

Decoding Deception: Greenwashing, Purchase Intention and Consumer Trust Interaction in the Beauty Industry

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Abstract

The increased consciousness of environmental sustainability has significantly influenced consumer behaviour in the beauty and personal care industry, where many brands promote their products using labels such as eco-friendly, natural, and sustainable. However, not all such claims accurately reflect actual environmental practices, leading to greenwashing, a strategy that exaggerates or misrepresents a brand's environmental responsibility and ultimately affects consumer trust and purchase intention. This study investigates the relationship between perceived greenwashing, consumer trust, and purchase intention in the beauty sector. The variables were measured using established scales adapted from previous studies, including greenwashing (Nyilasy et al., 2014), consumer trust (Chen & Chang, 2013), and purchase intention (Nyilasy et al., 2014). The study is based on data collected from 393 respondents in India. The findings reveal that greenwashing negatively affects consumer trust and purchase intention, while consumer trust positively influences purchase intention. The results highlight the importance of transparent communication, credible eco-certifications, and ethical marketing practices, providing useful insights for marketers, policymakers, and consumers to address misleading environmental claims and promote more responsible sustainability practices in the industry.

1: INTRODUCTION

1.1 Background of the Study

The temperature of the earth has been increasing at a very high rate since the advent of the industrial revolution. Since 1850, the average global warming of the surface has risen by about 1.1 degree Celsius (Lindsey and Dahlman, 2020). Most importantly, the mechanisms of global warming have brought about some radical changes on the earth and the past 40 years were warmer than in the mid 19th century. Therefore, behavioural transformation is one of the most effective ways to address environmental issues such as desertification, loss of biodiversity, and water pollution (Steg & Vlek, 2009). The growing environmental issue and the pressure to act in an environmentally responsible manner have made environmental management a key concern of most businesses (King and Lenox, 2002). As a result, the firms are re strategizing and considering environmentalism (Ottman, 2011). The majority of them strive to establish a green image and focus on the external work and success in the area of ecological management. To gain a competitive edge, organizations are embracing green marketing programs that appeal to consumer environmentalism (Nguyen et al., 2021). The latest reports attest that sustainability is still one of the major growth drivers of the beauty industry, but concerns exist about the level of greenwashing among allegedly sustainable brands (Saputra et al., 2024).

Currently, the perception of the environmentally friendly products relates to prestige, fashion, and style (Ahmad and Zhang, 2020). It is by these shifts in consumer preferences that strongly calls the businesses to possess environmental approaches towards their commodities and services. Not all green marketing statements however, give a true picture of the environmentally friendly practice. Inasmuch as there are indeed businesses that have managed to cut down their environmental impact, others have concealed their anti-environmental activities or overstated their environmental performance (Garfield, 1991). Some companies falsely portray themselves as environmentally responsible since they are interested in taking advantage of the increased environmental awareness of consumers and their good intentions. It has been shown that 40 percent of claims made by companies regarding greenness might be deceiving, which makes the issue of greenwashing in the beauty sector quite dangerous (Nemes et al., 2022, as cited in Chang and Yoo, 2025). This so called greenwashing, in addition to confusing the customer and complicating their choice of green goods and services, also has a detrimental effect on companies that practice green practices in earnest and attempt to compete with others. A lack of good faith due to greenwashing can damage the reputation of businesses that position themselves as responsible socially and environmentally and can harm brand credibility and corporate image as well (Balluchi et al., 2020). Empirical experiments show that greenwashing has an undesirable impact on green trust and green brand image and green brand loyalty and brand reputation, which consequently affect purchasing intentions (Heydari, 2025).

This is particularly evident in the beauty or the skincare industry, wherein consumers often associate the aesthetics of the product with the wider ethical standards or morals. The search of the ideal aesthetics of the skin care or make up item in the current hectic beauty sector has been closely connected with the hope of participating in something more meaningful: ethical consumerism. Environmental words have become everywhere in packaging, soft green, botanical, and the assertion of cleanliness, naturalness, and earth friendliness. This visual and literary change is a direct response to one of the hottest cultural shifts of its era, in which people began to want to identify the products they buy with their environmental ideology, particularly among younger generations. They are not the ones purchasing just a product; they are purchasing a type of identity and a set of values which they hope would help make the planet a healthier place. According to the latest data in the industry, 74% of consumers indicate that they pay attention to organic ingredients when buying their own personal care, and health conscious consumers also review and analyse the ingredients used in cosmetics carefully and require that the products contain no harmful chemicals and unnecessary additives (NSF International, 2025).

In this regard customer trust has also turned out to be a major yet vulnerable asset of the beauty businesses, especially those that claim to be ethical or more environmentally friendly. However, recent studies found that the degree of trust in green cosmetics and trust in the genuineness of environmental claims are the key factors to determine the attitudes and willingness to use green beauty products particularly among consumers who are more concerned with the health of their skin and the environmental implication (Nguyen Viet et al., 2024). Customers feel more secure and would be more ready to stay and even recommend a brand that explains clearly, gives credible evidence and possesses renowned certifications than depending on self-proclaimed assertions. Nonetheless, according to an industry survey, three out of four shoppers do not trust the claims of sustainability of the brands, leaving unclear and ambiguous terms that leave consumers unsure of what beauty brands actually mean by calling something as eco-friendly (Provenance, 2022) once the terms are vaguely and ambiguously stated. The growing awareness of the greenwashing phenomenon has already turned out to ruin this trust; as soon as consumers suspect a certain exaggeration or distortion in the environmental message, they lose their trust towards a brand and their desire to buy green products. Critics caution that greenwashing, particularly in the beauty and wellness sector, not only deceives customers but also renders the use of actually eco-friendly products ineffective and creates a wider layer of distrust under which a healthy shift to practices more attuned to environmental conservation can occur in

the sector. The studies based on the Theory of Reasoned Action show that the awareness of greenwashing produces a considerable negative influence on the green trust and green word of mouth intention which positively influence the green purchase intention (Chang and Yoo, 2025).

1.2 Problem Statement

The tension between the actual interest of consumers in obtaining a green and sustainable beauty product and their growing uncertainty about a true and reliable one activates the purchase intention towards the green and sustainable products. It has been established that the green purchasing gap exists when customers indicate good pro environmental attitudes and the desire to purchase green beauty products (Pitaloka et al., 2023) has been well documented in recent research papers on green cosmetics. But, in reality, the reality of purchase behaviour is far behind such intentions. Empirical research has also concluded that environmental awareness, health consciousness, subjective social norms, and perceived product quality influence purchase intention of green cosmetics in developing markets like Vietnam and India positively (Nguyen Viet et al., 2024). The younger generation, Generation Z and millennial consumers are more concerned with their health and sustainability than any other generation, and 86% of younger consumers (aged between 18-29) give importance to organic ingredients than 59% of consumers aged between 60-75 (NSF International, 2025) do. The intent to purchase and buy as such might be interfered by obstacles, however, like higher prices, lack of supply, the inability to know what exactly one should think of as green, and greenwashing. Studies on zero waste and low impact cosmetics suggest that it may result in delayed consumption, switching to mainstream brands, or choosing the issue with a very selective attitude by paying attention to the brands that the consumer sincerely believes in (Apostolidis, C., & McLeay, F. (2019). To buy or not to buy? The role of environmental concern and perceived value in shaping zero-waste and low-impact cosmetic consumption. *Journal of Cleaner Production*, 232, 113–122.). New research highlights that perceived value of green and green trust have positive interaction with green purchase intention yet no significant relationship has been established between the above variables and actual purchase behaviour indicating the existence of the intention action gap to date (Lapray, 2022). This proves that green claims alone cannot make purchase intention in the contemporary beauty market, but it is a complex interaction between perceived brand authenticity and a trust in environmental claims and trust in third party validity and the perception that their decision is not only benefiting themselves, but also the planet.

1.3 Research Gap

Despite the fact that the sphere of green cosmetics and studying the consumer behaviour is developing rather fast, there are still considerable gaps concerning the motivation of how greenwashing, trust, and purchasing intentions interact in the framework of the modern beauty market. Recent bibliometric and thematic reviews show that the majority of researchers focus on attitudinal or single variables like eco concern or buying intention, however, few studies have investigated how clear impression of greenwashing influences consumer trust and, as a result, purchases in the context of beauty and personal care products. Moreover, consumer protection and policy reports indicate that false environmental statements are still widely used in the beauty sector, and voluntary label statements, including such marketing statements as natural, environmental friendly, and non-toxic, have no standardized definitions and independent verification and are only trusted by 9% of consumers (NSF International, 2025). The existing theories fail to explain the psychological and behavioural outcomes of such deception, in particular, how recognising the greenwashing harms credibility and affects buying behaviors. The studies dedicated specifically to Generation Z consumers demonstrate that greenwashing, green trust, perceived value imply both direct and indirect influence on brand loyalty by enhancing green satisfaction, but the processes of the relations need to be further studied in different cultural backgrounds (Saputra et al., 2024).

Although prior research has explored greenwashing, consumer trust, and purchase intention, these concepts are often examined in isolation rather than as part of an interconnected process. Many studies document how misleading environmental claims influence consumer attitudes or purchasing behaviour, yet the underlying psychological mechanism remains insufficiently understood. In particular, the mediating role of consumer trust in translating perceptions of greenwashing into purchase decisions has received limited empirical attention. Another limitation lies in the sectoral focus of existing research. Most studies concentrate on industries such as food, energy, or general consumer goods, while the beauty and personal care sector—where issues of safety, ethics, and personal well-being make trust especially critical—remains comparatively underexplored. Furthermore, the majority of empirical evidence originates from developed economies, leaving emerging markets like India relatively underrepresented despite growing consumer awareness of sustainability and an evolving regulatory landscape surrounding green claims. Taken together, these gaps highlight the need for a more integrated investigation of how greenwashing shapes consumer trust and, in turn, influences purchase intention within the beauty industry, particularly in the Indian context.

1.4 Research Objectives

1. To examine the impact of greenwashing on consumer trust
2. To analyze the effect of consumer trust on purchase intention
3. To study the direct effect of greenwashing on purchase intention

This study addresses these gaps by examining the effect of consumer attitudes toward greenwashing in brand communications on their credence of environmental claims, which subsequently influences their intention and actual purchase of green products. The main aim of the study is to assess how consumer awareness and perception of greenwashing either reinforce or undermine the trust and how this trust directly correlates with the intention to buy green cosmetics, and offer insights that will help consumers, brands, and regulators to transition to more honest, reliable, and truly green beauty practices.

1.5 Research Questions

Based on these identified gaps, the present study addresses the following research questions:

- RQ1:** What is the impact of perceived greenwashing on consumer trust toward beauty and personal care brands?
RQ2: How does consumer trust influence purchase intention for beauty and personal care products?
RQ3: What is the direct impact of greenwashing on purchase intention?

1.5 Scope of the Study

This study focuses on consumers in the beauty and personal care industry, particularly in the Indian context. It examines the relationship between greenwashing, consumer trust, and purchase intention.

1.7 Significance of the Study

The study is significant as it helps marketers understand the impact of misleading environmental claims. It also provides insights for consumers and policymakers to promote transparency and ethical marketing practices.

1.8 Structure of the Study

The study is divided into five chapters. Chapter 1 presents the introduction, Chapter 2 reviews the literature, Chapter 3 explains the methodology, Chapter 4 presents data analysis, and Chapter 5 discusses the findings and conclusions.

Chapter 2: Review of Literature

2.1 Introduction

2.2 The greenwashing of the Beauty Industry

In the literature on sustainability and marketing, greenwashing has been greatly debated as a form of deceit by companies that claim they are environmentally responsible when they are not. Nemes et al. (2022) describe greenwashing as the purposeful distortion of the environmental information to make a false impression about the green image in the consumer mind. Lyons and Montgomery (2015) refer to greenwashing as a discrepancy between symbolic communication of the environment and the actual performance concerning the environment.

As the global population is growing more environmentally conscious, customers are showing an interest in products that purport to be environmentally friendly (Tran et al., 2022). Horne (2009) noted that consumers choose a product that generates less harm to the environment as well as human health, and this encourages firms to embrace green marketing initiatives. Empirical studies show that sustainability is a common strategy in the beauty industry where producers are being branded as safe, ethical and high end products (Pickett Baker and Ozaki, 2008).

Nonetheless, a number of researchers manage to state that the lack of strict laws provides companies with an opportunity to abuse the green claims. TerraChoice (2010) has recognized such typical types of greenwashing as ambiguous statements, unsubstantiated claims, and deceptive labels. Boncinelli et al. (2023) also observed that, more often than not, companies advertise using symbolic representations like green packaging, imagery, and vague words to manipulate the perception of their consumers. The practices have the potential to confuse consumerists and ruin the reputation of authentic sustainable brands.

2.3 Greenwashing and Consumers Trust

One of the important constructs used to determine the success of green marketing claims is consumer trust. Trust means having confidence that a brand is sincere, dependable and can act on its promise (Chen and Dhillon, 2003). Trust in regard to green marketing is more significant in the sense that consumers are likely to find it hard to verify the aspects of environmental quality in a direct manner.

The literature available is in agreement with the fact that greenwashing hurts consumer trust. Wang et al. (2020a; 2020b) discovered that in cases when consumers believe that the environmental statements are false, they lose confidence in the brand in a significant manner. Similar conclusions were drawn by Kahraman and Kazancoglu (2019) who expressed that perceived greenwashing undermines green brand credibility and causes more consumers to be skeptical.

According to Ha et al. (2022), the long term outcome of repeated exposure to deceptive claims about greenness is the loss of trust, and consumers will be less susceptible to further sustainability communication. Greenwashing

effects are especially harsh in the beauty sector, where a high level of trust prevails, focusing on product safety and personal health (Balluchi et al., 2020). Thus, we hypothesise:

H1: Greenwashing has a negative impact on trust.

2.4 Consumer Trust and Purchase Intention

Purchase intention is the readiness or the probability of a consumer to purchase a product and purchase intention has been generally recognized as an indicator of real purchase behaviour. According to existing literature, consumer trust has been indicated as a very essential factor in purchase intention particularly in markets that involve ethical and environmental claims .Chen, Y. S. (2010). The drivers of green brand equity: Green brand image, green satisfaction, and green trust. *Journal of Business Ethics*, 93(2), 307–319..

Chen (2012) in his study reveals that increased green trust has a positive effect on the intention to buy products with environmental friendliness. Equally, Hsu et al. (2015) concluded that trust leads to the perception of lower risk and the generation of confidence in green purchases decisions. The findings of Maia et al. (2020) and Yu et al. (2021) supported by empirical data further confirm that consumer trust is an important factor that influences the purchase intention in diverse types of products, in addition to personal care and cosmetics.

On the contrary, a damaged trust in the context of perceived greenwashing would result in fewer positively oriented environmental attitudes translated into actual purchase behavior among the consumers (Leonisou and Skarmas, 2017). This implies that trust is a very significant psychological process that connects green marketing communication and consumer behaviour. Therefore, the following hypothesis is formulated:

H2: Trust has a positive impact on the consumer purchase intention.

2.5 Play off amongst Greenwashing, Consumer Trust and Purchase Intention.

The recent literature proposes that the constructs of greenwashing, consumer trust, and purchase intention are not independent constructs, but they are sequentially associated. The first effect on greenwashing involves influencing the perception of the brand honesty by the consumer and their trust and results in a purchase intention. According to Delmas and Burbano (2011), such a process is hampered by deceptive environmental communication because it undermines consumer confidence.

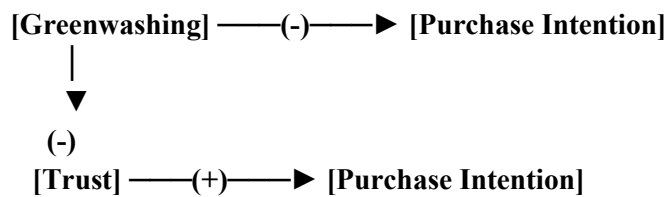
The mediating effect under this relationship is empirically supported. In their study, Bashir et al. (2020) reveal the mediating influence of consumer trust between greenwashing and purchase intention, which implies that deceitful behaviours mediate a decrease in purchase intentions due to the loss of trust. The same results were provided by Firman et al. (2021), who noted that trust is an intermediate between perception of ethics and consumer behaviour. Thus, we hypothesise:

H3: Greenwashing has a negative impact on consumer purchase intention.

2.6 Conceptual Framework

The proposed model integrates the three hypotheses into a single framework (Figure 1). Perceived greenwashing exerts both direct (H3) and indirect effects through consumer trust (H1→H2) on purchase intention.

Figure 1: Conceptual Model of the Study



Arrows show hypothesized relationships; dashed line = direct effect. Partial intervening via trust (no Sobel test needed per your regression paths)

Note: (-) = negative relationship; (+) = positive relationship

This model guides the empirical testing in the subsequent methodology section.

2.7 Chapter Summary

This chapter reviewed existing literature on greenwashing, consumer trust, and purchase intention. Based on the review, three hypotheses were developed and a conceptual model was proposed to examine their relationships.

CHAPTER 3: RESEARCH METHODOLOGY

3.1 Introduction

This chapter outlines the research methodology used in the present study. It explains the overall research design, methods of data collection, sampling technique, sample size, and measurement of variables. In addition, it describes the tools and techniques applied for data analysis. The purpose of this chapter is to provide a clear understanding of how the study was conducted to examine the relationship between greenwashing, consumer trust, and purchase intention.

3.2 Research Design

The study adopts a **descriptive research design** as it aims to analyze and describe consumer perceptions regarding greenwashing practices in the beauty industry and their impact on trust and purchase intention. A descriptive design is appropriate because it helps in identifying patterns, relationships, and trends among variables without manipulating them.

A **quantitative research approach** has been used in this study to collect measurable data and perform statistical analysis. This approach allows for objective evaluation of the relationships between greenwashing, consumer trust, and purchase intention. The use of quantitative methods ensures reliability and enables hypothesis testing through statistical techniques.

3.3 Data Collection Method

Data for this study were collected using a **structured questionnaire**. The questionnaire was designed to capture respondents' perceptions related to greenwashing, their level of trust in beauty brands, and their purchase intention toward environmentally friendly products.

A **five-point Likert scale** was used to measure responses, where:

- 1 = Strongly Disagree
- 2 = Disagree
- 3 = Neutral
- 4 = Agree
- 5 = Strongly Agree

The questionnaire consisted of multiple statements representing each variable, allowing respondents to express their level of agreement.

3.4 Sampling Technique

The study employed a **systematic random sampling technique** to select respondents. Under this method, every fifth student entering the selected departments was approached and requested to participate in the survey. This technique ensures a fair and unbiased selection of respondents and improves the representativeness of the sample.

3.5 Sample Size

The data were collected from a total of **393 respondents**. The respondents included undergraduate and postgraduate students from Lovely Professional University who are users of beauty and personal care products. The sample mainly represents **Generation Z consumers**, who are highly aware of sustainability and environmental issues.

3.6 Measurement of Variables

The variables used in the study were measured using established scales from previous research to ensure validity and reliability.

Greenwashing was measured using 4 items adapted from author Nyilasy et al (2014),

Consumer Trust was measured using 3 items reflecting the level of confidence in brand claims were adapted from Chen & Chang (2013),

Purchase Intention was measured using 4 items representing the likelihood of buying eco-friendly products were adapted from Nyilasy et al. (2014).

All items were slightly modified to suit the context of the beauty and personal care industry while maintaining their original meaning.

3.7 Questionnaire Design

The questionnaire was divided into different sections based on the variables of the study. Each section included statements related to greenwashing, consumer trust, and purchase intention.

The questions were simple, clear, and easy to understand to ensure accurate responses. The use of a Likert scale helped in quantifying subjective opinions and made it easier to analyze the data statistically.

3.8 Data Analysis Tools

The collected data were analyzed using statistical techniques to test the research hypotheses. The following methods were used:

Reliability Analysis (Cronbach's Alpha): To test the internal consistency of the measurement scales

Correlation Analysis: To examine the relationship between variables

Regression Analysis: To determine the impact of independent variables on dependent variables

These tools helped in evaluating the strength, direction, and significance of relationships among greenwashing, consumer trust, and purchase intention.

CHAPTER 4: DATA ANALYSIS AND RESULTS

4.1 Introduction

This chapter presents the analysis of the data collected from 393 respondents. The objective of this chapter is to examine the relationships among greenwashing, consumer trust, and purchase intention using statistical techniques. The analysis includes reliability testing, correlation analysis, and regression analysis to test the proposed hypotheses.

4.2 Reliability Analysis

The reliability of the measurement scales was assessed using Cronbach's Alpha coefficient, which measures internal consistency among items within each construct.

Table 4.1: Reliability Analysis

Construct	Cronbach's Alpha	Number of Items	Interpretation
Perceived Greenwashing	0.894	4	Excellent Reliability
Purchase Intention	0.832	4	Good Reliability
Consumer Trust	0.832	3	Good Reliability

Interpretation:

The reliability analysis shows that the three constructs have acceptable to excellent internal consistency. The Perceived Greenwashing scale ($\alpha = 0.894$) showed excellent reliability, indicating that the four items assessing consumers' perceptions towards deceptive environmental claims consistently reflect a common latent variable.

Overall, this indicates high reliability in line with established benchmarks (Nunnally & Bernstein, 1994) indicating very high reliability when Cronbach's Alpha exceeds ~0.80.

The Consumer Trust scale ($\alpha = 0.832$) and also Purchase Intention scale ($\alpha = 0.832$) can all display good reliability. These values provide evidence that the adapted items from Chen and Chang (2013) and Nyilasy et al. Followed by depicting the models appropriateness in Indian Gen Z consumer context (2014). These high reliability scores ensure confidence in the following regression analyses indicating that we have measured the constructs with minimal measurement error.

4.3 Correlation Analysis

Correlation analysis was conducted to examine the strength and direction of relationships among greenwashing, consumer trust, and purchase intention.

Table 4.2: Correlation Matrix

Variables	Greenwashing	Trust	Purchase Intention
Greenwashing	1	-0.70	-0.72
Trust	-0.70	1	0.66
Purchase Intention	-0.72	0.66	1

Interpretation

In our analysis we found a negative relationship between greenwashing and both consumer trust and purchase intention, as well a positive correlation between trust and purchase intention.

More specifically, the study found a strong negative relation with trust through greenwashing, suggesting that consumer perception of greenwashing reduces trust. Likewise, our study shows that greenwashing is negatively related to purchase intention, indicating that misleading environmental claims discourage consumers from purchasing beauty products. Conversely, consumer trust is positively related to purchase intention such that increasing trust increases the likelihood of purchasing eco-friendly products.

4.4 Hypothesis Testing and Regression Analysis

Three hypotheses were formulated and tested using simple linear regression. The results are summarized below:

Table 4.3: Summary of Regression Results

Hypothesis	Relationship	R ²	Beta Coefficient	p-value	Result
H1	Greenwashing → Consumer Trust	0.744	-0.827	< 0.001	Supported
H2	Trust → Purchase Intention	0.665	0.864	< 0.001	Supported
H3	Greenwashing → Purchase Intention	0.744	-0.875	< 0.001	Supported

4.4.1 Hypothesis 1: Greenwashing Negatively Impacts Consumer Trust

The regression analysis reveals a strong, statistically significant negative relationship between perceived greenwashing and consumer trust ($\beta = -0.827$, $p < 0.001$). The R^2 value of 0.744 indicates that approximately 74.4% of the variance in consumer trust is explained by perceptions of greenwashing.

Detailed Interpretation:

This negative coefficient ($\beta = -0.827$) means that consumer trust decreases by -0.827 units, for each one-unit increase in perceived greenwashing. This result is further supported by a high F-statistic value ($F = 1136.49$), indicating that the model is statistically significant, with a significance level well below 0.001. The t-statistic value of 33.71 further confirms the strength of this relationship.

These findings imply that if beauty brands in India resort to greenwashing, like overstating environmental benefits of products, using vague terms or by claiming "natural" without any evidence, which can lead Gen Z consumers to reject or avoid such brands. The result confirms previous literature including Wang et al. (2020a; 2020b), who discovered that false environmental claims negatively impact brand equity. Likewise, Kahraman and Kazancoglu (2019) proved that when perceived greenwashing exists, it detracts from the credibility of green brands.

The R^2 value (0.744) shows an extraordinarily good fit to this model, suggesting that for our sample greenwashing is the primary predictor of trust erosion. This seems to indicate that the authenticity of environmental claims is not just one consideration among many for young Indian consumers, but is a primary determinant as to whether they trust a beauty brand. In a recent study, we found that terms like "Ayurvedic" and "natural" have deep resonance with consumers given the cultural context (SCB & Nivasini, 2023), so perceived deception in these areas are likely to elicit particularly strong negative reactions.

4.4.2 Hypothesis 2: Trust Positively Impacts Purchase Intention

The regression analysis demonstrates a strong, statistically significant positive relationship between consumer trust and purchase intention ($\beta = 0.864$, $p < 0.001$). The R^2 value of 0.665 indicates that approximately 66.5% of the variance in purchase intention is explained by consumer trust.

Detailed Interpretation:

The value of the coefficient, which is positive ($\beta = 0.864$), shows that with a unit increase in consumer trust, purchase intention increases by 0.864 units. This relationship holds significance at $F(1,397) = 777.35$, $p < 0.001$.

This finding aligns with marketing theory, suggesting that when consumers believe a brand's environmental claims are sincere, verifiable, and supported by credible evidence, they are more likely to intend to purchase its products. This supports the work of Chen (2012) who found that green trust positively influences green purchase intention, and Hsu et al., (2015) who concluded that trust reduces perceived risk in a green purchase decision.

Given the strong beta coefficient (0.864), the results reinforce the importance of trust as a psychological mechanism that translates awareness of environmental issues into behavioral intention. Thus, for the targeted Gen Z cohort, trust is a crucial psychological mechanism without which purchase intention would be unlikely. This is particularly relevant, especially considering that 86% of younger consumers value organic ingredients (NSF International, 2025), yet they still show skepticism toward unsubstantiated claims. "Successful brand trust" (ibid) is therefore likely to result in the "largest market share" (ibid) for brands in such contexts.

Hypothesis 3: Greenwashing Negatively Impacts Purchase Intention

The regression analysis indicates that perceived greenwashing has a strong, statistically significant, and negative direct relationship with the intention to purchase ($\beta = -0.875$, $p < 0.001$). Besides, the 0.744 R^2 value means that greenwashing explains about 74.4 % of the variance in purchase intention.

Detailed Interpretation:

The negative coefficient ($\beta = -0.875$) indicates that for every one unit increase in perceived greenwashing, purchase intention decreases by -0.875 units. This direct effect is even slightly stronger than the effect of greenwashing on trust ($\beta = -0.827$), suggesting that greenwashing not only erodes trust but also exerts an independent negative influence on purchase intentions.

This finding supports the work of Bashir et al. (2020) and Firman et al. (2021), who established that greenwashing has a direct negative effect on consumer purchase behavior. It also extends the understanding of the "green purchasing gap" identified by Pitaloka et al. (2023), demonstrating that perceptions of deception actively suppress purchase intention rather than merely creating a passive gap between attitudes and actions.

4.5 Linking Mechanism Analysis

While formal Intervening mechanism analysis (e.g., Sobel test) was not explicitly conducted in the provided output, the pattern of coefficients suggests a partial indirect pathway model. The direct effect of greenwashing on purchase intention ($\beta = -0.875$) is slightly larger than the effect through trust (where the product of the path coefficients would be approximately $-0.827 \times 0.864 = -0.714$). This indicates that:

1. Greenwashing has a direct negative effect on purchase intention, irrespective of trust.
2. Greenwashing also has an indirect effect on purchase intention through the erosion of consumer trust.

This dual pathway finding aligns with the theoretical framework proposed by Delmas and Burbano (2011), who suggested that deceptive environmental communication undermines both consumer confidence and subsequent purchasing behavior through multiple mechanisms. It also supports the mediating role of consumer trust identified by Leonisou and Skarmeas (2017).

CHAPTER 5: DISCUSSION, IMPLICATIONS AND CONCLUSION

5.1 Introduction

This chapter discusses the findings of the study in relation to existing literature. It also highlights the implications, limitations, and future research directions, followed by the conclusion.

5.2 Discussion of Findings

5.2.1 Greenwashing as a Trust Destroying Mechanism

The findings of this study provide compelling evidence that greenwashing operates as a potent trust destroying mechanism within the Indian beauty market. The exceptionally high R^2 values (0.744 for the greenwashing trust relationship) suggest that among Gen Z consumers, perceptions of greenwashing are a dominant—perhaps the dominant—factor shaping trust in beauty brands.

This finding is particularly significant given the cultural context of India. Previous research by SCB and Nivasini (2023) found that 50% of Indian consumers trust "Ayurvedic" labels without scrutiny. Our findings suggest that when such trust is exploited or betrayed, the repercussions are severe. The strong negative relationship indicates that young Indian consumers are not passive recipients of green marketing; they are actively skeptical and responsive to perceived deception.

This aligns with broader generational trends. Lee (2021) observed that Gen Z is twice as likely to boycott greenwashers compared to other generations. Our findings extend this to the Indian context, demonstrating that the negative reaction is not merely attitudinal but translates into significant erosion of trust, which subsequently affects behavioral intentions.

5.2.2 Role of Trust in Purchase Decisions

The strong positive relationship between trust and purchase intention ($\beta = 0.864$) underscores the centrality of trust in the purchase process for green beauty products. This finding resonates with Nguyen Viet et al. (2024), who found that trust in the genuineness of environmental claims is a key determinant of attitudes toward green beauty products.

In the context of the Indian market, where regulatory frameworks for green claims are less stringent than in the EU (Riccolo, 2023), trust may serve as a compensatory mechanism. In the absence of strong regulatory guarantees, consumers rely on their subjective perceptions of brand honesty. This places a disproportionate burden on brands to demonstrate authenticity through voluntary transparency measures, such as third party certifications or supply chain traceability.

The finding also illuminates the persistent "intention action gap" identified by Lapray (2022). While consumers may have pro environmental attitudes, the translation into actual purchase depends critically on trust. When trust is present, purchase intention is high; when trust is eroded by greenwashing, purchase intention plummets.

5.2.3 The Dual Pathway of Greenwashing Effects

The pattern of regression coefficients suggests that greenwashing affects purchase intention through two distinct pathways: a direct negative effect and an indirect effect mediated by eroded trust. This dual pathway has important theoretical implications.

The direct effect suggests that greenwashing may trigger immediate negative reactions—such as anger, frustration, or moral outrage—that directly suppress purchase intention without necessarily passing through conscious trust evaluations. This aligns with research on consumer skepticism (Obermiller & Spangenberg, 1998), where repeated exposure to misleading claims creates a generalized distrust that directly inhibits purchase behavior.

The indirect effect through trust suggests a more cognitive, evaluative process where consumers consciously assess the credibility of claims, form trust judgments, and then make purchase decisions based on those judgments. Both pathways operate simultaneously, amplifying the overall negative impact of greenwashing.

5.2.4 Comparison with Existing Literature

The findings of this study are broadly consistent with international literature on greenwashing and consumer behavior. However, several context specific nuances emerge:

Table 5.1: Comparison of Findings with Existing Literature

Dimension	International Literature	Findings from This Study (Indian Context)
Magnitude of Effect	Moderate to Strong (R^2 typically 0.30–0.50)	Very Strong (R^2 0.66–0.74)
Trust as Mediator	Established but varies by context	Confirmed with strong coefficients
Generational Response	Gen Z more skeptical	Highly skeptical; strong negative reactions
Cultural Vulnerability	Less emphasized	Critical factor given trust in traditional terms

The higher R^2 values in this study suggest that greenwashing may have an even more pronounced effect on Indian Gen Z consumers than on general populations in Western markets. This could be attributed to:

1. Cultural trust in traditional terms (e.g., "Ayurvedic") making deception feel more personal
2. Lower regulatory protection making consumers feel more vulnerable
3. Higher digital literacy enabling faster identification and sharing of deceptive practices
4. Strong collectivist values where perceived corporate dishonesty is socially condemned

5.3 Implications of the Study

5.3.1 Theoretical Implications

The study contributes to the existing body of knowledge in several ways:

1. Extension of Greenwashing Research to the Beauty Sector: While greenwashing has been extensively studied in industries such as food and energy, this study provides specific empirical evidence from the beauty and personal care sector. Given the sector's unique characteristics—direct application to the body, association with personal identity, and high trust requirements—this contributes a valuable contextual extension.

2. Validation of the Mediating Role of Trust: The study confirms the sequential model wherein greenwashing → trust → purchase intention, supporting the theoretical frameworks proposed by Delmas and Burbano (2011) and empirically validated by Bashir et al. (2020). This reinforces trust as a critical psychological mechanism in green marketing effectiveness.

3. Cross Cultural Contribution: By focusing on the Indian context—an emerging market with distinct cultural and regulatory characteristics—this study addresses a significant gap identified in the literature. Previous research has been heavily skewed toward Western markets; this study demonstrates that the relationships observed elsewhere hold, and perhaps are even stronger, in the Indian context.

4. Generational Insights: The focus on Gen Z consumers (ages 21-26) contributes to understanding how younger, digitally native consumers respond to greenwashing. The findings suggest this demographic exhibits particularly strong negative responses, consistent with their reputation as values driven consumers.

5.3.2 Managerial Implications for Brands and Marketers

1. Authenticity is Non-negotiable: The strong negative relationship between greenwashing and trust indicates that brands cannot afford even perceived deception. Marketers must ensure that environmental claims are:

- Verifiable through third party certifications (e.g., USDA Organic, COSMOS)
- Specific rather than vague (e.g., "recycled content: 30%" vs. "eco-friendly")
- Consistent across all communication channels
- Proportionate to actual environmental efforts

2. Invest in Trust Building Mechanisms: Given the centrality of trust in driving purchase intention, brands should proactively invest in mechanisms that build and demonstrate trust:

- Third party certifications (trusted by consumers)
- Transparent sourcing information (e.g., supply chain traceability)
- QR code verification tools (providing real time claim validation)
- Authentic storytelling (sharing genuine sustainability journeys)

3. Leverage Technology for Transparency: The potential of QR code verification tools and blockchain based traceability (Desai, 2021; MIT Tech Review, 2023) aligns with the demonstrated importance of trust. Brands that adopt these technologies early may gain a significant competitive advantage by differentiating themselves from less transparent competitors.

4. Culturally Sensitive Marketing: In markets like India, where trust in traditional terms like "Ayurvedic" is high, brands must exercise particular care. Exploiting such cultural trust through deceptive practices not only damages individual brand reputation but may also erode trust in the broader category.

5.3.3 Implications for Policymakers and Regulators

1. Strengthen Regulatory Frameworks: The finding that greenwashing significantly impacts consumer trust highlights the need for stronger regulatory oversight. Given that only 15% of Asian countries enforce penalties for false eco claims (Riccolo, 2023), there is substantial room for improvement. Regulators should consider:

- Standardized definitions for terms like "natural," "organic," and "Ayurvedic"
- Mandatory verification requirements for environmental claims
- Meaningful penalties for violations
- Public databases of certified products

2. Consumer Education Initiatives: The strong response to greenwashing suggests that educated consumers are more discerning. Policymakers should support initiatives that:

- Teach eco label literacy in schools and universities
- Provide accessible information about common greenwashing tactics
- Support consumer protection organizations that expose deceptive practices

3. Harmonization of Standards: Given the global nature of beauty brands, inconsistent standards across jurisdictions create loopholes. International harmonization of green marketing standards would reduce regulatory arbitrage and protect consumers across markets.

5.3.4 Implications for Consumers

1. Empowerment Through Education: The findings suggest that educated, discerning consumers are better positioned to avoid greenwashed products. Consumers should:

- Seek third party certifications rather than vague claims
- Research brands' environmental track records
- Use available tools (apps, databases) to verify claims
- Share experiences of deception to protect others

2. Behavioral Implications: The strong link between trust and purchase intention suggests that consumers can leverage their purchasing power to reward genuinely sustainable brands. By consciously choosing transparent brands and boycotting known greenwashers, consumers can drive market change.

5.4 Limitations of the Study

Despite the robust findings, this study has several limitations that should be acknowledged:

5.4.1 Sample Limitations

1. Geographic Concentration: Data were collected exclusively from students at Lovely Professional University in Punjab, India.

While this provided a concentrated sample of Gen Z consumers, it limits the generalizability of findings to:

- Other regions of India (rural areas, other states)
- Non student populations (working professionals, older adults)
- International contexts

2. Demographic Homogeneity: The sample predominantly consisted of young adults aged 21-26. While this aligns with the study's focus on Gen Z, it does not capture generational differences in response to greenwashing. Older consumers may respond differently based on different cultural exposures and purchasing habits.

3. Sample Size and Sampling Method: While 393 responses provide adequate statistical power for regression analysis, the systematic random sampling method, though appropriate, may have introduced selection bias. The use of a university student sample may overrepresent digitally literate, educated consumers relative to the general population.

5.4.2 Methodological Limitations

1. Self-reported Data: The study relies on self-reported measures of greenwashing perception, trust, and purchase intention. These are subjective perceptions and may not correspond to objective measures of actual greenwashing or actual purchase behavior. Social desirability bias may have influenced responses, particularly given the socially desirable nature of environmental concern.

2. Cross Sectional Design: The data represent a snapshot in time, limiting the ability to establish causal relationships definitively. While the regression analyses reveal strong associations, longitudinal research would be required to confirm causal ordering and examine how relationships evolve over time.

3. Purchase Intention vs. Actual Behavior: The study measures purchase intention rather than actual purchase behavior. The well-documented "intention-action gap" (Lapray, 2022) means that stated intentions may not fully translate into actual purchases. Future research should incorporate actual purchase data where possible.

4. Single Method Approach: The study employs only quantitative methods. While this provides statistical generalizability, it does not capture the rich qualitative nuances of how consumers experience and make sense of greenwashing. A mixed methods approach would provide deeper insights.

5.4.3 Construct Limitations

1. Limited Constructs: The study focuses on greenwashing, trust, and purchase intention. Other potentially important variables—such as price sensitivity, brand familiarity, social norms, or environmental consciousness—were not included. These may moderate or mediate the observed relationships.

2. Cultural Specificity: The measurement scales, though adapted from validated sources, were originally developed in Western contexts. Despite strong reliability, there may be culturally specific nuances in how Indian consumers interpret concepts like "trust" or "greenwashing" that the scales do not fully capture.

5.4.4 External Validity Limitations

1. Sector Specificity: The findings are specific to the beauty and personal care industry. While this was the study's focus, the results may not generalize to other sectors where greenwashing occurs, such as food, fashion, or energy.

2. Temporal Limitations: Data were collected in early 2026. Green marketing practices, consumer awareness, and regulatory environments evolve rapidly. Findings may not remain stable over time.

5.5 Directions for Future Research

Based on the limitations identified, several avenues for future research emerge:

5.5.1 Expanding Sample and Context

Geographic Expansion: Replicate the study across different regions of India and in other emerging markets (e.g., Brazil, Indonesia, Nigeria) to examine cross cultural variations in greenwashing responses.

Demographic Diversification: Include older generations (Gen X, Baby Boomers) and non student populations to examine generational and socioeconomic differences.

Cross National Comparisons: Conduct comparative studies between India and markets with stronger regulatory frameworks (e.g., EU) to examine how regulatory context moderates relationships.

5.5.2 Methodological Enhancements

In future research, one useful approach could be to study changes in consumer trust and purchase intention over time instead of capturing responses at one point only. This would help in understanding how consumers react after real incidents of greenwashing.

Another way to improve future studies is by not relying only on surveys. Researchers can also include interviews to understand what consumers actually feel and think, which numbers alone cannot fully explain.

It would also be interesting to test different types of greenwashing in a controlled setting, for example by showing consumers different advertisements and observing how they respond to vague or misleading claims.

5.5.3 Extended Conceptual Models

Future studies can also look at additional factors that may influence consumer behaviour, such as how environmentally aware people are, how sensitive they are to price, or how comfortable they are with digital information.

Apart from this, variables like brand authenticity, brand image, and customer satisfaction can also be explored to get a more complete understanding of consumer decision-making.

Researchers may also try different models, for example by checking whether greenwashing directly affects brand loyalty instead of only affecting trust.

Another area that can be explored is how brands recover after being accused of greenwashing, such as whether apologies, certifications, or more transparent communication actually help in rebuilding trust.

5.5.4 Technological and Policy Research

With the rise of technology, future research can also focus on tools that help consumers verify claims, such as QR codes, blockchain tracking, or AI-based systems. It would be useful to understand whether these tools actually make consumers feel more confident while making purchase decisions.

At the same time, the role of government policies can also be studied. For example, stricter rules for environmental claims or clear definitions of terms like “natural” and “eco-friendly” may help in reducing confusion and increasing trust among consumers.

5.6 Conclusion

This study examined how perceived greenwashing affects consumer trust and purchase intention in the beauty and personal care industry. The results show that although greenwashing has a strong negative impact on consumer trust as well as purchase intention, while trust acts as an important intermediary in this negative relationship.

The results of the Reliability analyses supported the fact that all the measurement scales were reliable with a Cronbach’s alpha of 0.832 to 0.894. The results of the Regression analyses supported all of the three research hypotheses in terms of statistically significant relationships: greenwashing negatively affects trust ($\beta = -0.827$), trust positively affects purchase intention ($\beta = 0.864$), and greenwashing negatively affects purchase intention ($\beta = -0.875$).

The results of this research have important theoretical implications; they expand the body of knowledge on greenwashing to include the beauty industry and establish the mediating function that trust has within an Indian setting. Based on this study, businesses need to create authentic products, transparent processes, and trust-based relationships with their customers. Stronger regulations should be developed, along with consumer-oriented educational programs.

Limitations include cross-sectional design, sampling bias and self-report measures. This study provides a good base for future studies. As environmental awareness continues to grow, especially among younger consumers, Understanding this relationship can help reward genuinely sustainable efforts and discourage deceptive practices.

The cosmetics industry has reached a crossroads point. The results of this research show that the way forward for the industry is through genuine commitment to environmental sustainability, open communication, and accountability that can be backed with evidence and demonstrated by actions. For companies to earn the trust of consumers that will translate into long-term brand loyalty and sustained buying intentions, companies must first commit to these ideals because the marketplace is becoming more selective with its purchases. The research helps academicians by supporting future studies and developing better decision-making frameworks to understand the impact of greenwashing in emerging markets.

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