardised regression weight (β) of 0.636, a standard error of 0.057, a critical ratio (t value) of 10.352, and a p-value of 0.000. Hypothesis 2 (H2) is also supported because the t-value is greater than the crucial value and the p-value is less than 0.05. This suggests that customers are more likely to make environmentally conscious purchases from brands with a great reputation for sustainability.

Table 4: Model fit indices

Measure	Estimate	Threshold
Normed Chi-Square (CMIN/DF)	2.784	Between 1 and 3
Comparative Fit Index (CFI)	0.967	> 0.95
Goodness of Fit Index (GFI)	0.932	> 0.90
Normed Fit Index (NFI)	0.950	> 0.95
Tucker Lewis Index (TLI)	0.956	> 0.95
Root Mean Square Error of Approximation (RMSEA)	0.068	< 0.08

Source: Primary survey

The model fit indices represented in Table 4 suggest a reasonable fit for the hypothesized model according to established guidelines and standards. The normed chi-square (CMIN/DF) value of 2.784 was acceptable given that it hovered between the recommended range of 1 and <3, implying a moderate level of model complexity for panel data (Van et al.,2008). The Comparative Fit Index (CFI) score of 0.967 was over the threshold of 0.95, representing a good model-data fit for this reason [14]. Furthermore, the Value of Goodness of Fit Index (GFI) is 0.932 was also more than a threshold value greater or equal to.90indicating that model's goodness fit as overall adequacy [60]. The Normed Fit Index (NFI) = 0.950 and the Tucker-Lewis Index (TLI) = 0.956 also exceed >.95, which reinforce a robust model Last, the Root Mean Square Error of Approximation (RMSEA) value 0.068 and is below its cutoff upper limit of. Taken together, these indices suggest that the model is correct in form and has a reasonable fit to data (supporting ecological validity of underlying theory).

4.4 Discussion and Implications

The present investigation has pinpointed the elements that affect green purchase intention, establishing that both green marketing and green brand image serve as significant positive influences on consumer behaviour, accounting for 44% of the variance in green purchase intention. The analysis indicates that successful green marketing strategies significantly improve the perception of a green brand image. This finding is consistent with the study conducted by Singh and Gupta (2023), highlighting that effective green marketing not only encourages environmentally friendly practices but also enhances consumer trust in brands.

On the basis of standardized regression weight (0.582) and t-value with critical ratio 8.783, the study attests that green marketing has a positive highly significant effect over green brand image. The p-value with 0.000 indicates that effective green marketing campaigns can positively influence the intentions of consumers about brand loyalty towards a carefully chosen sample brands' environmental responsibility This evidence supports hypothesis 1, companies who focus their attention on developing and implementing green marketing strategies will have a positive effect to build an image of being concerned over the environment.

Then the results also revealed a high correlation between green brand image and green purchase intention (0.636>10.352). The statistical significance level of this relationship (sig Value 0.000) supports H2, which implies that respondents who hold a positive attitude toward green brand are likely to make purchase decisions for environmentally friendly items This is consistent with what had been previously studied and known: the importance of green marketing in influencing brand image, which are important determinants for purchase consideration. Furthermore, the notable effect of a green brand image on the intention to make eco-friendly purchases aligns with the conclusions drawn by Lee and Kim (2023), emphasising that a robust green brand image enhances consumers' readiness to buy environmentally sustainable products.

Organisations ought to prioritise the development of engaging eco-friendly marketing strategies that align with consumer values, ultimately strengthening their sustainable brand reputation and encouraging a robust intention to buy environmentally friendly products. Organisations should prioritise investing in thorough green marketing strategies that clearly convey their sustainability initiatives. Companies must create genuine messaging that showcases their dedication to environmental responsibility, as this can greatly enhance their green brand image. Furthermore, improving brand visibility via focused marketing strategies can significantly impact consumer intentions regarding eco-friendly purchases. Ultimately, it is essential for managers to focus on aligning marketing strategies with sustainable practices in order to foster a favourable green brand image. By cultivating a sincere dedication to environmental sustainability through impactful green marketing strategies, organisations can greatly improve consumer purchase intentions and encourage a transition towards more sustainable consumer behaviour.

5. Conclusion and Future research

The study concludes that green marketing plays a pivotal role in enhancing brand image, which in turn drives green purchase intention. Businesses should leverage green marketing strategies to build consumer trust and loyalty by clearly communicating their environmental efforts. Future research could explore the impact of green marketing across different industries or investigate the role of social media in influencing consumer perceptions of green brands. Additionally, future studies could expand on the current research by examining the long-term effects of green marketing on brand loyalty and exploring how different demographic factors influence green purchase behaviour.

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