

# The Impact of Greenwashing on Green Brand Trust from an Indian Perspective

Praful Vijay More\*

**Abstract** Purpose: Companies in haste for higher consumers' preference tend to appear as 'green' and mislead about environmental concerns, which are termed as "Greenwashing." The purpose of the study is to investigate the consumer perception on greenwashing activities and analyze its impact on green brand image, green brand loyalty and green brand trust among Indian consumers. Design/methodology: The study makes use of a written questionnaire method to collect survey data from approximately 500 consumers all over India. The study uses Structural Equation Modeling (SEM) to study the hypothesized relationship between constructs affected by greenwashing based on consumer perspective in the Indian context. Findings: The study shows that Indian consumers are becoming aware of greenwashing activities, which have a negative impact on green brand trust and undermines green brand image and green brand loyalty. Implications: The study results are beneficial to policy-makers, researchers, practitioners, and managers to create awareness among Indian consumers on greenwashing activities.

**Keywords** Greenwashing, green brand trust, green brand image, green brand loyalty, Indian consumer

## I. Introduction

The concept of recycling is inherent in the emerging economy like India. However, despite inventing new ways to recycle, Indian consumers are still ignorant of the environment and its related regulatory issues. From the consumer's perspective, it is matter of concern that many environmental attributes cannot be verified, even after their usage (Carlson et al., 1993; Lyon and John, 2011). As a result, the dishonest claims made by companies that promote environmental attributes of their products or brands can impede consumer trust in the field of green marketing (Chen and Chang, 2013; Parguel et al., 2015). Green marketing and greenwashing are two sides of the coin;

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\* School of Business Management, NMIMS (Deemed-to-be-university), Mumbai, India; [praful.more@yahoo.in](mailto:praful.more@yahoo.in)

wherein green marketing tends to increase consumer preference for greener products, greenwashing is adopted by companies to increase consumer preference by spending time, money and efforts in marketing themselves as environment-friendly (Tinne, 2013). Greenwashing is defined as the “act of misleading consumers regarding the environment-friendly practices of a company (Pargual et al., 2011). India is actively involved in green marketing activities and also seems to be affected by greenwashing (Mukherjee and Ghosh, 2014). This study makes a unique contribution by conducting an overview of greenwashing activities in emerging economies like India by building up a new framework that further extends the literature on green marketing in an Indian context.

The word greenwash is used as a metaphor like ‘whitewash’ in the context of environmental management to build perception among consumers that an organization uses sustainable processes and practices in business. But there is always a difference between preaching and practice (Mukherjee and Ghosh, 2014). Using the term ‘green’ beyond a certain point creates vagueness in consumer’s mind (Zimmer et al., 1994) which creates difference between what companies try to communicate about their green products or brands and the perception of consumers especially in developing economies such as India which comprises a responsible young population caring for preservation of environment. Greenwashing seems to undermine consumer confidence that has an impact on green trust (Chen and Chang, 2012). Green trust is defined as, “the readiness of a consumer to depend on a product based on belief or expectation resulting from its benevolence, credibility, and ability about environmental performance (Chen, 2010). Not only consumers, but greenwashing also deter investor’s confidence (Delma and Burbano, 2011), therefore, companies must strive to eliminate consumer skepticism of green claims by enabling them to obtain enough information regarding the same (Hoedeman, 2002), thereby, enhancing brand image and brand loyalty. Green brand image is defined as “a set of perceptions in a consumer’s mind about a particular brand which shows its commitment and concern towards environment” (Chen, 2010) whereas green brand loyalty is defined as “the level of repurchase intention prompted by a strong environmental attitude and sustainable commitment towards a product, a brand or so on” (Chen, 2013).

This study undertakes an empirical test to understand the impact of greenwashing activities on green brand trust from the Indian consumer’s perspective. In addition, this study explores the impact of the mediating variables green brand loyalty and green brand image on greenwashing and green brand trust. The structure followed in this study is as follows. Section 2 reviews the literature and develops hypotheses. Section 3 describes the methodology, data collection, and the measurement of the constructs. Section 4 elaborates a measurement model and a structural model based on the empirical

results. Section 5 highlights the conclusions and practical implications of this study, followed in Section 6 by a discussion of the recommendations and limitations, calling for more such studies in the future.

## **II. Literature Review and Hypothesis Development**

The term “greenwashing” was first coined by Jay Westerveld based on an essay examining practices of the hotel industry in 1986. Despite appearing in the mid-1980s, it is only now that greenwashing is widely accepted, and people seem to relate it to the practice of exaggerated and undeserved claims of environmental friendliness to gain higher market shares (Mukherjee and Ghosh, 2014). It was observed that misleading claims of environmental friendliness accounted for 58% in advertisement content in a study conducted by the Journal of Public Policy. The Federal Trade Commission in 1998 created guidelines for green marketing, and in the year 1999, the word “greenwashing” was added in the Oxford dictionary. Greenwashing is described as the practices of companies overclaiming the environmental functionality of their green product or brand that cannot be sustained (Parguel et al., 2011). Greenwashing leads to the deceptive use of green PR or green marketing for creating a perception about products or brands being environment-friendly. There are numerous drawbacks accrued due to the use of greenwashing activities which are known to affect brand image, brand loyalty and brand trust among consumers utilizing green products or brands.

### **1. The Negative Effect of Greenwashing on Green Brand Image**

The variation of perceptions among consumers about a specific product or brand is defined as a brand image of that product or brand (Cretu and Brodie, 2007). The brand image becomes a key element in green marketing activities since it is tough for consumers to figure out the difference between products and brands (Mudambi et al., 1997). The perception of greenwashing activities has an impact on consumers’ attitude towards environmental commitments of companies (Papasolomou et al., 2009). Apart from that, it hurts brand image creating doubt among consumers about green marketing activities of the company (Polonsky et al., 2010). Greenwashing causes confusion among consumers through untrustworthy advertising or green claims making it harder for consumers to evaluate green products or brands (Ramus and Montiel, 2005), which consequently damage the green brand image of companies (Laufer, 2003). As a result, the study suggests that greenwashing negatively impacts green brand image and the following hypothesis is proposed:

***Hypothesis 1 (H1)- Greenwashing has a negative impact on green brand image.***

## **2. The Negative Effect of Greenwashing on Green Brand Loyalty**

A commitment to repurchasing a preferred product or brand on a regular basis is referred to as loyalty (Oliver, 1999). Brand loyalty is the strength of a consumer's devotion to the repeated purchase of a product or brand (Dick and Basu, 1994). Companies try hard to enhance brand loyalty for increasing the sale of their green products or brands by improving functionality (Chen, 2013). However, greenwashing could negatively influence consumers' green brand loyalty if they are unable to differentiate the trustworthiness of green claims (Gillespie, 2008). Greenwashing positively affects the perceived risk to the consumers, which cause a decrease in their green brand loyalty with regards to environmental concern (Slaughter, 2008). Hence, this study argues that greenwashing is negatively related to green brand loyalty and implies the following hypothesis:

***Hypothesis 2 (H2)- Greenwashing has a negative impact on green brand loyalty.***

## **3. The Negative Effect of Greenwashing on Green Brand Trust**

The meaning of the term 'trust' refers to the level of confidence between two parties that would behave as per each other's expectations (Hart and Saunders, 1997). Greenwashing undermines consumers' trust by misleading and unclear information, which raises suspicions and causes confusion, thus, negatively affecting consumer trust (Singh and sirdeshmukh, 2000; Walsh and Mitchell 2010). Greenwashing activities causes negative word-of-mouth as a result of which more consumers are confused regarding numerous green claims, which undermine consumer trust in the marketplace (Ramus and Montreil, 2005). The consumers are unable to establish a long-term relationship based on the trust factor due to greenwashing activities of the companies (Cherry and Snerison, 1999). Since greenwashing activities mislead strategies and damage customer attitude towards a company (Paraguel et al., 2011), it is negatively associated with green trust (Chen and Chang, 2012). Based on this argument, this study proposes the following hypothesis:

***Hypothesis 3 (H3)- Greenwashing has a negative impact on green brand trust.***

#### **4. The Positive Effect of Green Brand Image on Green Brand Trust**

Brand image is directly related to purchasing intentions, and if consumers perceive that brand image is strong then there is a greater intention to purchase, thus, leading to increase in trust associated with that brand. (Wu et al., 2011; Shah et al., 2012). The rise of consumer environmentalism prevalent in society coupled with strict environmental regulations has made green brand image important for companies applying green marketing to build a differentiation (Chen, 2010). It is indicated that brand image affects decision-making for future purchase since there is a strong relationship between the trust of consumer and the brand image (Flavian et al., 2005). Likewise, the better the green brand image, the higher the positive relationship between brand image and green trust due to an increase in consumer preference (Chen, 2010). Therefore, in an environmental management context, this study formulates the following hypothesis:

***Hypothesis 4 (H4)- Green brand image has a positive impact on green brand trust.***

#### **5. The Positive Effect of Green Brand Loyalty on Green Brand Trust**

The loyalty of the consumers develops in three stages: first, cognitive sense, then effective sense, and finally behavioral sense (Oliver, 1999). The literature notes that one of the primary factors influencing purchase intention is customer loyalty, which is a direct result of brand trust associated with the company (Souiden and Pons, 2009). In order to increase purchase intention, companies must raise their customer loyalty (Chi et al., 2009), which can be made possible by emphasizing trust associated with the brand. The degree of customer trust is directly dependent upon the customer's loyalty (Flavian et al., 2006; Sirdeshmukh et al., 2002). Since brand trust determines future purchase intention with help of awareness, perceived quality, and loyalty to the brand (Delgado et al., 2005; Chen, 2010; Garbarino and Johnson, 1999), customer loyalty is said to be positively associated with brand trust. This study hypothesized that the greater the level of brand loyalty associated with green products, the higher the green brand trust leading to larger purchase intention of green products. Thus, this study proposes the following hypothesis,

**Hypothesis 5 (H5)- Green brand loyalty has a positive impact on green brand trust.**

The study seeks to extend research on greenwashing in India by first understanding consumer perception about greenwashing and its impact on green brand trust with the mediating effect of the green brand image and green brand loyalty. Though there are many studies on greenwashing, no study discusses the consumer's perception on greenwashing activities based on an empirical test to study the impact of greenwashing on green brand trust using mediating variables such as green brand image and green brand loyalty in the Indian context. Therefore, this study attempts to fill this research gap and make a unique contribution by pioneering the studies of greenwashing activities from the Indian consumer's perspective.

**6. Theoretical Frameworks/ Adoption Models**

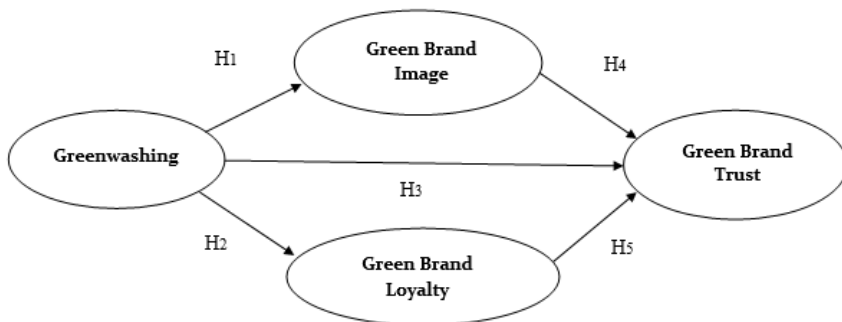


Figure 1 Research framework

**III. Methodology and Measurement**

**1. Data Collection and the Sample**

The study uses the consumer as a unit of analysis, specifically the consumer purchasing green products or brands for environment protection. The research focuses on Indian consumers selected on the basis of random and judgment sampling methods. This study employs the survey method using a questionnaire to verify hypotheses and research framework. Accordingly, a sample comprising of 248 respondents was collected from various parts of the country with an effective response rate of 42.8%. The sample is well balanced

in terms of demographics, namely, age, and gender, working and non-working respondents. The data is collected through written questionnaire method (via email and printed copies) sent to 579 randomly chosen consumers; it is divided into five sections - greenwashing, green brand image, green brand loyalty, green brand trust, and questions on demographic information. Questionnaires have the advantage of reaching a large number of people at low cost (Sekaran, 2003). Also, they have the advantage of being anonymous, however, self-administered questionnaires are also subject to the disadvantages (Bourque and Fielder, 1995; DeVaus, 1996; Kerlinger, 1986; Oppenheim, 1992) of having no control over who answers the questionnaire, misunderstanding of questions and a low response rate. Therefore, participants could take the survey only once, and pre-testing of the questionnaire was done by circulating it among college professors and research scholars in the Mumbai region of India.

**Table 1 Demographic features of the respondents**

Dimension	Variable	No. of Respondents
Age	0-20	175
	20-40	200
	40-60	100
	60 and above	04
Income (INR per annum)	Below 300000	250
	300000-500000	300
	Above 500000	28
Gender	Male	275
	Female	304
Cities	Metro	376
	Other cities	203
Occupation	Working	312
	Non-working	267

## **2. Measurement of the Constructs**

The study evaluates questionnaire items using a five-point Likert scale from 0 to 5 rating, ranging from the strength of disagreement to the strength of agreement. This study asked each respondent to identify a green product or brand they purchased and which he or she find most impressive in terms of environmental friendliness or sustainability. Then, each respondent was asked to fill in the questionnaire based on information about the green product or brand that the consumers possess. The references used in creating a

measurement scale for constructs and the measurements of the constructs in this study are described as follows:

Greenwashing: The study intends to investigate the awareness of greenwashing activities among Indian consumers of green products or brands by referring to Chen and Chang (2013) in the following five items:

- a) The green product or brand misleads consumers with words or phrases by promoting its environmental features.
- b) The green product or brand confuses consumers with visuals or graphics by promoting its features related to the environment.
- c) The green product or brand makes vague or seemingly unprovable claims of environment protection.
- d) The green product or brand overstates or exaggerates its functionality in terms of supporting the environment.
- e) The green product or brand makes claims by deliberately leaving out or masking important information about the environment.

Green brand image: The assessment of green brand image is carried out by referring to Chen (2010) and using the following five items:

- a) The green product or brand is considered the best for its environmental commitments.
- b) The green product or brand is professional about its environmental reputation.
- c) The green product or brand is true about its environmental performance.
- d) The green product or brand is true about its environmental concerns.
- e) The green product or brand is trustworthy about its environmental promises.

Green brand loyalty: The measurement of green brand loyalty is done by referring to Chen (2013) using the following four items:

- a) The consumer is willing to do a repeated purchase of the green product or brand due to its functions related to environmental sustainability.
- b) The consumer prefers purchasing the green product or brand over other brands for its performance related to environmental sustainability.
- c) The consumer avoids switching to other green product or brands because of its environmental concern.
- d) The consumer intends to continue purchasing the same green product or brand because of its environmental sustainability.



Green brand trust: Lastly, this study measures green brand trust by referring to Chen (2010) using the following five items:

- a) The consumer feels that green product or brand's environmental reputation is reliable.
- b) The consumer feels that green product or brand's environmental performance is dependable.
- c) The consumer feels that green product or brand's environmental claims are trustworthy.
- d) The consumer feels that green product or brand's environmental concerns meet his or her expectations.
- e) The consumer feels that green product or brand protects the environment by keeping its promises and commitments.

#### **IV. Empirical Results**

The study uses the Statistical Package for the Social Sciences (SPSS) and AMOS 24 version software to analyze data, which is divided into two parts. Firstly, the study focuses on getting an overview of consumer perception regarding greenwashing activities in India and, secondly, this study uses analytical techniques to find out the impact of greenwashing on green brand image, green brand loyalty, and green brand trust.

*Part I- To get an overview of consumer perception regarding greenwashing activities in India.*

An overview of Indian consumer perception on greenwashing activities, was based on a descriptive analysis. The results of the analysis were tabulated below.

**Table 2 Description analysis of greenwashing activities**

Dimensions	N	Minimum	Maximum	Mean	Std. Deviation
The green product or brand misleads with words in terms of environmental features	272	1.00	5.00	1.7535	0.06878
The green product or brand mislead with visual or graphics in terms of environmental features	269	1.00	5.00	1.6257	0.07898
The products green the claim is vague or seemingly unprovable	274	1.00	5.00	1.4024	0.08459
The product overstates or exaggerates its green claim	266	1.00	5.00	1.5671	0.96940
The product tries to prove its green claim better than others	269	1.00	5.00	1.4569	0.10153
Valid N (list-wise)	248				

From the table above, the study concludes that customers are not quite aware that the product misleads them with words in term of environmental features, with a mean of (1.7535), followed by the parameter that the product misleads with visual or graphics, with a mean of (1.6257). The customers are also less aware that the product overstates its claims, with a mean of (1.5671). Parameters relating to a product that tries to prove that it is better than others have a mean of (1.4569) and vague product claim has a mean of (1.4024). Therefore, we can say that awareness among Indian consumers regarding greenwashing activities is at a low level. They are aware that they are being misled through words or graphics about environmental features, but are not fully aware on other parameters like products overstating their claims and products trying to prove they are better than others.

*Part II- To examine the impact of greenwashing on green brand trust, green brand image, and green brand loyalty.*

For analyzing the impact of greenwashing on green brand trust, green brand image, and green brand loyalty, this study uses structural equation modeling (SEM) on two levels - the measurement model and the structural model.

## **1. Results of the Measurement Model**

The mean, standard deviations, and correlation matrix are reported in the table below:

**Table 3 Descriptive statistics of this study**

S. No	Constructs	Mean	S.D.	A	B	C
1	Greenwashing	1.720	0.372			
2	Green brand image	3.589	0.390	-0.270*		
3	Green brand loyalty	3.649	0.385	-0.285*	0.297*	
4	Green brand trust	3.763	0.578	-0.310*	-0.302*	-0.301*

Note: \*p<0.05, \*\*p<0.01

The table shows that greenwashing has a negative correlation with other constructs whereas there is a positive correlation among green brand image, green brand loyalty, and green brand trust. Besides, the reliability and validity of the measurement model are shown in the table below:

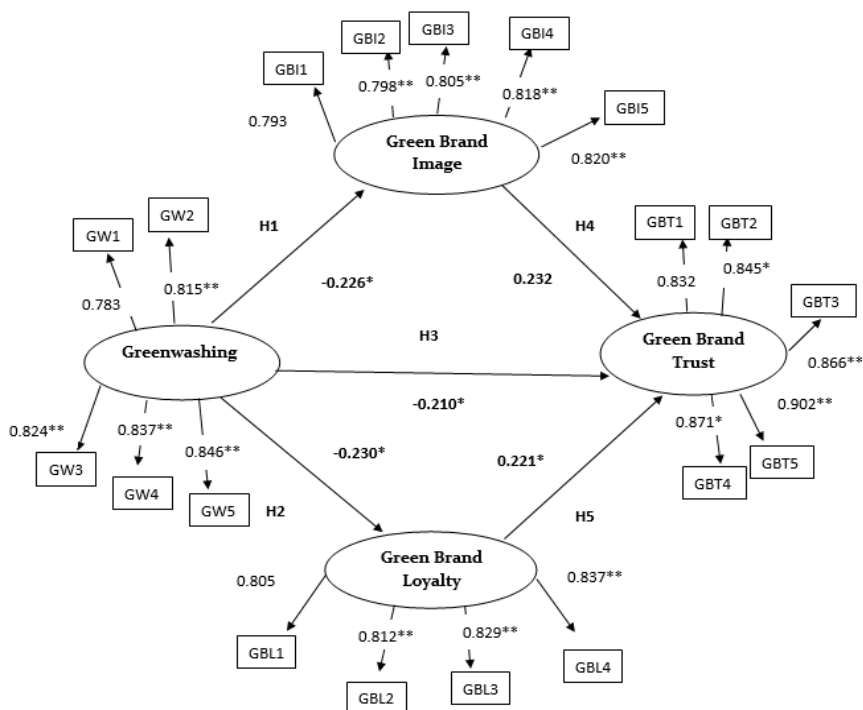
**Table 4 The items' loadings ( $\lambda$ ) and the constructs' Cronbach's  $\alpha$  coefficients and AVEs**

Constructs	No. of Items	Factor Loadings $\lambda$	Cronbach's $\alpha$	Average variance extracted (AVE)	Square Root of AVE
Greenwashing	GW1	0.783	0.891	0.686	0.828
	GW2	0.815**			
	GW3	0.824**			
	GW4	0.837**			
	GW5	0.846**			
Green Brand image	GBI1	0.793	0.885	0.728	0.853
	GBI2	0.798**			
	GBI3	0.805**			
	GBI4	0.818**			
	GBI5	0.820**			
Green Brand loyalty	GBL1	0.805	0.903	0.740	0.860
	GBL2	0.812**			
	GBL3	0.829**			
	GBL4	0.837**			
Green Brand Trust	GBT1	0.832	0.910	0.752	0.867
	GBT2	0.845**			
	GBT3	0.866**			
	GBT4	0.871**			
	GBT5	0.902**			

Note: \*\* p<0.01.

The study shows that the loading ( $\lambda$ ) of all items is significant and, in addition, the table also shows Cronbach's  $\alpha$  coefficient, which examines the reliability of the measurement model. The minimum requirement of the Cronbach  $\alpha$  coefficient is 0.7 (Hair et al., 1998). Based on the results, the measurement is acceptable in reliability since Cronbach alpha is more than 0.7 for all constructs. In addition, the study uses an average variance extracted (AVE) in order to find the discriminant validity of the measurement (Forman and Larcker, 1981). The square root of a construct's AVE should be higher than the correlations between the constructs for discriminant validity. Based on results obtained, there is enough discriminant validity between the constructs and hence it is acceptable in this study. Moreover, the convergent validity of a construct is acceptable if it is higher than 0.5, so accordingly, the study shows acceptable convergent validity of the measurement.

## 2. Results of the Structural Model



(GFI=0.908, RMSEA=0.042, NFI=0.912, CFI=0.910) Note: \* $p < 0.05$ , \*\* $p < 0.01$ .

Figure 2 The results of the full model

As shown in Figure 2, the overall fit measuring the full model in SEM demonstrates that the fit of the model is acceptable since all five paths are significant. The residuals of covariance center near zero, so increasing more paths won't significantly improve the fit. The results of the structural model are given in the table below:

**Table 5 The results of the structural model**

Hypothesis	Proposed effects	Path coefficient	Result Supported
H <sub>1</sub>	-	-0.226*	Supported
H <sub>2</sub>	-	-0.230*	Supported
H <sub>3</sub>	-	-0.214*	Supported
H <sub>4</sub>	+	0.232*	Supported
H <sub>5</sub>	+	0.221*	Supported

The results of the empirical tests point out that greenwashing negatively impacts green brand image, green brand loyalty as well as green brand trust. It also shows that green brand image and green brand loyalty both have a positive impact on green brand trust. Therefore, this study infers that the reduction of greenwashing will not only cause an increase in green brand image and green brand loyalty, but it will also increase in compliance with the growing environmentalism by raising green brand trust among consumers in India. The study extends research on greenwashing by using constructs such as green brand image and green brand loyalty as mediating variables in order to understand the awareness and impact of greenwashing activities. Currently, there is a vast amount of literature on greenwashing, but no study discusses the relationship between greenwashing and green brand trust using the green brand image and green brand loyalty as mediating variables. Therefore, this study proposes to fill this research gap and make a unique contribution by pioneering the studies of greenwashing activities from the Indian consumer's perspective.

## **V. Conclusion and Implications**

Due to the lack of a genuine commitment by companies, many cases of greenwashing activities have been exposed in the last decade, making green consumers cynical about their environment concern. Firstly, consumers at various levels do not even know what the word 'Green' specifically means and even those who know about it, have little awareness that greenwashing activities damage consumer's trust by affecting brand image and brand loyalty for green product or brand. The previous literature focuses little on how trust

can be built among consumers. So, this study offers a consumer perception approach of greenwashing activities and how they impact negatively on green brand trust, green brand image and green brand loyalty with a view to stimulate the trust-building process for Indian companies in the greenwashing trend. India is one of the leading economies, hence a lot of awareness needs to be created on what is greenwashing and how it undermines consumer trust. The study should be useful for policymakers to design some regulatory measures to curb rampant greenwashing practices. The practical implications are as follows:

**To the consumers:** The study serves as a great source to educate consumers on how greenwashing negatively impacts brand image and brand loyalty, which eventually undermines green brand trust.

**To the company:** The study will benefit companies to understand the consumer awareness of greenwashing activities and how to increase the value of green brand trust for their products or brands.

## **VI. Recommendations and Limitations**

In the past decade, many countries, especially the developed ones, have framed laws to stop the evils of greenwashing. It is time for developing countries to prohibit companies from greenwashing by framing new, stricter laws that can be implemented. The new laws and regulations should be in place so that companies can be punished for providing misleading environmental claims. Companies must stop using the color 'Green' in the logos of different products in order to create an environment-friendly image. There is a dire need to distinguish products based on their environmental impact. Green audits can help evaluate the performance of the companies towards the conservation of the environment. The advertisement standards and corporate codes of conduct should be reformed by the government, holding companies accountable through the usage of mass media. Time has come for government bodies, NGOs and environmentalists need to step forward and stop the menace of greenwashing for the betterment of consumers and society at large.

### **Limitations**

The main limitation of the study was the time factor and the number of variables used for conducting the study. In addition, the study had three more limitations. Firstly, the focus was only on green products or brands, so future research can include other products like electronic products or brands.

Secondly, it focuses only on Indian consumers, so future research can focus on other geographical regions with different demographics. Thirdly, the study could not observe the dynamic changes through longitudinal data, since it only provides cross-sectional data.

**Note from Dr Shashi Jain, Chair of COSMAR 2018**

As consumers become increasingly aware of the environmental impact of their choices, corporations world-wide have put in concerted efforts to become “greener”. While honest efforts to go green helps the society as well as the corporation by building up green-loyalty, what happens when consumers are misled by the companies to believe that they are making environment friendly choices? This paper presents the results of an empirical study to understand the impact of the so-called greenwashing on the green brand image in India.

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