





“Assessing the influence of green marketing on consumers’ word-of-mouth through the mediating effect of brand equity dimensions”

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ASSESSING THE INFLUENCE OF GREEN MARKETING ON CONSUMERS' WORD-OF-MOUTH THROUGH THE MEDIATING EFFECT OF BRAND EQUITY DIMENSIONS

Abstract

Changes in consumer behavior are influenced by green marketing and brand equity dimensions. Green marketing places high concerns on consumers' environmental attitudes as a determinant of purchases and word of mouth. Green marketing increases brand awareness, fosters consumer loyalty and enhances reputation. The study aims to assess the influence of green marketing on consumers' word of mouth through the mediating effect of brand equity dimensions. This descriptive causal research establishes a cause-and-effect relationship between variables, employing a quantitative research method. The questionnaire was deployed to collect the data and was pre-tested using a pilot test. 495 Lebanese consumers were included in the sample, which was collected using the convenience sampling technique. The results validated that green marketing reinforces consumers' word of mouth ($\beta = 0.663$). It has a strong influence on brand equity ($\beta = 0.899$), brand loyalty ($\beta = 0.772$), brand trust ($\beta = 0.663$) and perceived quality ($\beta = 0.353$). The results corroborated that brand trust has the strongest mediating in this study (SE: 0.950; CR: 6.602; $p < 0.01$). Brand loyalty, while not a significant mediator in this relationship (SE: 0.012, CR: 0.872, $p: 0.383 > 0.005$), still plays a crucial role in brand management. This study concludes that giving brands a voice will appeal to the target audience and keep them committed. It highlighted the need for managers to review their loyalty strategies.

Keywords

green marketing, word of mouth, brand equity, brand trust, brand association

JEL Classification

M14, M31

INTRODUCTION

Domestic and international brands are facing growing challenges of increasing competition and changing consumer behavior. As consumers become more environmentally conscious, brands must adapt to meet their evolving expectations. However, many struggle to keep pace, encountering significant marketing obstacles along the way. Failing to align with consumer needs increases consumer dissatisfaction. Unsatisfied consumers with purchased items share their brand experience with others. Negative consumer word-of-mouth resulting from dissatisfaction adversely influences other consumers' purchasing decisions and the brand's reputation in the marketplace when ignored (Pancić et al., 2023). Negative recommendations represent an organizational weakness and cause deficiencies in brand trust and loyalty. In an effort to regain consumer trust and strengthen brand loyalty, brands have turned to green marketing as a strategy. However, not all brands are sincere in their efforts. Some brands engage in deceptive practices known as "greenwashing," where they falsely claim to



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be environmentally responsible (Qayyum et al., 2023). These fake practices erode consumers' trust and increase complaints and boycotts (active resistance). Consequently, a lack of genuine commitment to green marketing leads to a value-action gap (Bladt et al., 2024).

Meyer (2023) highlighted the relevance of the value-action gap theory in understanding consumer behaviors. The value-action gap highlights the challenge for brands to bridge the gap between consumers' environmental values, their actual purchasing behaviors, and word-of-mouth recommendations (Ding et al., 2023). In other words, even if consumers express their preference for green brands (values), a gap exists between their actual behavior (action) due to several barriers, such as higher costs and distrust of environmental claims (Yang & Chai, 2022).

These consolidated facts raise two questions: What is the statistical influence of green marketing and brand equity on Lebanese consumers' word of mouth? To what extent do brand equity and its dimensions mediate the relationship between green marketing and consumers' word of mouth?

The choice of the study's variables was not arbitrary. Strong motivation to advance theoretical understanding of word-of-mouth as consumer behavior resulting from successful green marketing and brand equity justifies this action. This article manifests theoretical and practical significance. Theoretically, this paper helps close the gap in the literature by proposing a new conceptual framework. Practically, it offers brand managers valuable insights into the implementation of green marketing, brand equity and word-of-mouth. An effective implementation helps them build stronger, credible brands in an increasingly sustainability-driven market.

1. LITERATURE REVIEW AND HYPOTHESES

Brands implement green initiatives, a form of marketing that promotes products or services based on their environmental benefits. This type of organic promotion has significant power in luring prospective customers, increasing revenues, and securing its long-term viability. In response to the ongoing changes in consumer demand, brands are restructuring their operations to implement green marketing strategies and build sustainable brand equity. Marketers are committed to green (sustainable) marketing and branding to differentiate their brand names (Nguyen-Viet & Nguyen Anh, 2022). However, despite extensive research on green marketing and brand equity, limited studies explore the influence of green marketing on consumer word-of-mouth (WOM) through the mediating effect of brand equity dimensions.

Green marketing promotes sustainable initiatives and reinforces environmental commitment. Green marketing techniques are implemented to transition from revenue-driven to ecologically responsible by introducing environmentally friendly products (Vilkaite-Vaitone et al., 2022).

Organizations frequently participate in recycling initiatives and are attentive to waste management. Brands inform customers about environmental protection by donating to environmental causes (Alkhatib et al., 2023). Simanjuntak et al. (2023) expostulated that brands communicate about the ecological characteristics of their products, which has led to the growth of a large segment of well-informed green consumers, introducing change in consumer behavior (Lee et al., 2021).

Brands use green marketing to raise awareness among their customers and show them that they are seeking to contribute to solving environmental problems (Correia et al., 2023). Consumers identify these brands using terms such as "organic," "eco-friendly," "recyclable," or "sustainable."

Green marketing is a credible source of brand trust, especially as consumers become warier about ethical and responsible messages (Nguyen-Viet, 2023). Going green can help gain consumers' trust and loyalty. Shabbir et al. (2020) verified that green marketing boosts brand credibility, decreases adverse environmental effects, targets consumers aware of ecological issues, and guarantees brand viability (Jamal et al., 2023).

Brand equity is the value that a brand adds to a product, possessing physical attributes, emotional value, and financial value that support the manufacturer's identity. A brand's equity can be evaluated using various factors. Major indicators comprise perceived quality (price sensitivity, business value, and sales), visibility (the proportion of customers who are adequately aware of the brand), positive brand association, consumer satisfaction, loyalty, and trust. Hence, brand association, awareness, perceived quality, loyalty, and trust are five aspects of establishing brand equity (Dangaiso, 2024). Awareness refers to consumers' recognition and recall of a brand. A well-known brand with wider exposure encourages consumers to talk about it spontaneously. The research shows that high brand awareness promotes word-of-mouth because consumers like to discuss popular brands. Additionally, when consumers are familiar with a brand, they feel more confident in recommending it (Majeed et al., 2021).

Perceived quality, which is the buyer's belief that the product can meet their expectations, is a key factor in consumer decision-making. The perceived quality is affected by insights from advertising and promotion. When perceived quality is high, consumers are more likely to have a positive experience, which encourages sharing and recommendation through WOM (Dalman et al., 2020). Chi et al. (2020) show that brands perceived as offering higher quality generate positive conversations because consumers want to share experiences that have satisfied them. Liu and Jiang (2020) verified that green marketing initiatives contribute to raising perceived quality.

Brand associations are developed based on consumers' brand perception (innovative, user-friendly) and because of using and experiencing the brand (Ertemel & Civelek, 2020). Strong, positive, and unique associations with a brand, such as ethical values, lifestyle, or perceived benefits, increase the likelihood of consumer discussions. Emotional associations with a brand – for example, a brand perceived as environmentally friendly – drive positive WOM because consumers like to share brands that align with their values (Hendratta et al., 2021).

Brand loyalty, as defined by Chahal et al. (2022), is the intention of consumers to recommend their favorite brand. This loyalty is based on two criteria: repeated purchases and consumer recommendations. Loyal customers who have a strong attachment to a brand are more likely to buy again and become brand ambassadors. Saputra (2022) shows that loyal customers generate stronger word-of-mouth because they actively share their experiences with others. This emphasis on brand loyalty makes the audience feel valued and appreciated for their role in promoting the brand.

Nguyen-Viet (2023) discussed how a brand's ability to inspire trust is influenced by its legitimacy and effective implementation of sustainable practices. Customer trust in brands affects their spontaneous behavior. Consumers' trust in brands influences their propensity for word of mouth (Ertemel & Civelek, 2020). The more consumers trust a brand, the more word of mouth will spread (Correia et al., 2023). Brand trust plays a central role in WOM. Consumers recommend a brand they trust because they perceive that the brand will deliver on its promises. Hendrata et al. (2021) show that trust strengthens WOM and improves the quality of recommendations. Thus, brand equity aspects from consumers' perspectives assisted by green marketing help spread positive word of mouth (Wibowo & Wulandari, 2022).

Customer-Based Brand Equity (CBBE) guides marketers in predicting and anticipating consumers' wants and needs. The goal is to implement tactics to maximize brand equity through customer experience to build relationships and create an emotional connection with them (Park & Namkung, 2022). The Keller and Aaker models are two models used to measure CBBE. Keller is a pyramid-shaped model that aims to help brands boost their identity to the point of "resonance." Each stage of the customer journey generates thoughts, emotions and beliefs. Reaching the level of resonance offers brand opportunities in terms of customer loyalty and brand reputation (Tasci, 2021). Consumers become ambassadors at this point: customer experience, service, products or shared values leverage resonance. Keller (2016) translates those results into strong loyalty, brand superiority over competing brands, prioritizing the brand over the competition, and actual recom-

recommendations to friends and family. Results verified brand equity as a mix of awareness, associations, and loyalty (Reddy & Kavitha, 2019).

Social identity theory endorses the relationship between these constructs. Green brands allow consumers to express their ecological identity and social values. When a brand, through its green marketing practices, is perceived as reflecting these values, its brand value becomes a social identification link for consumers. This pushes them to share this brand with their social network to reinforce their personal and collective identity, which boosts WOM (Ahmad et al., 2023).

Green marketing influences five dimensions of Aaker's brand equity model. First, green marketing increases a brand's visibility by differentiating it through its commitment to sustainability. Consumers become aware of environmentally friendly brands, which increases brand recognition (Mehdikhani & Valmohammadi, 2022). Second, consumers associate green practices with higher standards, strengthening the perception of the brand as responsible and trustworthy. Third, advertised green values create positive associations in consumers' minds. Brands that adopt sustainable strategies are perceived as ethical, reinforcing their image (Amer & Ezz, 2023). Fourth, consumers committed to the environment are loyal to brands that align with their values. Green marketing reinforces this loyalty by offering products that match their ecological concerns. Lastly, green marketing builds brand equity by improving brand image among environmentally conscious consumers, which increases their engagement and trust. An increase in brand trust encourages word-of-mouth. Consumers recommend a brand that is perceived as authentic in its green practices (Diryana et al., 2017).

Green marketing practices enhance brand equity, which acts as a mediator between these practices and consumer word-of-mouth. Brand equity is an organizational asset that influences consumer behaviors, including their propensity to promote a brand through word-of-mouth (Ruangkanjanases et al., 2020). Green marketing practices increase consumers' perceived value of a brand by improving its awareness, perceived quality, positive associations, and consumer loyalty. These dimensions

reinforce the perception of the brand as socially responsible and environmentally friendly. Thus, this increased perception of value encourages consumer recommendations, thus reinforcing positive WOM (Moise et al., 2019).

Bekk et al. (2016) justified that brand equity moderates the relationship between green marketing and consumers' word-of-mouth. Thus, advertising ecologically friendly corporate initiatives ought to increase positive customer feedback. Green marketing directly influences brand equity and consumer word-of-mouth (WOM), drawing on growing environmental awareness and demand for sustainable practices (Huang et al., 2024). It actively stimulates positive conversations (word-of-mouth). Bladt et al. (2024) and Meyer (2023) show that applying Aaker's brand equity model in the context of green marketing reveals an overall enhancement of brand equity. Consumers attracted to environmentally friendly products become ambassadors by recommending these brands through word-of-mouth.

Zhao et al. (2023) attested that word-of-mouth is a fundamental marketing tool. Word-of-mouth is a strategy that uses social contacts to spread the word about the brand's goods and services. Customers with a great brand experience tell their friends and relatives about it willingly. Maisam and Mahsa (2016) interpreted that consumers base their decisions on the advice of their friends. Therefore, recommendations from friends and family are seen as trustworthy. Word-of-mouth advertising has shifted largely without difficulty in the digital age (Xu et al., 2020).

Word-of-mouth marketing aims to disseminate positive feedback and opinions about a brand's name, goods, and services. It refers to in-person interactions based on mutual trust. It is an affordable method of spreading brand awareness among offline and online audiences. Marketers prioritize word-of-mouth in traditional and digital forms as an organic prerequisite (Sun et al., 2021).

Empirical research supports the influence of brand equity dimensions on word-of-mouth. Awareness makes consumers feel more confident in their recommendations, perceived quality and positive brand association drive positive discus-

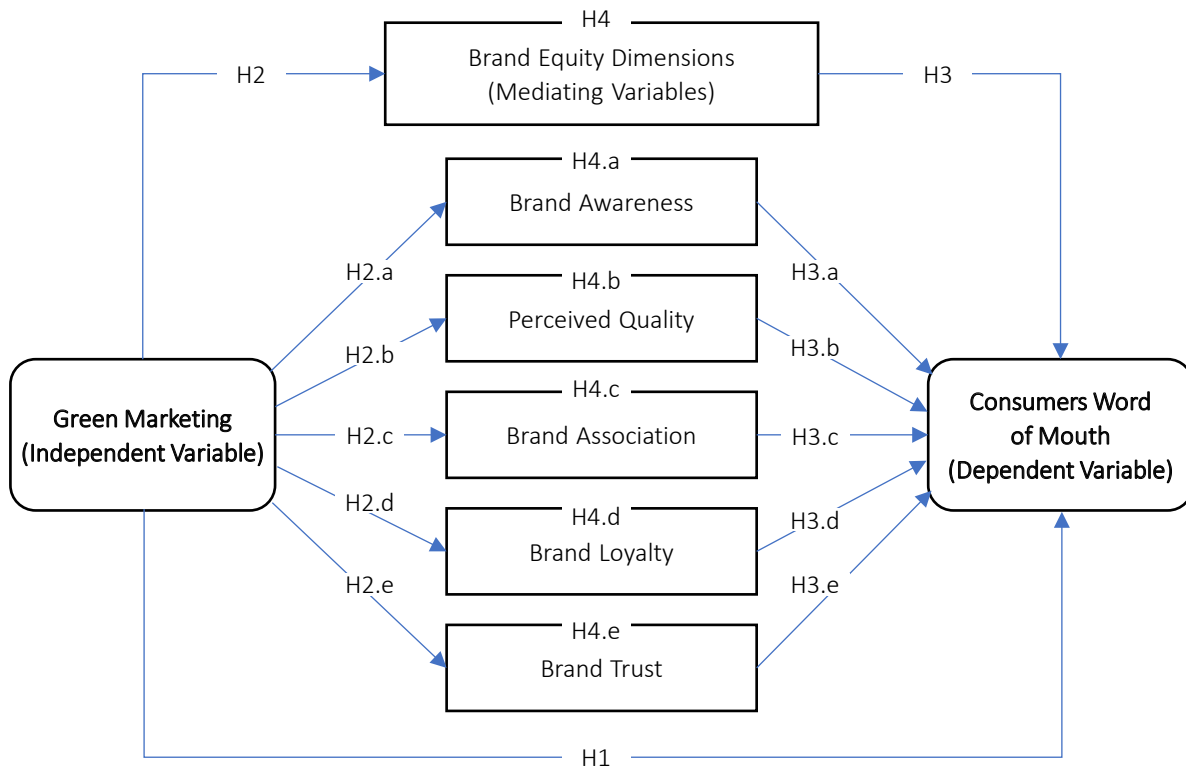


Figure 1. Conceptual framework

sions, and loyalty and trust lead to authentic and engaged recommendations. By combining these dimensions, brands can create an environment that fosters positive WOM, which is often more powerful than traditional marketing efforts. Hence, the objective of this study is to assess the statistical influence of green marketing on consumers’ word of mouth through brand equity dimensions as mediating variables. Therefore, this study evaluates the mediating effect of brand awareness, perceived quality, brand association, brand loyalty and brand trust in the relationship between green marketing and consumers’ word of mouth.

The following hypotheses were framed from past studies:

- H1: Green marketing has a statistically significant effect on consumers’ word-of-mouth.*
- H2: Green marketing has a statistically significant effect on brand equity.*
- H3: Brand equity has a statistically significant effect on consumers’ word-of-mouth.*

H4: Brand equity dimensions mediate the relationship between green marketing and consumers’ word-of-mouth.

At this point, a conceptual framework was developed.

2. METHODOLOGY

The article in question embraces a causal and descriptive design. It describes the causal effect of green marketing and brand equity on consumer word-of-mouth. This type of research gauges the chosen variables and identifies correlations while relying on evidence from the gathered data. Additionally, causal research is essential to establishing a cause-and-effect relationship between variables. This study uses the quantitative research methodology. The questionnaire, a reliable survey tool deployed in this study, was used to gather data.

The survey tool was pre-tested by executives and academic experts, who were requested to analyze the questionnaire for readability and completeness. They determine whether items are suitable

measurements of constructs. This process led to minor changes before the questionnaire's final version was created. The questionnaire was structured to measure variables. The five-point Likert scale was chosen as the measurement scale. This questionnaire contains 42 close-ended questions (items) distributed among variables. The questionnaire items are measured on five-point Likert scale from strongly agree (1) to strongly disagree (5). Items were adopted from the study of Jamal et al. (2023), Ahmed et al. (2023), Bekk et al. (2016), and Huang et al. (2024).

The convenience sampling technique was applied in a non-probability sample. This sampling is selected for its practical accessibility and cost considerations. Selected respondents met two criteria: they were over 18 and available at Lebanese shopping malls (Table 1). The target sample consists of shoppers at Lebanese shopping malls.

Table 1. Demographic characteristics of respondents

		Frequency	Percent
Gender	Male	230	46.5
	Female	265	53.5
	Total	495	100.0
Age	Between 18 And 25 Years	313	63.2
	Between 26 And 36 Years	131	26.5
	Between 37 And 47	51	10.3
	Total	495	100.0
Social Status	Unemployed	64	12.9
	Student	78	15.8
	Employee	165	33.3
	Retired	184	37.2
	Governmental Position	4	.8
	Total	495	100.0
Education Level	No Previous Education	91	18.4
	High School	113	22.8
	Bachelor Degree	105	21.2
	Technical Degree	76	15.4
	Master's Degree	40	8.1
	PHD	70	14.1
	Total	495	100.0

Descriptive and inferential analyses formed the quantitative data examination. SPSS and AMOS (v-26), as statistical packages, were used to analyze the results and test hypotheses. The relationship between the dependent and independent variables was examined. Data processing followed two steps: A Principal Component Analysis (PCA), an

essential step of exploratory factor analysis, was first carried out to explore the validity and reliability of measurement tools. PCA calculates the number of factors to recover based on the eigenvalue criteria. Factors whose eigenvalue projecting values were higher than 0.5 were preserved. Deleted elements had a factor loading of less than 0.5. The Kaiser-Meyer-Olkin criterion determines whether a variable is ready for analysis ($KMO > 0.7 =$ satisfactory) (Majeed et al., 2022). The varimax rotation was applied to test the model's multidimensionality. Varimax rotation yields focused factor scores (orthogonal angles between axes) due to low correlation between the dimensions (0.3). Stages of measurement purification (the elimination of components deemed unnecessary) adhered to two standards. This process is iterative. First, items with a contrast ratio (commonalities) below 0.5 resulting from a structure explanation were disregarded. Second, items correlated with a two-factor axis (difference between two structural coefficients less than 0.4) were eliminated. Each element's removal affects the model structure.

Structural Equation Modeling (SEM) was provided for the second step to test hypotheses. The SEM seeks to confirm the scale adjusted and validate this structure. The second-order analysis explains the relationships between items, while the first-order confirms the global model fitness, testing the hypotheses. It compares the model fitness to a null model by deploying indices to evaluate the improvement, such as NFI and CFI, with a minimum value of 0.9. The GFI, AGFI, and SRMR should have a cut-off value of 0.90. The RMSEA should have a value as close to 0.05 (Bchennaty et al., 2024).

3. RESULTS

This section begins with the empirical results' normality tests, followed by the descriptive statistics and the correlation matrix. It then embraces the results of PCA and SEM. Table 1 denotes the skewness and kurtosis as two statistical tests for normality distribution.

The skewness and kurtosis values were less than 3, as shown in Table 2. Results prove that the data were normally distributed because the value is

Table 2. Normality statistics

Tests		Green marketing	Brand awareness	Perceived quality	Brand association	Brand loyalty	Brand trust	Consumers' word of mouth
N	Valid	495	495	495	495	495	495	495
	Missing	0	0	0	0	0	0	0
Skewness		-.796	-.614	-.387	-.494	-.412	-.613	-.470
Std. error of skewness		.110	.110	.110	.110	.110	.110	.110
Kurtosis		.779	-.317	-.028	-.381	-.373	.224	.069
Std. error of kurtosis		.219	.219	.219	.219	.219	.219	.219

Table 3. Correlation matrix

Variable	Green marketing	Brand awareness	Brand association	Brand loyalty	Brand trust	Perceived quality
Brand Awareness	0.323**	1				
Brand Association	0.003	0.073	1			
Brand Loyalty	0.072	0.042	0.10*	1		
Brand Trust	0.061	0.030	0.214**	0.166**	1	
Perceived Quality	0.321**	0.242**	0.079	0.001	0.059	1
Consumers' Word of Mouth	0.386**	0.403**	0.181**	0.197**	0.374**	0.219**

near zero. Table 3 demonstrates the relationship between green marketing, brand equity dimensions and word-of-mouth. A correlation value of 1 indicates that a variable is always connected to itself. The association between the five elements of brand equity and consumer word-of-mouth was supported by a p-value <0.001. For instance, green marketing is positively correlated with consumers' word of mouth with Pearson correlation of 0.386 and a sig value of less than 0.05.

The Principal Component Analysis (PCA) explored and analyzed construct structures. It determined the structure of observed variables and retained a representative purified number of dimensions. The factorization begins with an initial analysis of validity and reliability. The initial KMO results of variables varied between 0.610 and 0.881 and were satisfactory. Therefore, the results are deemed suitable for the PCA. The measuring scale's strong internal consistency was attested by Cronbach's alpha index score greater than 0.5 and between 0.60 and 0.78. In other words, these two indices sustained the fact that the data are factorizable. Factor analysis results are presented in Table 4.

The PCA analysis reduced the number of components, improving the reliability and validity of the measurement scales. The factor analysis with varimax rotation validated the scale (Bchennaty et al., 2024). It retained 24 items out of 42. Table 5 retained 18 items distributed across five factors, rep-

resenting the brand equity dimensions. Those factors explain 66% of the total variance explained. Table 5 displays the validity and reliability indices for retained items for the factor analysis.

KMO evaluated the sampling's adequacy. The Bartlett test is significant (p <0.05), and the Kaiser-Meyer-Olkin (KMO) statistic is higher than 0.7. For example, the KMO test for word-of-mouth produced an outstanding result of 0.810. As a result of the analysis, it can be shown that all of the component-specific Cronbach's alpha values are over 0.6, which is considered to be acceptable. In other words, items are adequately depicted in every aspect.

The causal path emphasizes the significance of brand equity components as mediators. The direct and indirect effects are assessed using the structural equations method. Structural Equation Model results are depicted in Figure 2.

Fit indices are shown in Figure 2 (RMSEA is near 0.05, and GFI is higher than 0.9). It is also vital to remember that the structural modeling of the effect permitted the enhancement of the scale's attributes. The NFI and CFI are fit indices that display the improvement in the model's overall fit relative to an independent model with a negligible effect from the sample size. The SEM analysis specified that the fit indicators were satisfactory for instance, CMIN/DF = 2.21, p = 0.000, GFI =

Table 4. Component matrix

Variable	Factor loadings	AVE/ determinant	
Green Marketing (GM)			
(GM1) I think green promotions are fake ads to increase sales	0.816	59%/ 0.627	
(GM2) The company supports the use of sustainable and green factors in advertising	0.779		
(GM6) Eco-friendly brands maintain their commitments to protecting the environment	0.733		
(GM4) I only buy socially responsible brands	0.487		
4			
Brand Awareness (BA)			
(BA1) I can identify the Ishtar brand logo among other competing brands.	0.794	66%/ 0.150	
(BA3) I always notice product advertising on social media.	0.752		
(BA4) I am very familiar with the Ishtar company logo and products.	0.688		
(BA2) I can differentiate between eco-friendly brands and their competitors.	0.684		
(BA5) Some characteristics of my favorite brand come to mind when discussing home appliances.	0.542		
Brand Association (BS)			
(BS2) This brand fits with the lifestyle of consumers.	0.690		
(BS1) I associate eco logos of eco-friendly brands with brand logo visibility.	0.650		
(BS5) When I see the Ishtar company logo, I associate environmental logos with eco-friendly brands.	0.637		
(BS6) I can associate eco-brands with innovative marketing practices.	0.613		
(BS3) This brand fits perfectly with my personality as a consumer.	0.611		
Brand Loyalty (BL)			
(BL3) I will always buy this brand, even if there is a cheaper alternative.	0.768		
(BL2) If I cannot find my favorite brand in the store, I will not buy another one.	0.722		
Perceived Quality (PQ)			
(PQ5) The company products are distinguished by their beauty.	0.746		
(PQ4) The brand's products are attractive due to their operational performance.	0.724		
(PQ3) The products sold by Ashtar are highly durable.	0.673		
Brand Trust (BT)			
(BT2) Positive reviews online increase my confidence in the brand.	0.737		
(BT6) I trust the durability of products as a brand.	0.715		
(BT5) I trust the efficiency of this brand's products.	0.615		
Consumers Word of mouth (WOM)			
(CWOM5) I always write positive reviews on social media.	0.927	82%/ 0.551	
(CWOM4) I encourage my friends, family, and relatives to try the products sold by this brand.	0.917		
AVE: Average Variance Extracted			

Table 5. Summary of PCA

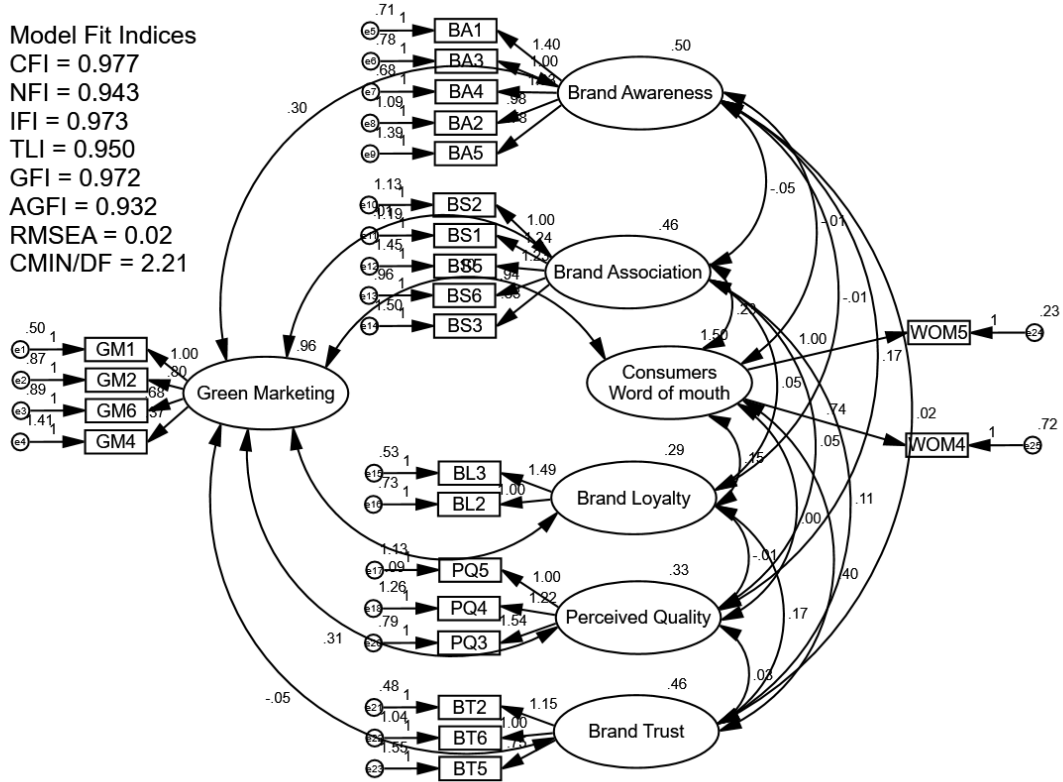
Classification	Variables	Cronbach's alpha	KMO	Sig.	Number of initial items	Items after EFA
Independent variable	Green marketing	0.775	0.884	0.00	6	4
	Brand awareness	0.882	0.890	0.00	6	5
Brand equity mediating variable	Perceived quality	0.720	0.778	0.00	6	3
	Brand association	0.808	0.801	0.00	6	5
	Brand loyalty	0.800	0.868	0.00	6	2
	Brand trust	0.857	0.825	0.00	6	3
Dependent variable	Consumers' word of mouth	0.896	0.810	0.00	6	2

Note: KMO: Kaiser Mayer Olkin, sig: significance, EFA: Exploratory Factor Analysis.

0.977 (>0.9), TLI = 0.950 (>0.9), CFI = 0.977 (>0.9), and RMSEA = 0.02 (0.08).

The statistical results in Figure 3 show the influence of green marketing on various brand-related variables and their effect on word-of-mouth. All

the relationships tested have a value of $p = 0.00$, which confirms the significance of each hypothesis at the 5% level. The regression coefficient β for each relationship shows the magnitude of the effect of the independent variable on the dependent variable.



Note: BA: brand awareness, BS: brand association, BL: brand loyalty, PQ: perceived quality, BT: brand trust, GM: green marketing, WOM: consumers' word of mouth. CFI: comparative fit index, NFI, IFI: Incremental fit index, TLI: Tucker Lewis index, GFI: goodness of fit, AGFI: adjusted goodness of fit index, RMSEA: root mean square error of approximation.

Figure 2. Structural equation modeling (second order)

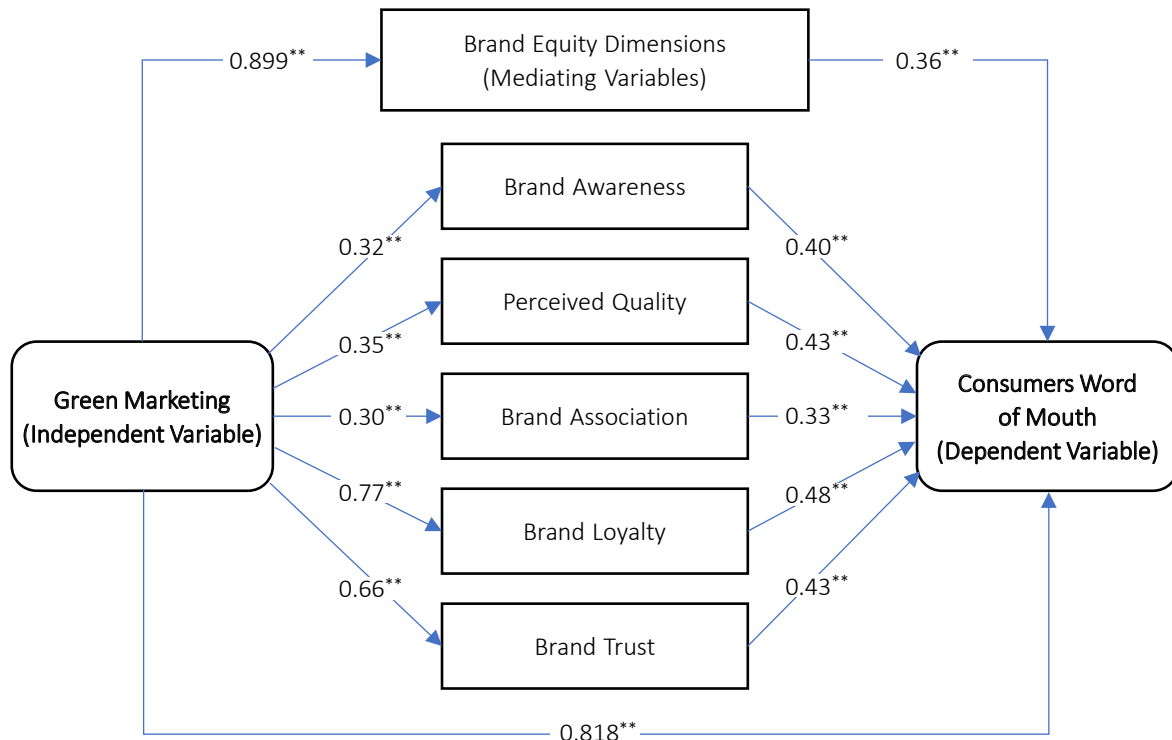


Figure 3. Path analysis with β (beta) coefficient

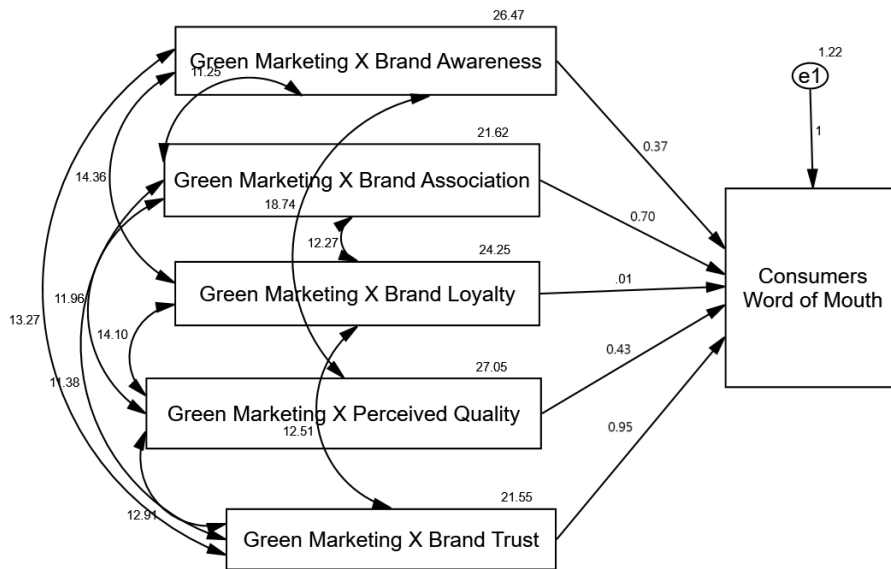


Figure 4. Mediating effect of brand equity dimensions

Green marketing strongly influences brand loyalty ($\beta = 0.772$) and brand equity ($\beta = 0.899$), indicating that green marketing initiatives mainly strengthen brand equity dimensions. It influences brand trust ($\beta = 0.663$) and perceived quality ($\beta = 0.353$), which highlights the importance of green marketing in improving consumer perception.

Regarding word of mouth, the most influential factors are brand trust ($\beta = 0.430$) and brand loyalty ($\beta = 0.488$), which shows that consumers are more likely to talk about a brand when they trust and are loyal to it. Green marketing has a strong effect on brand equity ($\beta = 0.899$), which shows that it contributes significantly to brand equity, which can translate into long-term competitive advantages. Green marketing is a powerful lever for improving brand image and generating positive word of mouth, thus strengthening the relationship between the company and its consumers.

Figure 4 verified that green marketing significantly influences word-of-mouth across dimen-

sions such as brand awareness, brand association, perceived quality, and brand trust, except for brand loyalty. Structural Equation Modeling (SEM) was used to test hypotheses. All mediating hypotheses were accepted, as evidenced in Table 6, which shows that brand equity and green marketing predict consumer word-of-mouth ($p < 0.05$).

Brand Awareness (SE: 0.370; CR: 2.542; $p: 0.00 < 0.01$). Brand awareness acts as a significant mediator in the relationship between green marketing and word-of-mouth. The regression coefficient (0.370) and the significant p-value indicate a moderate but significant influence.

Brand Association (SE: 0.700, CR: 9.481, $p: 0.00 < 0.01$). Brand association is an extremely powerful mediating variable, with a coefficient of 0.700, indicating a strong influence. The very high CR of 9.481 and the significant p-value show that this variable mediates the effect of green marketing on word of mouth very effectively.

Table 6. Regression weights

Variables		Estimate (E)	SE	CR	p	Hypothesis
Green Marketing X Brand Awareness	→ Consumers' Word of Mouth	0.370	.015	2.542	.00	Supported
Green Marketing X Brand Association	→ Consumers' Word of Mouth	0.700	.014	9.481	.00	Supported
Green Marketing X Brand Loyalty	→ Consumers' Word of Mouth	0.012	.014	.872	.383	Rejected
Green Marketing X Perceived Quality	→ Consumers' Word of Mouth	0.430	.014	3.029	.00	Supported
Green Marketing X Brand Trust	→ Consumers' Word of Mouth	0.950	.014	6.602	.00	Supported

Note: SE: standard error, CR: critical ratio, p: p-value < 0.05.

Brand Loyalty (SE: 0.012, CR: 0.872, $p: 0.383 > 0.005$). Contrary to expectations, brand loyalty is not a significant mediator in this relationship. The very low coefficient (0.012), the CR less than 1.96, and the non-significant p-value indicate that green marketing does not directly influence word of mouth through brand loyalty.

Brand Trust (SE: 0.950; CR: 6.602; $p < 0.01$). Brand trust is the strongest mediator in this study, with a coefficient of 0.950. High CR (6.602) and significant p-value confirm that trust is a key factor in the mediation between green marketing and word of mouth.

4. DISCUSSION

Green marketing has a direct impact on brand awareness, association, loyalty, trust, and perceived quality. Clothing brands are building strong relationships with consumers through green marketing practices that build awareness, positive associations, and, most importantly, trust. Green marketing efforts encourage positive word of mouth. Therefore, clothing brands are investing in green initiatives to encourage consumers to share their experiences.

The findings validated that four brand equity dimensions mediate the relationship between green marketing and consumer word-of-mouth, with the exception of brand loyalty. Among these dimensions, brand association and brand trust are key variables that have a notable influence on consumer recommendations. Hence, strengthening the association between the brand and ecological values is essential to boost word-of-mouth. A positive association of the brand with ecological values strongly strengthens consumer word-of-mouth (recommendations). Consumers who trust a brand are more likely to recommend it because of its environmental commitment. Brand awareness helps capture consumers' attention, stimulating their willingness to share their experiences. Therefore, brands are promoting their environmental actions through massive awareness campaigns. Brands are building brand awareness through green marketing campaigns. A well-known brand associated with environmentally friendly practices generates greater attention and public interest,

which reinforces positive consumer discussions (word of mouth). Contrary to expectations, brand loyalty does not mediate the relationship between green marketing practices and consumers' word of mouth. Results should prompt managers to revisit their approaches and review loyalty strategies.

The outcome of this study is consistent with Issock Issock et al. (2020), Severi and Ling (2013), and Thu and Binh (2023). These studies provided evidence in favor of the idea that brand equity factors mediate the relationship between green marketing and customer word-of-mouth. The results reiterate the inspiring impact of green marketing on brand equity, motivating brands to continue their efforts in this direction. The findings corroborate the conclusions made by Ertemel and Civelek (2020), Chahal et al. (2022) and Majeed et al. (2021), verifying that brand equity, namely trust, influences consumer behavior. Those studies underscore the crucial role of trust in consumer behavior, reassuring brands about the importance of their efforts in building trust.

This study's primary limitations are conceptual and empirical. Conceptual constraints are related to the dimensions of the study model. Green marketing and word of mouth were studied as unidimensional variables. Future studies should consider including dimensions in green marketing, such as sustainable sales promotion and practices. Word-of-mouth focuses on the consumer regarding intention and actual consumption. Therefore, it was ensured that consumers had actually bought and used the brand in a filter question at the beginning of the questionnaire.

The empirical limitation is related to the sample size being restricted to Lebanese consumers. The convenience sampling procedure also limited the result's generalization. Gathering responses online was challenging due to time constraints, which limited the total number of questionnaires collected. The goal of future studies should be to broaden the time horizon to increase the sample size. Limitations point to a few potential directions for further study. First, future studies are encouraged to replicate the study by comparing results according to well-known brands, incorporating characteristics like brand image and popularity and examining how it affects electronic word-of-

mouth. Second, future research might gather data from every different Lebanese area using probabilistic sampling to improve the generalizability of the data. Furthermore, future research investigations could compare participants according to culture, income and age groups.

CONCLUSION

The objective of this article was to appraise the interaction between green marketing, brand equity dimensions, and consumers' word of mouth from a Lebanese consumer's point of view. The results verified that green marketing positively influences brand equity dimensions and consumers' word of mouth. According to the results, brand awareness, perceived quality, brand association, brand loyalty, and brand trust play crucial roles in enhancing word-of-mouth. The outcome validated that these brand equity dimensions mediate the relationship between green marketing and consumers' word of mouth, except for brand loyalty. This outcome can be explained by the fact that in highly competitive Lebanese markets where consumers are price-sensitive, green consumers diverge their purchases based on the products' green marketing approaches without remaining loyal to a single brand. Therefore, Lebanese consumers seek the most environmentally friendly option with each purchase rather than remaining committed to a specific international brand. Furthermore, the outcome endorsed that brand association and trust reinforce the relationship between green marketing and consumers' word of mouth.

Brands should leverage brand loyalty by strengthening consumers' feelings and the emotional connection between the brand's ecological messages and their actual experience. This emotional connection is the foundation of lasting loyalty. Brands should create brand salience and resonance built on consumer-based brand equity to reinforce the mediating role of brand equity. Hence, marketers should ensure that every point of contact with the brand (product, service, after-sales service) reflects the brand's stated ecological values. Brands could capitalize on an eco-friendly loyalty program that helps transform rational membership into emotional attachment, driving word of mouth. Brand loyalty is valued and encouraged through mechanisms that resonate with the beliefs of green consumers.

AUTHOR CONTRIBUTIONS

Conceptualization: Bassel Maaliky, Mazen Massoud, Radwan Choughari.

Data curation: Bassel Maaliky, Mazen Massoud.

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