

Does Greenwashing Build Green Brand Associations? Evidence from the Indian Packaged Food Market

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Abstract

Purpose : Marketers engage in a tactic known as “greenwashing,” which involves making false environmental claims in order to capitalize on consumers’ desire for environmentally friendly items. This study looked at how views of “greenwashing” affected links between green brands and packaged foods in India. It also looked at how green concern and green skepticism function as moderators and mediators, respectively.

Methodology : The study is based on a survey of 326 users of packaged food products. The questionnaire consisted of four major constructs: greenwashing perception, greenwashing skepticism, green concern, and green brand associations. The structural equation modeling (SEM) approach was applied to conclude the data.

Findings : This study showed that green skepticism acts as a mediating factor between the impression of greenwashing and negative associations with green brands. It was discovered that the moderator of green concern emphasized the detrimental effect of the perception of greenwashing on affiliations with green brands.

Practical Implications : The results from the study may be used by lawmakers, regulators, and packaged food marketers to frame their environmental policies and practices to reduce green skepticism by providing proof of green claims and practices.

Originality : The study was distinctive in that it examined green brand linkages from the viewpoint of the notion of greenwashing. Furthermore, no research on the subject of greenwashing examined the moderating and mediating effects of green concern and green skepticism, respectively. Thus, the study addressed this research void.

Keywords : greenwashing, green skepticism, green concern, green brand associations, Indian packaged food market

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Green marketing typically entails the creation of “green” items for sale to “green” customers. Reducing waste, providing organic food, and using harmless materials for the manufacturing and production of goods and services can be placed under the aegis of greening. The urban Indian consumer is becoming more environmentally conscious in their choice of products (Tara et al., 2015). For some product categories, there are both enablers—health, environmental friendliness certification, low pesticide use, superior quality, and recyclability—and barriers—high price, low availability, low promotion, no certification, no well-known brands, and resistance to change (Laheri, 2020). Sales of consumer packaged goods witnessed a 50% rise in sales from 2013 to 2018, as per the report of the Centre for Sustainable Business (Reints, 2019). Through their increased

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environmental consciousness, consumers are realizing how important it is to safeguard the environment (Laroche et al., 2001). Companies want to differentiate themselves from competitors and attract customers who are highly inclined to buy environmentally friendly products. To do this, they employ green marketing. Sadly, certain companies inflate their claims of sustainability in order to engage in greenwashing. One could become skeptical as a result.

Green or Greenwashing?

Environmentalism Jay Westerveld first used the phrase "greenwashing" in 1986. He saw signs in hotel bathrooms urging patrons to reuse towels in order to save water usage. Rather than saving water, the goal was to reduce laundry expenses (Orange & Cohen, 2010). Furthermore, the method seemed to be ecologically benign. With the central theme of masking the truth coupled with inconsistency in intent and action, greenwashing has been defined by other researchers in various ways. AZO Cleantech (2008) gave an all-encompassing definition covering the market actions of various entities to promote unreasonable practices in the name of being environmentally friendly. Orange and Cohen (2010) used the term for all industries that use green acts superficially to hide the true motive of increasing profits. UL Solutions (2010) focused on misinformation regarding the environmental benefits of a company's product, service, or practices to mislead consumers. Lyon and Maxwell (2011) discussed how to project a positive image of the firm by suppressing bad news and limiting the spread of good news on the company's social and environmental practices. Delmas and Burbano (2011) highlighted the overlap between low performance on the environmental dimension by a company and its affirmative communication about it. Walker and Wan (2012) reflected on the symbolism employed by an organization without having a firm base in reality in its actions. They summed up the discrepancy between information and action by comparing the disparity between Green Talk and Green Walk.

Chen and Chang (2012) and Ramus and Montiel (2005) asserted that "greenwashing" is the term used to describe any assertion made regarding how a company's actions and goods affect the environment but is based on false information or the false impression that it is irrelevant or misleading. Markham et al. (2014) pointed out greenwashing as an effort by an organization to proclaim deceiving information to build a public image of being responsible toward the environment. Somani and Stroud (2019) emphasized the business practice of companies to exaggerate the positive effect on the environment of their products to make consumers believe that a product is friendlier to the environment than it is in reality. They also highlighted the use of buzzwords like biodegradable, natural, and organic by companies to create a false image of being green. Szabo and Webster (2021) viewed the inaccurate reflection of the environmental conduct of a company in its green marketing claims as greenwashing.

Greenwashing and Packaged Food in India

According to Euromonitor International (2020), there has been a transition from unpackaged to packaged products due to rising disposable income and consumer concerns about quality and sanitation. The report also stated that products with a healthy and natural image generally gained interest, with major players launching healthier variants. The packaged food products in India can be broadly divided into four packaged food categories. The first category of packaged food is "cooking ingredients and meals," which comprises ready-to-eat meals, spices, oils, sauces, condiments, dressings, spreads, and soups. The second category is "dairy products and alternatives," which has butter and spreads, yogurt, cheese, drinking meal products, sour milk products, and baby foods under its ambit. The third category is "snacks," which include savory snacks, fruit snacks, snack bars, sweet biscuits, ice creams, and frozen desserts, as well as all kinds of confectionary products like those made of chocolate, sugar, and gum. The fourth category is "staple foods," which consist of rice, pasta, and noodles;

breakfast cereals; processed meat and seafood; processed fruits and vegetables; and baked goods. These packaged foods are popular among busy people since they are practical and easy for customers to get. A growing percentage of consumers are also selecting packaged foods out of concern that unpackaged goods may be tainted. It is essential to make informed judgments and carefully study the labels to ensure that the packaged food is nutritious and meets demands.

The Food Safety and Standards Authority of India (FSSAI), in partnership with the Advertising Standards Council of India (ASCI), addresses the issue of misleading advertisements about the food and beverage industry. This goal is to ensure that consumers are consuming the advertised product and not anything that is absent or that is misrepresented as having greater value (Food Safety Helpline.com, 2016). Thacker (2019) reported that consumers generally get persuaded by claims like “genuine,” “original,” or “real” on food products. The willingness of the consumer to buy green products and their readiness to pay a premium on the price of such products are highly dependent on their place of residence (Ghose & Chandra, 2018). When a food brand uses “real,” it is implied that this particular brand is the only one with original products and that all other competing brands are fake. In addition to giving consumers a false impression, this also goes against the FSSAI's Advertising Act requirements.

In contrast to the statements on the packaging, the Field Fresh Foods Pvt. Ltd. brand Del Monte advertising stated, “Whole Green Olives,” “Product of Spain,” and featured a segment of footage of olives being hand-picked in Puglia, Italy (“ASCI upheld complaints against,” 2020). This claim was misleading as it created the impression that the brand was fresh and natural and violated the ASCI Guidelines for food and beverage advertising. Naresh (2019) reported that the Yours Forever Organic Products promotion stated “100% certified organic food and wellness products.” An authenticated claim must ideally provide proof of the product's organic status. In the absence of a certifying body, it can be inferred that it is self-proclaimed, thereby making a claim overstated or deceitful. Rasna, an international brand of instant drinks, also, in one of their promotions, endorsed “natural fruit energy” without demonstrating to the audience how the drink is natural. The implication of the fruit content of the product endorsed, and the advertisement itself was found to be vague and misleading by ASCI (“ASCI pulls up Reliance Jio,” 2018). Consumers often fall prey to greenwashing in packaged food. The use of nebulous or unclear terminology that is challenging to verify is another typical greenwashing tactic. For instance, a business might assert that its product is “sustainably sourced,” but there is no agreed-upon definition of the term and no method to confirm the assertion. It is critical to exercise caution when considering statements that appear too good to be true and to support businesses that are dedicated to sustainability and open about their environmental impact.

A genuine dedication to environmental responsibility and sustainability is necessary to establish a green brand association. Companies that participate in “greenwashing” could come across as opportunistic, which could hurt their efforts to establish a positive link with the environment. However, organizations that care about sustainability and environmental responsibility can create a strong relationship with their green brand by being open and honest about their efforts. Companies can gain consumers' trust and develop a reputation as trustworthy and environmentally sensitive brands by demonstrating their sustainable practices and environmental effects. Although greenwashing has garnered sufficient interest in earlier research, this study is distinctive in that it examines green brand associations from the standpoint of greenwashing perception. No study examines the mediating and moderating impacts of green skepticism and green concern, respectively, in the context of greenwashing. The study thereby addresses this gap in the literature. This study offers a construct of “greenwashing” that includes the following elements: “greenwashing perception,” “green skepticism,” “green concern,” and “green brand associations,” after giving due consideration to the pre-existing theories and constructs.

Literature Review

After analyzing the concept of greenwashing from the perspective of researchers and its practices in the packaged food market in India, the study delves into the following entities:

Greenwashing Perception

It is evident from the discussion above that greenwashing firms intentionally mislead customers with false, unsubstantiated, exaggerated, or unproven claims about their environmental actions to form a good image in the eyes of consumers and enhance their reputation. Horiuchi et al. (2009) suggested that claims that use words with no clear meaning, like eco-friendly green images, unjustified the green impact, and irrelevant claims that emphasize one green attribute. In contrast, everything else is not green, or green claims without proof are all signs of greenwashing. Consumer perception of how closely green advertising slogans align with actual company environmental behavior is known as “greenwashing perception.” The perception of “greenwashing” may be impacted by several variables, including the company's trustworthiness, the environmental claims' brevity and openness, and the consumer's level of environmental education and awareness.

Green Skepticism

According to Foreh and Grier (2003), consumer skepticism of a company is based both on the perception that the company's motives are self-serving and on the perception that the company is hiding its true intentions. In other words, skepticism is defined as distrust of customers or disbelief in marketers' actions. These behaviors include marketing motivations and promotional efforts such as specific advertising claims and public relations (Obermiller & Spangenberg, 1998). This implies that when marketing claims or advertisements are inconsistent with a business's actions and these claims are not validated, skepticism arises in the minds of consumers. As a consequence, the response of consumers is negative to such claims by brands that are misleading, deceptive, or manipulative (Forehand, 2000). Green skepticism can develop for numerous reasons, such as a lack of confidence in information sources, contradictory facts, or individual ideas and ideals. Greenwashing frequently leads to doubt and skepticism regarding green claims. Due to the perceived financial burdens associated with environmental preservation efforts, consumers may be dubious about environmental claims. It can be harmful as it can result in inaction or apathy toward environmental challenges. It may also impede efforts to address environmental problems and advance the aims of sustainable development.

Green Concern

Increasing awareness of environmental issues has resulted in a change in the way consumers look after themselves (Agarwal & Khattri, 2018). Consumers' consciousness of environmental problems and their readiness to deal with those problems can be referred to as green concerns (Akehurst et al., 2012). It includes a variety of problems like global warming, pollution, deforestation, the extinction of species, and the depletion of natural resources. Talking about the environment, it can also be said that green concern is the consumer's affective evaluation of environmental issues (Newton et al., 2015). The more concerned a consumer is about “green concern,” the more likely that consumer is to portray a sense of environmental responsibility. A customer like this is probably going to act sustainably (Biswas & Roy, 2015). Consumers who care about the environment are more likely to research and purchase goods from businesses that practice environmentally friendly business practices. They are more likely to be drawn to brands that are committed to sustainability, use environmentally friendly materials, and improve the

environment. The probability of recognizing corporate greenwashing and its harmful effects is high for such consumers. Thereby, the sales and consumption of such products are also reduced (Newton et al., 2015).

Green Brand Association

According to Das et al. (2016), a company can create numerous associations with a brand. But rather than building many associations, the focus should be on building those associations that directly or indirectly affect the consumer's buying behavior or buying decisions. Aaker (2003) claimed that brand associations could be clustered according to their different meanings. These meanings help further define the brand's positioning. Consequently, brands with strong positioning are the result of a strong set of brand associations. Associations that are strong, positive, and exclusive strengthen a brand and increase its equity. The green image of the brand is an outcome of environmental associations that consumers create in their minds. Such an image enhances the green brand's reputation and overall brand equity (Bekk et al., 2016). Using environmentally friendly products, cutting back on carbon emissions, promoting sustainable practices, and supporting social issues are just a few ways to establish a "green" brand association. The customer loyalty, brand image, and reputation of brands that are successful in creating a strong green brand association all improve.

Further, numerous studies in the past have explored the importance of sustainability in products and green marketing practices (Bhatti & Negi, 2018; Jose & Koshy, 2018; Kourav & Sharma, 2023; Tara et al., 2019). Previous research has also addressed consumer acceptance and response to eco-friendly products, as well as insights into the factors (either environmental or personal) driving the increase in the use of eco-friendly products (Ghose & Chandra, 2018; Premi et al., 2021).

The study's originality lies in establishing the links between green brand associations and greenwashing perceptions. Also, no study in the context of greenwashing discusses the mediating and moderating effects of green skepticism and green concern, respectively. Therefore, the study fills this research gap. After giving due consideration to the existing theories and constructs, this study offers a unique framework for greenwashing. It includes the following entities: greenwashing perception, green skepticism, green concern, and green brand associations.

Research Methodology

The study has employed a descriptive research design, which is an attempt to describe, determine, and identify greenwashing practices in the packaged food market. The target population for the study was urban Indian consumers of packaged food products dwelling in the metropolitan national capital region (NCR) of Delhi. To maintain the representativeness of the sample, NCR was found to be most suitable due to the heavy concentration of migratory populations from all parts of India (Padhan, 2023).

Primary data for the study were gathered by employing a structured questionnaire that was administered both on paper and on Google Forms. The questionnaire consists of four major constructs that were adapted from earlier research with slight modifications to suit the requirements of the present study, which was conducted exclusively for packaged food products and brands. The greenwashing perception scale was adapted from Chen and Chang (2013); Horiuchi et al. (2009); Laufer (2003); green skepticism was adapted from Mohr et al. (1998), Nguyen et al. (2019), and Rahman et al. (2015); the green concern was adapted from Lee (2008); Paladino and Ng (2013); and Zhang et al. (2018). The green brand association scale was adapted from Akturan (2018) and Chang and Chen (2014). The questionnaire's reliability was confirmed by a pilot study including 40 participants. Table 1 displays the Cronbach values for the construct's dependability.

The data were collected in a natural environment while the consumers were shopping at department stores.

Department stores were chosen at random from a list of department stores located within shopping malls. The clients were asked to participate in the study after being informed of its goal. While some declined the invitation to participate, others expressed interest in taking part in the study as responses. Depending on their preferences, 500 respondents were given access to the questionnaire in both hard copy and electronic modes. A total of 326 of the responses were deemed complete and accurate enough to proceed with additional processing. Due to errors or inconsistencies, the remaining 174 replies were excluded. A total of 65.2% of the respondents answered the survey. The information was gathered between April 2022 and July 2022.

The collected data were coded and entered in SPSS 23 for further analysis, and the same data file was used in AMOS 21 for structured equation modeling (SEM) and mediation/moderation studies. The proposed model structure was put to the test using a two-stage SEM approach. In order to ascertain the measurement tool's precision and accuracy, a confirmatory factor analysis (CFA) was initially conducted. In the second stage, the entire structural model was estimated in order to verify that the model fits well and examine any potential linkages.

Research Framework and Hypotheses

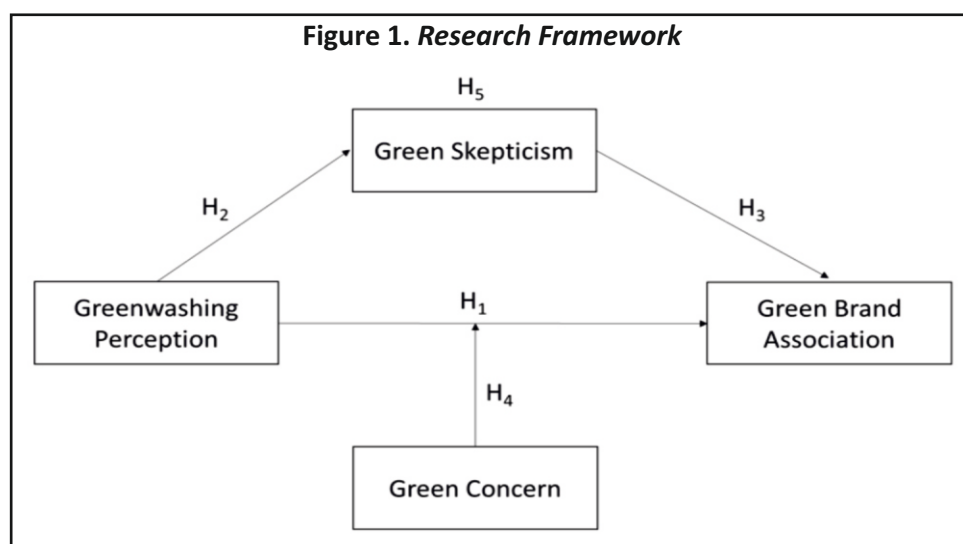
Consumers may become skeptical about a firm when they realize that the environmental claims of these brands are deceptive. As a consequence, consumers may change their responses towards these brands and their offerings when they have sufficient evidence of their greenwashing practices (Goh & Balaji, 2016). They may generate unfavorable perceptions about such companies' or brands' motivations. The study suggests, based on a review of the literature, that consumers' perceptions of greenwashing will influence their association with green brands. Therefore, the study hypothesizes:

➤ **H₁** : Greenwashing of packaged food exerts a negative influence on green brand association.

This study also contends that packaged food greenwashing is positively associated with their green skepticism, which hurts their green brand association in H₂ and H₃.

➤ **H₂** : Green skepticism is positively impacted by packaged food's greenwashing.

➤ **H₃** : Green skepticism in packaged food exerts a negative influence on green brand association.



As a result, by modifying this framework (see Figure 1) to fit the study's context, it becomes clear that green concern modifies the research framework and suggests the following hypotheses:

✎ **H₄** : Green concern acts as a moderator and strengthens the negative relationship between greenwashing and green brand association.

✎ **H₅** : Green skepticism mediates the relationship between greenwashing and green brand association.

Sample and Data Collection

The gender of the participants comprised 150 (46%) females and 176 (54%) males. The education level distribution of the participants encompassed 120 (36.8%) graduates, 124 (38%) postgraduates and higher, and 82 (25.2%) pursuing school education or college dropouts. In terms of occupation, 79 (24.2%) were self-employed, 162 (49.6%) were service professionals, 32 (9.8%) were homemakers, and the remaining 53 (16.2%) were students or unemployed. All the respondents were urban consumers with some experience in the purchase and consumption of packaged food products, which are known to make some green claims or promises of environmental or health friendliness.

Measurement of Constructs

Table 1 lists the four primary pretested and standardized scales used to measure views of green label association (5 items), green skepticism (4 items), green concern (4 items), and greenwashing (5 items). These 18 items evaluated the four main unidimensional components used in the study using a 5-point Likert scale.

Table 1. Measurement of the Constructs

Constructs	Items	λ	α	AVE	SQRT (AVE)	CR
Greenwashing Perception, adapted from Laufer (2003); Horiuchi et al. (2009); Chen & Chang (2013)	GP1: The words on the packaged food product mislead consumers about its environmental attributes.	0.769	0.883	0.684	0.827	0.915
	GP2: The pictures or graphics on the packaged food item deceive consumers about its environmental attributes.	0.842				
	GP3: The packaged food product is linked to a questionable or vague "green" claim.	0.864				
	GP4: The packaged food product exaggerates or overstates its green functionality.	0.828				
	GP5: The packaged food item omits or conceals crucial facts, making the green claim appear more impressive than it is.	0.828				
Green Skepticism, adapted from Mohr et al. (1998); Nguyen et al. (2019); Rahman et al. (2015)	GS1:* The majority of environmental and safety statements on food product package labels or in advertising are correct.	0.776	0.82	0.653	0.808	0.883
	GS2: Consumers would benefit if such promises on the labels of packaged food products or in advertising were not stated	0.805				

	since they are overstated in terms of safety and the environment.					
	GS3: The majority of environmental and safety statements on the packaging of food products or in advertising are made to deceive people rather than to inform them.	0.856				
	GS4: Most of the environmental and safety promises that are made on the labels of packaged food products or in advertising are untrue, in my opinion.	0.793				
Green Concern, adapted from Lee (2008); Paladino & Ng (2013); Zhang et al. (2018)	GC1: I am concerned about the deterioration of environmental quality.	0.747	0.875	0.737	0.858	0.918
	GC2: The environment is a major concern for me.	0.92				
	GC3: I am deeply concerned about environmental issues.	0.884				
	GC4: I frequently consider ways to enhance the state of the environment.	0.874				
Green Brand Association, adapted from Akturan (2018); Chang & Chen (2014)	GBA1: Because of its commitment to the environment, this packaged food brand sticks out to me among competitors.	0.895	0.95	0.842	0.918	0.955
	GBA2: This brand of packaged foods is one I am familiar with due to its environmental reputation.	0.91				
	GBA3: I can quickly think of a few environmental traits of this packaged food company when considering it.	0.94				
	GBA4: I can clearly recall the green branding of this packaged food firm.	0.925				
	GBA5: This packaged food brand is recognizable to me since it cares about the environment.	0.903				

Note. *Reverse order scale item.

The dimensionality of each of the four constructs was examined using exploratory factor analysis, and it was discovered that each construct was unidimensional. To evaluate construct reliability, the four constructs' Cronbach's values and composite reliability (CR values) were also looked at separately. The overall reliability of 18 scale items was also checked. The alpha and CR values were found to be above 0.7 for all the constructs. All factor loadings (λ values) were found to be significantly high, > 0.7 for all item loadings on their respective constructs. The high values of all four constructs > 0.5 establish the convergent validity of the scales.

Further, the mean and standard deviation values of the constructs were calculated, and their inter-item correlation matrix was also prepared and studied, as shown in Table 2.

Table 2 shows that the square root of the average variance of each construct was found to be greater than the values of inter-item correlation for all the constructs employed in the study. Here, a diagonal element in the matrix above represents the square root of AVE, which is bolded. The study's constructs have strong discriminant validity, according to the results. As a result, the study's constructs' construct validity and reliability have been thoroughly investigated and validated.

Table 2. Construct Validity

	<i>GP</i>	<i>GS</i>	<i>GC</i>	<i>GBA</i>	Mean	<i>SD</i>
Greenwashing Perception (<i>GP</i>)	0.827				2.546	0.8413
Green Skepticism (<i>GS</i>)	0.890**	0.808			2.671	0.8903
Green Concern (<i>GC</i>)	0.278**	0.317**	0.858		3.662	0.9263
Green Brand Association (<i>GBA</i>)	-0.401**	-0.435**	0.105	0.918	3.548	1.0233

Note. ** Correlation is significant at the 0.01 level (2-tailed).

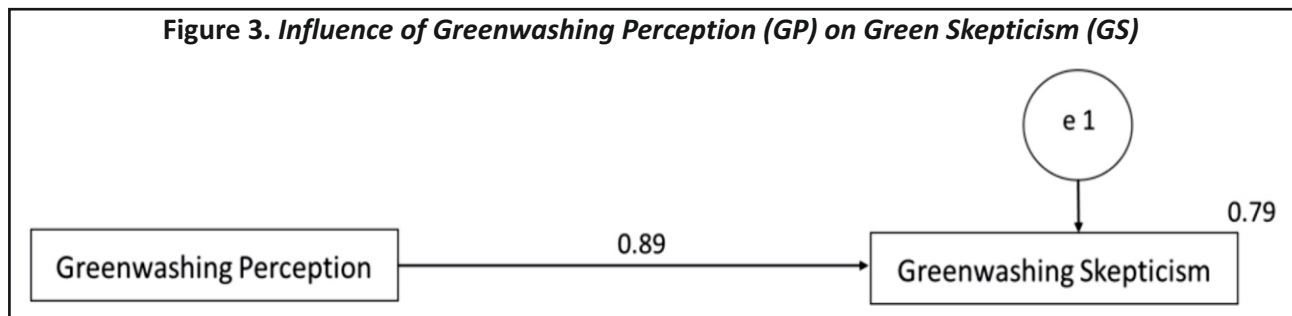
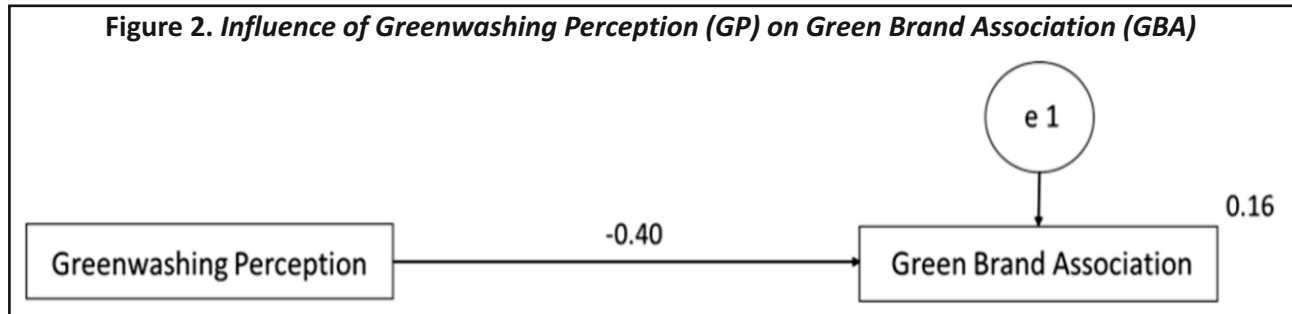
Analysis and Results

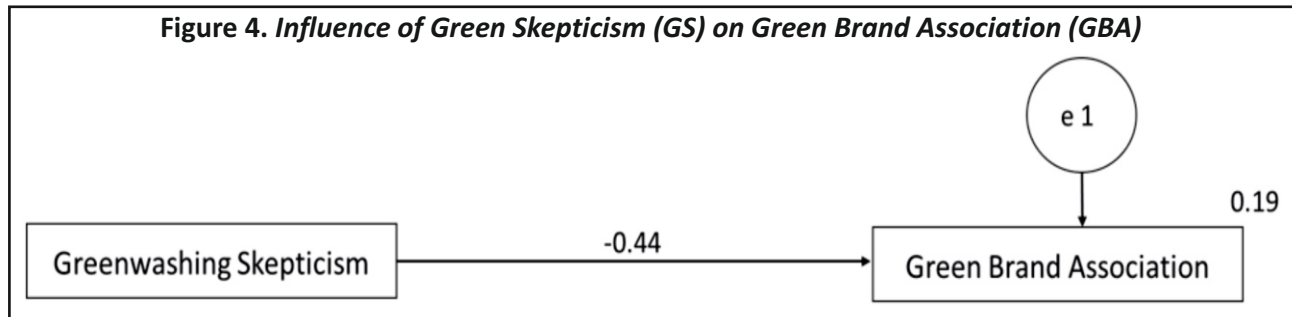
The study employed SEM via AMOS 21 as a means of testing the hypotheses that were outlined in the protocol. In order to test the model framework shown in Figure 1, direct and indirect relationships between the independent variable (IV: Greenwashing perception), dependent variable (DV: Green brand association), moderating variable (MoV: Green concern), and mediating variable (MdV: Green skepticism) were looked at. The findings are shown in Figures 2, 3, and 4.

It can be observed from Figure 2 that greenwashing perception exerts a negative influence with a standardized path coefficient ($\beta = -0.40$) on the green brand association, and the influence is found to be significant ($p < 0.05$); therefore, the hypothesis of the test results support H_1 .

Furthermore, it is evident from Figure 3 that greenwashing perception is found to exert a positive influence with a standardized path coefficient ($\beta = 0.89$) on green skepticism, and the influence is found to be significant ($p < 0.05$); therefore, the test results support hypothesis H_2 .

Figure 4 explains the influence of green skepticism on the green brand association. As per the hypothesis, the influence is found to be negative, with a standardized path coefficient ($\beta = -0.44$ and $p < 0.05$). Therefore, hypothesis H_3 supports the test results.



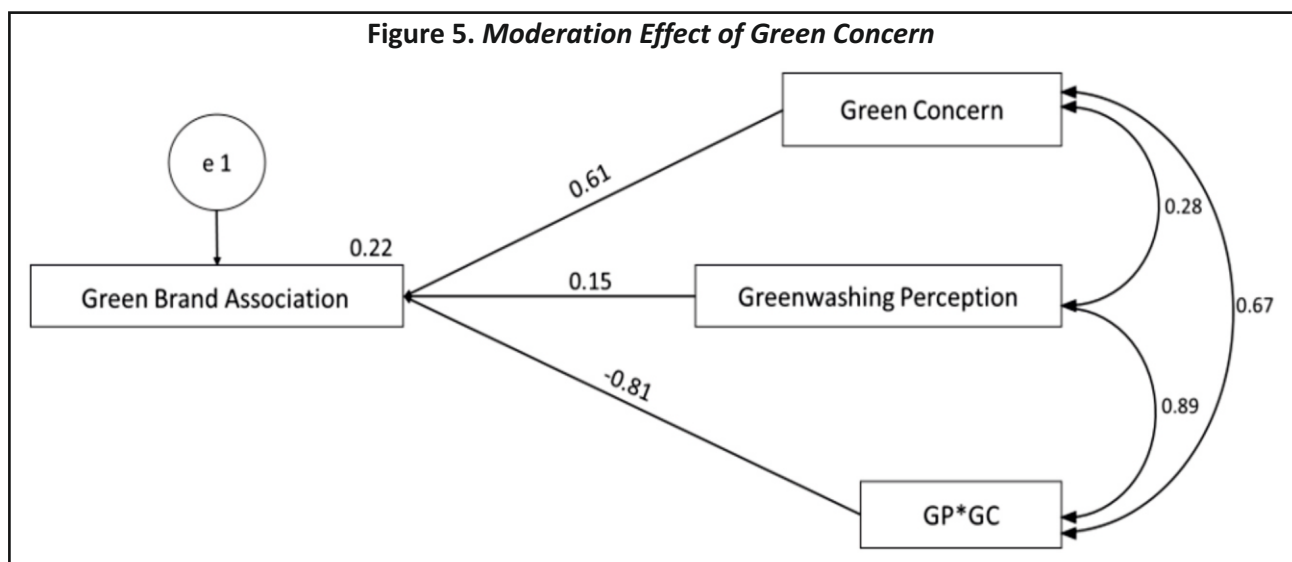


Using AMOS 21, a moderation analysis is performed to examine the interplay between green concern and the perception of greenwashing as well as its effects on the affiliation with green brands. The following variables are taken into consideration in order to explore moderation: GP*GC, GC, GBA, and greenwashing perception (GP). The intended effect of green concern (GC) as a moderator is investigated using the product of greenwashing perception (GP) and green concern (GC). The variables mentioned above have their standardized Z scores computed, which are then utilized for moderation analysis.

As specified in Figure 5, the standardized path coefficient -0.81 of the interaction effect GP*GC is found to be significant on the dependent variable GBA along with other direct relationships. Therefore, hypothesis H_4 is tested. It is found good to accept that green concern acts as a moderator and strengthens the negative relationship between greenwashing perception and green brand association.

SEM is used to examine the direct, indirect, and total effects of the perception of greenwashing on green brand association and how it is mediated by green skepticism. According to the preconceived assumptions, tests have already been conducted on the independent effects of greenwashing perception (GP) on green brand association (GBA), greenwashing perception (GP) on green skepticism (GS), and GS on GBA. Additionally, route analysis is done to investigate the mediating function of green skepticism (GS), and the outcomes are shown in Figure 6.

In order to investigate and evaluate the mediating role of green skepticism on the relationship between greenwashing perception and green brand association, the study's mediation analysis employed 5,000 bootstrap samples and the bootstrap confidence intervals approach. In the mediating model, the effect of GP on GBA is



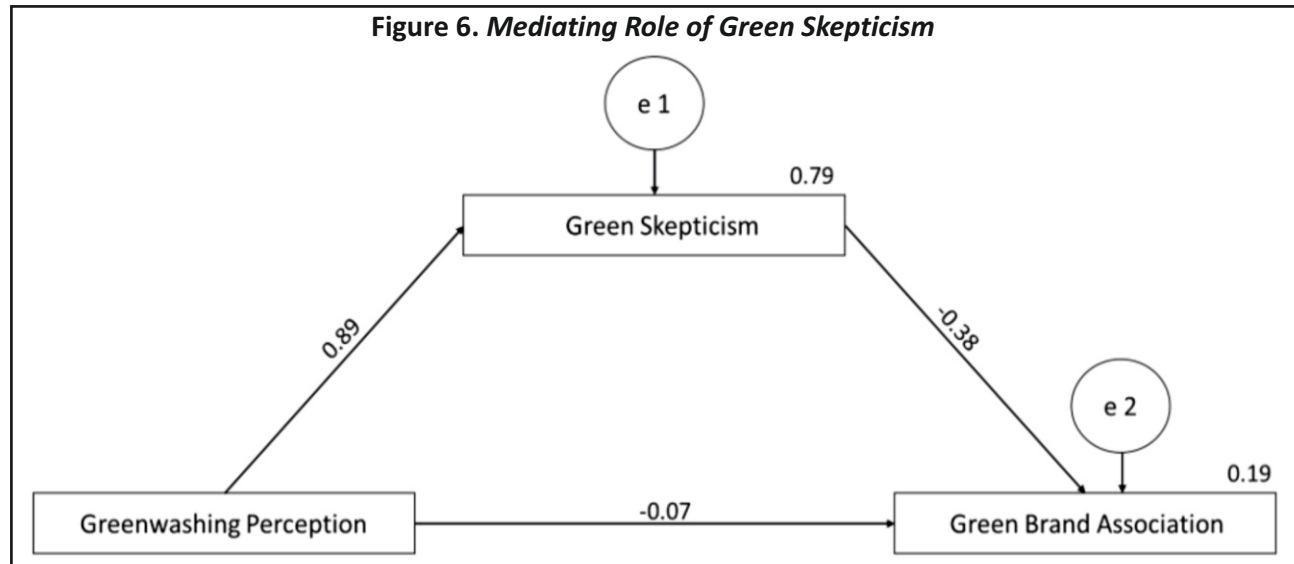


Table 3. Path Estimates

			Estimate	SE	CR	P
GS	<---	GP	0.942	0.026	35.771	***
GBA	<---	GP	-.080	0.131	-.606	0.544
GBA	<---	GS	-.433	0.124	-3.492	***

Note. *** Significant.

Table 4. Direct, Indirect, and Total Effect Analysis

Path	Direct Effect	Indirect Effect	Total Effect	Bias Corrected Confidence Interval	
				Lower Confidence Level	Upper Confidence Level
GP-->GS-->GBA	-0.065**	-0.336*	-0.401*	-0.524	-0.145

Note. *Significant; ** Non-Significant at $p=0.05$.

found to be non-significant ; whereas, the link between GP and GS and GS and GBA is shown to be significant ($p < 0.05$). Table 3 provides additional confirmation and evidence of the mediating effect.

Table 4 suggests that there is a strong indirect (mediating) effect of green skepticism on the connection between perceptions of greenwashing and associations with green brands. As a result, hypothesis H_3 is likewise approved.

Managerial and Theoretical Implications

Consumers are anxious and concerned about environmental degradation. To leverage the advantage of this concern, marketers are using environmental claims as a tool to sell their offerings. Since consumers are confused about the meaning and accuracy of these claims, there is skepticism in their confidence. Although the Food Safety and Standards Authority of India (FSSAI), the Advertising Standards Council of India (ASCI), the Organization

for Economic Co-operation and Development, the Consumer Protection Act, and other regulatory bodies have laid down a code of conduct for environmental claims and practices, the need of the hour is to further guide businesses in accurately explaining the green attributes of their products. A penalty should be imposed for non-compliance and should be used to create a benchmark for packaged food marketers to abide by the laws and regulations strictly. These regulations may further ensure that adding environmental management to internal policies is a must for organizations. Social enterprises and government authorities, for the betterment of society at large, must educate the consumers to make an informed choice by urging them to scrutinize the labels and the advertisement claims, familiarize themselves with reputable certification boards, ask for an explanation from the company (in the case of a greenwash claim by the company), and report the greenwash concern of a brand on an environmental platform and community forums. Informed and educated consumers are vital to unfolding a future without greenwashing.

According to this study, packaged food marketers should not only refer to environmental claims policies and practices but also dispel green skepticism by offering evidence of green practices and claims. Packaged food marketers should learn how consumers associate a green claim with certain things in order to influence their purchasing decisions. Companies need to focus on real environmental projects instead of greenwashing. This could increase trust and loyalty from customers and contribute to the positive connotation of green brands. Additionally beneficial are third-party certifications and logos that bolster companies' environmental claims and demonstrate their commitment to sustainability. Environmental awareness is one of the most explored topics and is rising globally. This work contributes to the theory by exposing the deceptive elements of green marketing. The study of relevant literature indicates that there hasn't been much research done on how perceptions of greenwashing, green skepticism, green concern, and green brand associations interact. This research focuses on this element and develops a theoretical framework that includes these variables. Consequently, this work creates a foundation for future research in the area of greenwashing theory and its consequences for creating green brand connections. Furthermore, the results of this article can also help in the theory-building process for CSR, sustainability, and ethical marketing practices.

Conclusion

The results of the study are found to be consistent with the hypothesis envisaged before the collection of data. The further steps of data analysis and its statistical interpretation strengthen the understanding of the conceptual framework and empirically validate it. The major constructs employed in this study are based on due consideration of previous studies and slightly modified according to the requirements of the current study for packaged food products and brands. All four major construct scales are tested in the present study and are found to be unidimensional, reliable, and valid. The data collected on the four major scale items of GP, GC, GS, and GBA was subjected to rigorous model testing for mediation and moderation through SEM using SPSS 23 and AMOS 21, and it is established that greenwashing perception exerts a positive influence on green skepticism. This implies that the consumer with a strong perception of being deceived by the packaged food product brand with false green claims tends to bear high skepticism and is doubtful of green or environmentally friendly claims communicated by the companies. Also, the direct impact of greenwashing perception is found to exert a negative influence on the green brand association, which means that consumers who believe the claims of packaged food products to be untrue generally do not associate green brand attributes with being true. The high level of green skepticism is found to exert a negative influence on green brand attributes, indicating that the customers of packaged food products who are generally skeptical or suspicious of green claims do not believe in the green brand associations created by packaged food product companies through their promotions. The mediation results prove that green skepticism plays a significant mediating role between greenwashing perception and green brand association. Moderation results established the accentuating effect of green concern on the negative relationship between greenwashing

perception and green brand association. Alternatively, it can be inferred that the greenwashing activities of the company will negatively impact consumers with high green concerns and will not believe in the promoted green brand attributes of the packaged food product.

Limitations of the Study and Scope for Further Research

Although our work contributes significantly to studies on the effects of greenwashing perception on building green brand associations, it does have some limitations. This study focuses on certain limited variables and their interplay to ascertain the negative brand association due to greenwashing by companies through their misleading advertisements. There are many other environmental factors apart from greenwashing that contribute to the brand association, like subjective norms, levels of environmental awareness, and selective exposure to media, which are not covered in the research. The study was conducted in the NCR of India, where the responses were collected on a pre-validated questionnaire that was used mostly in European and American studies. Certain specific aspects of environmental concern and environmental skepticism may differ among Indian consumers, which were not investigated before the use of the questionnaire in the study.

In order to comprehend the employment of greenwashing techniques across different product or service categories, it is necessary to explore a number of additional facets of this significant customer concern. Future research on lifestyle segmentation studies pertaining to green concern and green skepticism among Indian customers could be another subject of interest. Subsequent research endeavors may focus on an expanded range of merchandise or trademarks with varying degrees of environmental standing. If the study concentrated more intently on interpretation and meaning construction, a qualitative method approach would also be helpful. Another effective approach would be to conduct a series of tests using specific intervention sequences to examine how participants form associations with green brands in the context of the notion of greenwashing.

Authors' Contribution

Dr. Varsha Khattri conceptualized the idea well-grounded from the theory and developed the research design. The analytical calculations were carried out, and Dr. Vivek Singh Tomar planned the research technique. The literature review section contains the significant parts that Dr. Varsha Khattri pulled out of the important research that she identified as being relevant to the topic. This provided support for scale measurements and a well-designed questionnaire. The research was implemented by Dr. Vivek Singh Tomar, who also confirmed the study's numerical findings. Dr. Varsha Khattri recorded the research's significance, findings, and scope. The research received valuable comments from both authors, which influenced the theory, technique, analysis, and general portions of the publication.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial interest or non-financial interest in the subject matter or materials discussed in this manuscript.

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