

Consumer Perceptions of Green Advertising Claims: The Influence of Corporate Claims, Psychological Factors, Scepticism, and Transparency and Authenticity

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Abstract

Although green advertising is becoming more commonplace, its ability to influence communication of environmental commitments is reliant on the quality and credibility of the environmental claims. This study explores the influence of perceived quality of green advertising claims on perceived evaluation of green advertising claims and explores the role of perceived transparency and authenticity in parallel with the role of green advertising scepticism. A cross-sectional design with quantitative data was used, and data were analysed through partial least squares structural equation modelling (PLS-SEM) with 406 consumers of the sample. The perceived transparency and perceived authenticity were treated as a higher order construct (reflective–reflective). The results show that perceived quality of green advertising claims is positively correlated with consumer evaluations and significantly improves perceived transparency and authenticity. Then perceived transparency and authenticity positively affects consumers' evaluation, which constitutes an important partial mediating mechanism. There is also a positive relationship between perceived claim quality and green advertising scepticism, but green advertising scepticism does not mediate the perceived claim quality–evaluation relationship and does not significantly influence consumer evaluation. The model accounts for about 50% of the variance in a consumer's evaluation. The findings here indicate that positive consumer reactions to green advertising are not only about the mitigation of consumer doubts, but are also about bolstering perceptions of the openness, authenticity and congruity of environmental communication with organizational behavior. The study advances the field of green advertising research by conceptualizing and empirically separating positive credibility-building and scepticism-eliciting mechanisms in a single parallel mediation model and emphasizes the need for specific, substantiated and authentic environmental communication.

Keywords: green advertising, environmental claims, claim quality, transparency, authenticity, consumer scepticism, consumer evaluation.

1. Introduction

The issue of the environment has become a more prominent focus for how businesses inform their customers about their product, brand and organization. Green advertising has emerged as a significant tool for organisations to articulate their environmental benefits, sustainable handling of resources, resource efficiency, lowering environmental impacts and other ecological qualities (Ahmed et al., 2023; Obaid & Rashid, 2024). But that does not automatically ensure that an ad will be persuasive if it contains environmental content. Consumers can tell the difference between "real-world" environmental information and "symbolic" environmental claims, or possibly even misleading claims, and this perceived quality is a key factor in their response to an advertisement (Chaudhary & Kola, 2025; Z. Lee, 2017). Early studies revealed that the type of environmental claim presented in an ad can significantly impact the effectiveness of the communication (Deshmukh & Pasumarti, 2025; Elhajjar & Dekhili, 2019; Rademaker et al., 2015), and more recent research revealed that the usefulness, attractiveness and truthfulness of green advertising information influence consumer responses (Samad et al., 2023; Wang & Li,

2022). The importance of green advertising is not just that environmental claims are present, but that consumers believe the quality and credibility of the information being communicated (Samaniego-Arias et al., 2026).

Increasingly, this is becoming a concern in a world where greenwashing is on the rise. Consumers are subject to environmental claims which are far from uniform in terms of their specificity, relevance, degree of evidence and consistency with the way the organisation actually operates (Dekhili & Elhajjar, 2021; Dreist et al., 2025; Khorsand et al., 2023; Sahrash et al., 2026). Experimental studies show that consumers are not always able to recognize genuine green products from greenwashing products, especially when they are focused on the purchase rather than on the credibility of environmental claims (Haque & Lang, 2025; Khorsand et al., 2023). Greenwashing can thus affect the perceptions regarding the environmental performances of the companies, but the interventions that contribute to raising consumer awareness can minimize those effects (Samad et al., 2023). The results reinforce the need to not only consider the impact of green advertising on consumers, but also how consumers cognitively consider the claims.

One potentially important explanation is perceived information quality. Wang & Li, (2022), found that perceived usefulness and truthfulness of green advertising, among others, influence consumer responses. Likewise, congruence between the environmental issue promoted and the product category can enhance the credibility of the message, sponsor credibility, advertising attitudes, and behavioural intentions (Guru & Asifulla, 2026). Results such as this indicate that environmental communication is more likely to be favorably assessed if the consumers consider the claims to be meaningful, relevant, understandable, and well-supported. The perceived quality of green advertising claims is the concept of these characteristics in the present study. However, consumers' evaluations may not be solely due to claim quality. Consumers can also gain general characteristics of the organisation that is making the claim. In particular, transparency and authenticity can make the difference between a good environmental claim and a poor one, and whether it is read as a sign of genuine organisational commitment (Eyasu, 2026; Guru & Asifulla, 2026; Sahrash et al., 2026; Tu et al., 2024). The transparency refers to the lack of opacity and the accessibility of information on the environmental policies and practices while authenticity refers to the level of sincerity and consistency of a firm's environmental communication with its values and actions. Authenticity has been shown to be a powerful tool in green advertising that links ad appeals to consumer responses like purchase intention and digital involvement (Chadichal et al., 2025; Eyasu, 2026; C. Lee et al., 2021; Samad et al., 2023). The research on green marketing and greenwashing has also pointed out that transparency is a relevant downstream aspect of the consumer's assessment of environmental communication, albeit not always relevant in different contexts (Fella & Bausa, 2024; Huo et al., 2025; Jain, 2026; Samad et al., 2023). A combined analysis of transparency and authenticity might thus be useful to understanding how consumers convert perceived claim quality into their overall assessments of green advertising.

The second mechanism is related to scepticism regarding green advertising. Consumers may doubt environmental advertising when they believe the information to be misleading, exaggerated, phony, or constructed in a manner that fails to provide them with any sense of scientific backing. This scepticism is different from greenwashing perception: the greenwashing perception is the suspicion of the consumer about the truthfulness or persuasiveness of environmental claims, while scepticism is the suspicion about the actual environmental performance. Prior studies show that when trust is low, consumers with an environmentally concerned attitude can exhibit negative responses to environmental claims (Ahmad et al., 2026; Rahman & Nguyen-Viet, 2023; Sharma, 2026; Wang & Li, 2022). Experimental studies also demonstrated that specific persuasive cues can intensify the sense of deceptive intentions and lower positive messages about green advertising. More recently, Royne et al., (2012) found that green advertising scepticism was not positively related to all consumer responses; it negatively affected some outcomes, such as green brand trust and willingness to pay. This is a mismatch that needs to be explored as a mechanism, not taken for granted that lower scepticism leads to higher evaluations.

The literature thus provides a piecemeal picture. Studies have found that environmental claim characteristics (Neureiter et al., 2025), Green advertising information quality (Wang & Li, 2022), authenticity (Pittman & Li, 2025), transparency and greenwashing-related perceptions (Rahman & Nguyen-Viet, 2023) and scepticism (Chi et al., 2021; Guru & Asifulla, 2026; Raska et al., 2015; Schl  pfer et al., 2025; Zhang et al., 2026) are relevant.

But rather, a focus has been placed on other outcomes and mechanisms. There has been less focus on the simultaneous processes for perceived green advertising claim quality to translate to overall consumer evaluation, both through a positive credibility-enhancing process and a scepticism-related process. A differentiated understanding of consumers' processing of environmental advertising is provided by treating transparency/authenticity and scepticism as parallel mediators.

Thus, this study investigates three research objectives. *First*, it explores the direct link between perceived quality of green advertising claims and consumer assessment of the claims. *Second*, it examines whether perceived transparency and authenticity mediate this relationship. *Third*, it examines if there is an alternative mediating pathway: green advertising scepticism. In the process of linking these pathways, the study aims to provide an explanation of not only consumer attitudes towards green advertising but also for why the quality of environmental claims could produce such attitudes. The study meets this larger demand for studies that differentiate between substantive environmental communication and cues embedded in advertising that can lead to consumer resistance or the feeling that they are being manipulated (Pittman & Li, 2025; Samaniego-Arias et al., 2026; Suvittawat, 2020).

2. Theoretical Background and Hypothesis Development

2.1 Theoretical Foundation

The conceptual model is developed mostly based on Signalling Theory and partly on Persuasion Knowledge Model (PKM) to account for scepticism pathway. Signalling Theory is an approach to situations involving information asymmetry, where one party has some information that is hard to confirm directly by another party (Spence, 1973). The environment in Environmental Marketing is in such a way that consumers are not able to observe all aspects of a company's production processes, emissions, sourcing, resource use, and environmental performance themselves. Green advertising thus serves as a signal that communicates otherwise hard to discern environmental attributes (Javed et al., 2024; Pittman & Li, 2025; Samaniego-Arias et al., 2026).

Such signals will only be effective if consumers perceive them as informative and credible. Signalling logic has been explicitly used to understand the process of how environmental communication can communicate sustainability-related characteristics and can affect consumer behavior in the case of green marketing research. However, green advertising has been defined as a signal that can influence consumers' perceptions of environmentally responsible practices and products, and the effectiveness of the signal relies on the type and trustworthiness of the message (Lim et al., 2020). Therefore, specific, relevant, and substantiated environmental claims should be more informative than vague or unsubstantiated environmental claims.

However, the explanation of the reasons why consumers may actively reject environmental claims is not complete based on Signalling Theory. The PKM suggests that consumers gain knowledge of persuasion attempts and that this knowledge is utilized to understand the motives behind and tactics used by marketers (Friestad & Wright, 1994). Persuasion knowledge can be activated when an ad is presented in a manner that seems strategically manipulative, which can lead consumers to doubt the intent of the advertiser and to become resistant to the persuader. This mechanism is directly relevant to the field of green advertising. Specifically, Raska et al. (2015) identified that specific persuasive cues in green advertising can trigger perceived deceptive intent, and Lim et al. (2020) showed that persuasion knowledge can reduce the impact of cues in environmental advertising.

In this regard, Signalling Theory offers the main explanation for the positive impact of high-quality environmental information on consumer evaluations and perceptions of transparency and authenticity, while weak or questionable claims may trigger scepticism, as is explained by PKM. The two are therefore used complementary rather than interchangeably.

2.2 Perceived Quality of Green Advertising Claims

Perceived quality of green advertising claims is the degree to which consumers believe the information they are seeing in environmental advertising is specific, informative, relevant, understandable, meaningful, and supported.

The construct is about the nature of the claim itself and not the general openness or sincerity of the organisation making the claim.

Research in environmental advertising has been long established that attributes of the claim influence advertising effectiveness. Chan (2000) observed that type of environmental claim significantly affected consumer response and stated the importance of matching environmental claims to consumers' perceptions. Specifically, Wang and Li (2022) proposed the concept of the quality of green advertising information from four dimensions, namely usefulness, attractiveness, truthfulness, and green response of consumers, and drew the conclusion that the perceived quality of green advertising information had a positive effect on the green response of consumers. Likewise, Abbas et al. (2024) also found that perceived information quality is an important determinant of consumer responses related to the environment.

The findings are also similar to the findings on congruence and credibility of the message. Shin and Ki (2019), found that congruence between the environmental issue presented in the advertisement and the advertised product category resulted in more positive advertising attitudes and in increased message and sponsor credibility. The results indicate that green advertising is judged not only based on its environmental positioning, but also based on the substantively close and believable link between the environmental information and the product.

High quality claims, from a signalling point of view, help to communicate an organisation's environmental message in a way that is less ambiguous. Specific and informative claims are giving consumers greater information cues, whereas general environmental claims are giving consumers little evidence to consider the advertised environmental benefit. These informational differences should have an impact on the overall assessment of the advertisement. Yoon et al. (2020) further showed that consumers' cognitive and affective perception of green advertising leads to the formation of advertising attitudes and the result of persuasion. Accordingly:

H1. The perceived quality of green advertising claims has positive effects on consumer evaluation of the green advertising claims.

2.3 Perceived Transparency and Authenticity

Transparency and authenticity are similar but conceptually different assessments of environmental communication. Transparency is about the openness of a company in communicating relevant environmental information and putting the basis of a claim understandable and accessible. Authenticity relates to the perception of the genuineness, sincerity, and congruence of environmental communication with the company's identity, commitments, and actions. Transparency is especially relevant in markets where consumers are unable to directly observe environmental performance. By providing accessible and meaningful disclosure, consumers can assess the basis for making environmental claims, and this can help minimise informational asymmetry. Rahman and Nguyen-Viet (2023) integrated transparency into a more comprehensive model that included green marketing, greenwashing, trust and purchase intention. Even though transparency did not directly affect the green brand trust in their model in a statistically significant way, their study suggests that transparency is theoretically relevant to consumer evaluations of green marketing and should not be confused with the environmental claim.

Authenticity is a more inferential judgement. Consumers can question whether the environmental message is truly representative of the organisation or if it is primarily used as a marketing tool. In particular, Pittman et al. (2022) offer evidence relevant to this. In all the social media green advertising experiments, they determined that brand authenticity was a compelling tool between the ad messages and product purchase, as well as between the ad and digital engagement. Their results show that customers' perceiving of genuineness can both accompany and transmit the impact of environmental advertising rather than just accompany.

These judgements should be made based on the quality of a green advertising claim. Vague claims provide less informational support in a company's perception of being open and genuine to the environment, while specific claim with meaning provides more. Specific meaning with informational support is considered more evidence of the company's commitment to the environment than vague claims. The Signaling Theory posits, therefore, that

claim quality can be used as an antecedent of perceived transparency and authenticity. A credible environmental signal is more likely to be understood when it contains clear information, as opposed to symbolic imagery of the environment or general sustainability jargon. This is also consistent with the results of research that indicated consumers segmented environmental communications based on informational and contextual factors. Wang and Li (2022) found that consumers' perceptions of the usefulness and truthfulness of environmental advertising information influence consumer responses. Likewise, Pittman et al. (2022) demonstrated that the persuasive process may work by authenticity and not just by exposure to the message's appeal. Combined these results indicate that claim quality could influence consumer evaluation, in part due to consumers perceiving the environmental communication is transparent and authentic. Accordingly:

H2. Perceived quality of green advertising claims positively affects perceived transparency and authenticity.

In turn, consumer evaluations should be positive, when greater transparency and authenticity are obtained. Therefore, if consumers believe that the environmental communication is open, sincere, and that it is consistent with the behaviour of the organisation, they have more reason to read the advertisement positively. However, if there is a mismatch between the environmental statements and the actual behaviour of the organisation, it can lead to suspicion of greenwashing or impression management. Empirical studies suggest that deceptive environmental communication has the potential to mislead consumers and that consumers' susceptibility to greenwashing affects their reactions to green products and brands (Dutta-Powell et al. 2024; Fella & Bausa, 2024). It is important that authenticity should be particularly desirable as it enables the consumer to understand that environmental claims are not just short term marketing stunts but the true actions of the organisation. The study by Pittman et al. (2022) showed that perceived authenticity can serve as a mediating effect between the persuasive effects of green advertising. On this basis:

H3. The perceived transparency and authenticity have positive impacts on consumer evaluation of the green advertising claims.

The above arguments suggest an indirect mechanism. The informativeness of the environmental claims increases the perception of transparency and authenticity of the environmental communication, which improves the consumer evaluation. It is a pathway that enhances credibility of the claim, and therefore, may affect the evaluation of advertising beyond its informational effect. Accordingly:

H6. Perceived transparency and authenticity act as a mediation between the perceived quality of green advertising claims and consumer evaluation of green advertising claims.

In the empirical model, transparency and authenticity are specified as first-order reflective dimensions of a reflective–reflective higher-order construct. This specification is only maintained when the measurement model is empirically supported by the data in a satisfactory manner.

2.4 Green Advertising Scepticism

Green advertising scepticism is the tendency of consumers to question, doubt or suspect the truthfulness, accuracy, or underlying persuasiveness of environmental advertising claims. The constructs are related but are not the same as issue perceptions of greenwashing. The concept of greenwashing usually describes a judgment that is made in the communication to green, while scepticism describes the level of uncertainty and/or incredulity of the consumer towards the claim. As more and more products have begun to position themselves in the environment, scepticism has become more relevant. There is also some evidence that environmentally concerned consumers can have a negative attitude toward brands that make an environmental claim, so that “green” advertising can cause some resistance, not just “green” interest (Ulusoy, Barretta 2016). More recent studies also demonstrate that consumers can be impacted by the greenwashing message, and that they might need more cognitive activation in order to differentiate between greenwashed and genuinely ecological products (Fella & Bausa, 2024).

Consumers develop some knowledge about the techniques of advertising and persuasion and may draw on these when a message is perceived as having been created to persuade them in a potentially manipulative way (Friestad

& Wright, 1994). Raska et al. (2015) showed that descriptive normative cues within green supermarket advertising can elicit the perception that marketers may be trying to deceive their target audience, which can lead to a less favourable attitude toward the green supermarket products and to less favourable behavioral responses. Consumers with high persuasion knowledge also found that the effects of ostensibly environmental visual cues is reduced, which is consistent with the findings by Lim et al. (2020). That should ease scepticism, therefore, as perceived claim quality decreases. Specific and relevant, and factually substantiated information about the environment gives fewer opportunities for consumers to infer that the advertiser is using vague persuasive techniques. In contrast, claims with limited or no substantive information can make the persuasive intent more salient and cause doubt. Research showing that perceived information truthfulness is important to green-advertising response further supports this argument (Wang & Li, 2022). Accordingly:

H4. Green advertising scepticism is negatively affected by perceived green advertising claims.

Consumer evaluation should also be subject to skepticism, as should have potential consequences. If a consumer is not convinced that an environmental claim is genuine, they are less likely to take it on in an ad. The results of Nguyen-Viet and Nguyen (2024) indicated that the negative impact of green advertising scepticism on green brand trust and willingness to pay did not statistically differ but negatively influenced the purchase intention and word of mouth. There is a theoretical interest in this mixed pattern: for some, scepticism might have negative effects; for others, it might be positive, but with weaker or context-dependent effects. Other studies also show that the impact of green claims on consumers is not consistent, but rather based on trust, environmental concern, and perceived credibility (Ulusoy & Barretta, 2016). However, if the focal outcome is the consumer's evaluation of the green advertising claim itself, then it seems that the more sceptical the consumer becomes, the less likely he is to have a positive evaluation. Accordingly:

H5. Green advertising scepticism negatively influences consumer evaluation of green advertising claims.

These relationships, combined, imply another indirect mechanism. Claims should eliminate scepticism, and less scepticism should, theoretically, lead to more favorable evaluations. This pathway is not the transparency/authenticity mechanism as it relies on the opposite path of lowering a negative consumer judgement, instead of raising positive credibility related perceptions. Accordingly:

H7. Perceived quality of green advertising claims influences consumer evaluation of its green advertising claims via the intervening role of green advertising scepticism.

2.5 Consumer Evaluation of Green Advertising Claims

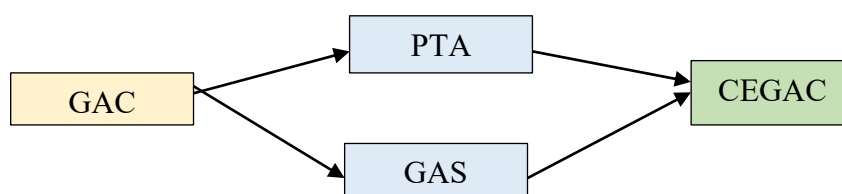
Consumer evaluation of green advertising claims is the overall positive or negative judgment of an environmental advertising message and the advertised product/brand as a result of the message. It is defined as an evaluative advertising result instead of purchase intentions or real buying actions. This is significant because advertising evaluations play a different role in the consumer-response process than do behavioural intentions. Yoon et al. (2020) showed that cognitive and affective perceptions of green ads affect advertising attitudes, and in turn, advertising attitudes affect persuasion and behavioural intentions. Similarly, Zhang et al. (2024) demonstrated that the different advertising framing has an impact on value perception and purchase intention through value perception differentiation mechanisms. These results suggest a positive trend in the evaluation of the advertisement can lead to downstream behaviour but not that they are a substitute for behaviour.

The present model thus shifts the attention from the interpretation of environmental advertising claims to the assessment of advertising claims by the consumers, rather than assuming that the assessment is translated into a purchase. This less broad outcome allows for a more direct measure of the information and psychological processes by which environmental claims are processed.

3. Conceptual Framework

The proposed framework deals with perceived quality of green advertising claims (GAC) as the main antecedent of consumer evaluation of green advertising claims (CEGAC). The model assumes that the two variables (GAC and CEGAC) are directly linked, and it also investigates two theoretically different mediators. The first pathway is via perceived transparency and authenticity (PTA). Perceptions of openness, credibility and congruence of environmental communication with organisational actions are expected to be enhanced when environmental claims are high quality, leading to favourable evaluation of the advertising. The second pathway is via green advertising scepticism (GAS). More quality claims should lead to less scepticism and vice versa. More scepticism should be related to less favourable evaluation, and vice versa. Based on this, the model involves parallel mediation instead of sequential mediation. PTA and GAS are not causal ordered mediators, but they both account for a theoretically different causal pathway between PTA quality and consumer evaluation. PTA is realised as a higher-order construct and therefore is a reflective-reflective construct, as this is the first order dimensions of transparency and authenticity.

Figure 1. Proposed conceptual framework



Note. GAC = the perceived quality of green advertising claims; PTA = the perceived transparency and authenticity of green advertising claims; GAS = green advertising scepticism; CEGAC = consumer evaluation of green advertising claims.

Source: Authors own based on the literature

4. Methodology

4.1 Research Design

The study utilized a quantitative design, explanatory, and cross sectional survey to investigate relationship between perceived quality of green advertising claims, perceived transparency and authenticity, green advertising scepticism and consumer evaluation. A quantitative approach was suitable because the conceptual framework describes theoretically derived relationships between the latent constructs which are able to be assessed at the same time by structural equation modelling. The unit of analysis was a consumer. The participants were asked to assess an advertisement for the environment or green that they had seen in the last 6 months. To ensure that participants had a common cognitive reference to begin with, they were asked to think of one company or brand that they had recently seen in an ad for the environment and they were asked to keep that same ad in mind when answering the measurement items. The study does not claim to measure cause and effect as the data were only gathered once in time and do not necessarily indicate causality. The structural paths are logically ordered, however the cross-sectional design does not rule out other causal relationships or cross causality.

4.2 Population and Sampling

The target group included adult consumers (aged 18 years and older) who had seen an environmental, sustainability, eco-friendly or green advertising claim in the last six months in Karnataka. The criterion was used to make sure that the subjects were not only not abstractly opinionated on the subject of environmental advertising, but also had recent experience of the phenomenon.

The sample size was performed using Cochran's formula for large or unknown population (Cochran, 1977). At a 95% confidence level ($Z=1.96$), with a conservative population proportion ($p=.50$), and a 5% margin of error, the calculation resulted in:

$$n_0 = \frac{Z^2 pq}{e^2} = \frac{(1.96)^2 (.50)(.50)}{(.05)^2} = 384.16$$

The minimum number was thus rounded up to 385 respondents. The sample size of 406 valid responses was larger than the minimum requirement. The respondents were selected by convenience sampling. Data were collected from January 2026 to August 2026.

4.3 Measurement Instrument

A structured questionnaire was used to collect data: screening questions, focal-advertisement identification, multi-item measures of the study constructs, consumer-profile questions, and demographic characteristics. All latent-construct items were measured using a five-point Likert scale ranging from 1 = strongly disagree to 5 = strongly agree. Perceived quality of GAC was determined by six items that reflect the usefulness, specificity, adequacy, accuracy, relevance and meaningfulness of environmental claims. The items were inspired primarily by the green advertising information-quality literature, such as Wang and Li (2022), but were also conceptualized based on research showing that the type of environmental claim affects advertising effectiveness (Chan, 2000).

The four items that measured the perceived transparency of environmental information provided by the company were used to represent it. These items were informed by Rahman and Nguyen-Viet (2023). The perceived authenticity was measured by five items extracted from Pittman et al. (2022) that encompass genuineness, sincerity, consistency, and congruence between environmental communication and organisational commitment. Transparency and authenticity were identified as distinct first order reflective constructs and then modelled as elements of the higher order PTA construct. Green advertising scepticism (GAS) was measured on five positively keyed scepticism statements that measured doubts about truthfulness, perceived exaggeration, need for supporting evidence, uncertainty about environmental performance, and caution in accepting green claims. The measure was guided by the green-advertising scepticism literature, specifically, Nguyen-Viet and Nguyen 2024 and Ulusoy and Barretta 2016. Therefore, higher scores indicate more scepticism, and there was no reverse coding. Consumer evaluation of green advertising claims (CEGAC) was evaluated with six items representing favourable overall evaluation, positive impressions, positive responses, contribution to product/brand evaluation, perceived persuasiveness and overall positive assessment. Studies on consumers' perceptions, attitudes toward advertising, persuasion, and green advertising responses (Yoon et al., 2020; Zhang et al., 2024) guided the development of the item.

4.4 Data Collection Procedure

The questionnaire started with screening of eligibility. The first question at issue concerned the respondents' age; they were asked to confirm that they were at least 18 years old, and also that they had seen a green or environmental advertisement in the past six months. All the substantive items were asked for reference to a specific brand or company that the participant could remember and to a specific advertisement. This focus-advertisement procedure helped to minimize the response ambiguity that might have occurred if the respondents had been required to switch brands and/or advertisements during the instrument completion process. Respondents were told that participation was voluntary and that their responses were kept confidential, and they were told the academic purpose of the study. The survey was conducted from January 2026 to August 2026 using Survey method. Responses were screened for data quality before analysis was performed, using prespecified data-quality criteria. After screening, a final sample of 406 respondents was analysed.

4.5 Data Analysis

Partial least square structural equation modelling (PLS-SEM) in SmartPLS 4 was used for the evaluation of the hypotheses. PLS-SEM was chosen since the study explains variance in consumer evaluation, includes multiple latent constructs, two specific indirect effects, and a hierarchical reflective-reflective construct. Therefore, the methodological choice for this study was not driven by the assumption that PLS-SEM is better for small samples (Hair et al., 2019; Hair et al., 2022). The analysis was done in two phases. Consistency of the reflective measurement models was evaluated with indicator loadings, Cronbach's alpha, ρ_A , composite reliability (ρ_C), and average variance extracted (AVE). The indicator loadings were approximately .708 or above; .70 to .95 were desirable for internal consistency reliability, and .50 or above for AVE were considered to represent convergent validity (Hair et al., 2022). The main method adopted for establishing discriminant validity was the heterotrait–monotrait ratio (HTMT) as recommended by Henseler et al. (2015).

PTA was modelled as a reflective–reflective higher-order construct and estimated using a disjoint two-stage approach. Stage 1 – Both transparency and authenticity were assessed separately via the indicators. They were subsequently used as reflective indicators of PTA in Stage 2, following the higher-order construct recommendations in PLS-SEM as recommended by Sarstedt et al. (2019). The structural model was then evaluated with the aid of collinearity diagnostics, standardised path coefficients, R^2 , *Adjusted R*², and F^2 effect sizes. There were two-tailed tests for the statistical inference, which was based on 5,000 bootstrap subsamples. The evaluation of mediation was based on the specific indirect effects, and their corresponding bootstrap confidence intervals, rather than just on the statistical significance of the specific constituent effects. The standardised root mean square residual (SRMR) was also used to approximate model fit. This sequence helps to distinguish between measurement quality and structural inference and offers a clear ground for assessing both direct and mediated relationships hypothesized in the conceptual model.

4. Results

4.1 Respondent profile

The analytical sample consisted of 406 respondents. Participants aged 25–34 years constituted the largest age group (33.5%), followed by those aged 18–24 years (26.6%) and 35–44 years (19.0%). So, 60.1% of the respondents were less than 35 years old. 53.4% of respondents identified as male and 43.3% as female, with 2.5% identifying with another gender identity and 0.7% preferring not to disclose their gender. Education levels were fairly high, with 50.0 percent having a bachelor's degree and 26.8 percent a master's degree. The highest proportion of people (44.8%) were full-time employees, with 20.4% holding student positions, and 11.3% in self-employment.

Environmental marketing was also found to be significant in the sample. One in two (52.7%) experienced green ads often or very often, and 30% experienced them sometimes. The distribution of green purchasing experience was almost equal (51.0% for green purchase and 49.0% for no green purchase in the reference period). 62.2% indicated moderate to extreme environmental interest; 73.9% said that environmental effects were taken into account when purchasing at least sometimes. The detailed demographic and consumer profile is shown in Table 1.

Table 1. Demographic and Consumer Profile of Respondents

Variable	Category	Frequency (n)	Percentage (%)
Panel A. Demographic profile			
Age	18–24 years	108	26.6
	25–34 years	136	33.5
	35–44 years	77	19.0
	45–54 years	44	10.8
	55–64 years	34	8.4

	65 years and above	7	1.7
Gender	Male	217	53.4
	Female	176	43.3
	Another gender identity	10	2.5
	Prefer not to disclose	3	0.7
Education	Secondary school or below	29	7.1
	Higher secondary	22	5.4
	Diploma/certificate	28	6.9
	Bachelor's degree	203	50.0
	Master's degree	109	26.8
	Doctorate	14	3.4
	Other	1	0.2
Employment status	Student	83	20.4
	Full-time employed	182	44.8
	Part-time employed	28	6.9
	Self-employed	46	11.3
	Homemaker	30	7.4
	Unemployed	14	3.4
	Retired	16	3.9
	Other	7	1.7
Monthly household income	Below ₹25,000	64	15.8
	₹25,000–49,999	86	21.2
	₹50,000–74,999	70	17.2
	₹75,000–99,999	72	17.7
	₹100,000–149,999	53	13.1
	₹150,000–199,999	35	8.6
	₹200,000 and above	26	6.4
Area of residence	Metropolitan	189	46.6
	Other urban area	117	28.8
	Semi-urban	63	15.5
	Rural	37	9.1
Panel B. Consumer and environmental profile			
Green advertising exposure	Very rarely	20	4.9
	Rarely	51	12.6
	Occasionally	121	29.8
	Frequently	142	35.0
	Very frequently	72	17.7
	Yes	207	51.0
Environmental interest	Not at all interested	29	7.1
	Slightly interested	124	30.5
	Moderately interested	165	40.6
	Very interested	70	17.2
	Extremely interested	18	4.4
Environmental consideration in purchasing	Never	22	5.4
	Rarely	84	20.7
	Sometimes	143	35.2
	Often	119	29.3
	Always	38	9.4

Notes: $N = 406$, Percentages are based on the total sample of 406 respondents and may not sum to exactly 100% because of rounding.

Source: Authors' field survey data

4.2. Assessment of the reflective measurement model

The measurement model was assessed prior to the examination of the structural models. A disjoint two-stage procedure was applied to the reflective–reflective higher-order construct, Perceived Transparency and Authenticity (PTA). In the first stage, the latent-variable scores of the factors of Transparency (TR) and Authenticity (AU) were estimated as separate first-order constructs, which were then reflected in the second stage as indicators of PTA.

Table 2. Measurement model assessment

Construct	Indicator/loading range	Cronbach's α	ρ_A	ρ_C	AVE
Authenticity (AU)	.840–.888	.912	.913	.934	.740
Transparency (TR)	.845–.877	.886	.887	.921	.745
Green Advertising Claim Quality (GAC)	.811–.883	.924	.925	.940	.724
Green Advertising Scepticism (GAS)	.836–.878	.905	.907	.929	.725
Consumer Evaluation of Green Advertising Claims (CEGAC)	.800–.874	.924	.925	.941	.726
Perceived Transparency and Authenticity (PTA, HOC)	.900–.911	.780	.782	.901	.820

Note: AU and TR are first-order dimensions of the reflective–reflective PTA higher-order construct. PTA loadings refer to the AU and TR latent-variable scores used in Stage 2.

Source: SmartPLS 4 analysis of the Survey dataset ($N = 406$).

High first order indicator loadings were present for all of them, and were greater than the typically desired value of 0.70. The loadings ranged from .840 to .888 for AU, .845 to .877 for TR, .811 to .883 for GAC, .836 to .878 for GAS, and .800 to .874 for CEGAC. At the higher-order level, both the loadings of AU and TR on PTA were statistically significant at $p < .001$, $p < .001$, with loadings of .911 and .900, respectively. The findings of these results are evidence of the adequate reliability of indicators. The use of loadings of around .70 or higher, reliability coefficients over .70, and AVE of .50 or more is in line with existing guidelines for evaluation of PLS-SEM.

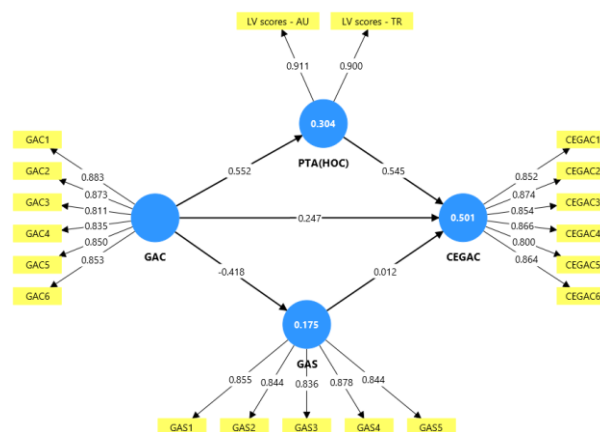


Figure 2. Measurement Model Assessment for the Reflective–Reflective Higher-Order Construct

Note: Values adjacent to the observed indicators represent outer loadings. Values linking Perceived Transparency and Authenticity (PTA) to the latent variable scores of Authenticity (AU) and Transparency (TR) represent higher-order loadings. Values inside the endogenous constructs indicate R^2 . GAC = perceived quality of green advertising claims; PTA = perceived transparency and authenticity; GAS = green advertising scepticism; CEGAC = consumer evaluation of green advertising claims.

Source: Authors' measurement model analysis using SmartPLS 4 ($N = 406$).

Cronbach's alphas ranged from .780 to .924, $\rho A\rho h o_A$, .782 to .925, and composite reliability ($\rho C\rho h o_C$), .901 to .941 (see Table 2). All values were then greater than .70 but not higher than the .95 threshold which could be an indicator of indicator redundancy. AVE values ranged from .724 to .820 for the principal second-order constructs, and were greater than .50 for all first-order dimensions, indicating convergent validity.

The heterotrait–monotrait ratio (HTMT) was used to test discriminant validity. The point estimates for all HTMT's were below the conservative value of .85 (range .236 to .797). The highest value was at the PTA level (.797) and the lowest value was at the CEGAC level (.713). Furthermore, the 95% confidence intervals for all of the bootstraps were not all centered at 1.00. The results are consistent with the empirical distinctiveness of the second stage constructs. This study uses .85 as the conservative criterion for HTMT and .90 as the less stringent criterion for closely related constructs, as recommended by Henseler et al.

Table 3. Discriminant validity: HTMT matrix

Construct	CEGAC	GAC	GAS	PTA
CEGAC	—			
GAC	.586	—		
GAS	.236	.456	—	
PTA	.797	.648	.274	—

Note: All HTMT point estimates are below .85.

Source: SmartPLS 4 analysis of the Survey dataset (N = 406).

4.3 Structural model assessment

First, structural collinearity was checked and then hypothesis testing conducted. Inner VIFs ranged from 1.000 to 1.649 indicating that there was no significant multicollinearity among the predictor constructs. These are well within the reference ranges of the VIF. The structural model accounted for 50.1% of the variance in the principal dependent construct (CEGAC), with the adjusted $R^2=.497$, $R^2=.497$. GAC explained 30.4% of the variance in PTA ($R^2=.304$, adjusted $R^2=.302$) and 17.5% of the variance in GAS ($R^2=.175$, adjusted $R^2=.173$). The latter means limited explanatory power of scepticism, and should not be regarded as strong.

Effect-size analysis was used to further differentiate the contribution of individual predictors. GAC had a small effect on CEGAC ($f^2=.074$), a medium effect on GAS ($f^2=.212$), and a large effect on PTA ($f^2=.437$). PTA had a significant impact on CEGAC ($f^2=.413$), with no significant incremental impact of GAS on CEGAC ($f^2<.001$). Traditional levels of F^2 for small, medium, and large effects are .02, .15, and .35 respectively.

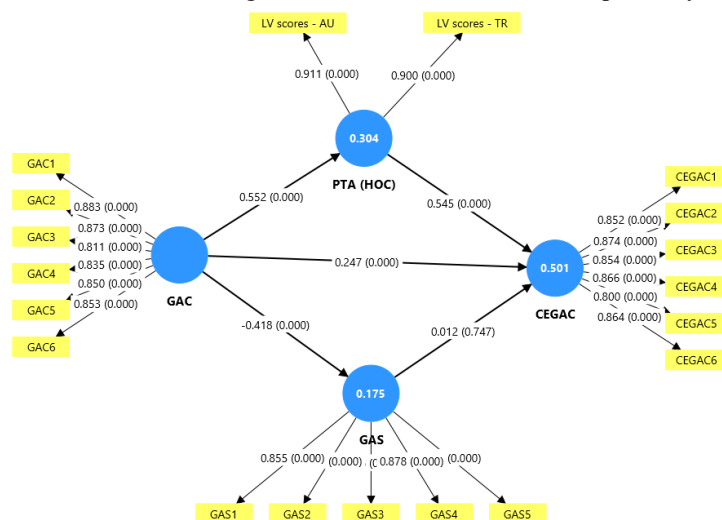


Figure 3. PLS-SEM Structural Model for Green Advertising Claim Evaluation

Note: Values on the structural paths represent standardized path coefficients (β), with p -values in parentheses. Values inside the endogenous constructs indicate R^2 . Values adjacent to the measurement indicators represent outer loadings. PTA was modelled as a reflective–reflective higher-order construct using the latent variable scores of Authenticity (AU) and Transparency (TR). GAC = perceived quality of green advertising claims; PTA = perceived transparency and authenticity; GAS = green advertising scepticism; CEGAC = consumer evaluation of green advertising claims.

Source: Authors' analysis using SmartPLS 4

The estimated model produced an SRMR of .0397 and NFI of .920, indicating favourable approximate fit according to commonly used PLS-SEM reference values. The bootstrap-based exact-fit statistics were less uniform. The estimated-model $dG=.175d_G=.175$ was below its 95% bootstrap upper bound (.177), whereas $dULS=.300d_ULS=.300$ was slightly above its 95% upper bound (.297) but below its 99% upper bound (.346). Accordingly, approximate fit was satisfactory, but it would be inappropriate to claim that every exact-fit criterion was satisfied at the 5% level. SmartPLS recommends interpreting $dULSd_ULS$ and dGd_G against their bootstrap distributions rather than fixed standalone cut-offs.

Table 4. Explanatory power and model-fit assessment

Criterion	Result	Assessment
R^2 , CEGAC	.501	Meaningful explanatory power
Adjusted R^2 , CEGAC	.497	—
R^2 , PTA	.304	Modest explanatory power
Adjusted R^2 , PTA	.302	—
R^2 , GAS	.175	Limited explanatory power
Adjusted R^2 , GAS	.173	—
Estimated-model SRMR	.0397	Below .08
Estimated-model NFI	.920	Above .90
Estimated-model $dULSd_ULS$	.300	> HI95 (.297); < HI99 (.346)
Estimated-model dGd_G	.175	< HI95 (.177)
Maximum inner VIF	1.649	No material collinearity

Source: SmartPLS 4 analysis of the Survey dataset (N = 406).

4.4 Hypothesis testing and mediation analysis.

The number of bootstrap subsamples was 5000; the level of significance was 5% with two-tailed test. The standardized path coefficients, bootstrap standard errors, t -statistics, p -values, confidence intervals, effect sizes and hypothesis decisions are reported in Table 5. GAC had a significant positive direct effect on CEGAC ($\beta=.247$, $t=5.609$, $p<.001$, 95% CI [.162, .334]), supporting H1. GAC also positively predicted PTA ($\beta=.552$, $t=16.292$, $p<.001$), supporting H2. PTA, in turn, had a strong positive association with CEGAC ($\beta=.545$, $t=14.156$, $p<.001$), supporting H3.

GAC negatively predicted GAS ($\beta=-.418$, $t=10.045$, $p<.001$, 95% CI [-.497, -.335]), supporting H4. In contrast, GAS had no statistically significant effect on CEGAC ($\beta=.012$, $t=.322$, $p=.747$); its confidence interval [-.060, .086] included zero. It was not therefore possible to support H5.

Mediation analysis yielded a highly clear break down of the two mechanisms. The indirect effect of GAC on CEGAC through PTA was positive and statistically significant ($\beta=.300$, $t=10.493$, $p<.001$, $95\% CI [.247, .358]$), supporting H6. The direct $GAC \rightarrow CEGAC$ effect was still present, and the sign was the same, so it was consistent with the pattern of complementary partial mediation. By contrast, the indirect effect through GAS was negligible and nonsignificant ($\beta=-.005$, $t=.318$, $p=.750$, $95\% CI [-.037, .026]$); hence, H7 was not supported. Perceived claim quality was negatively associated with scepticism, but scepticism did not mediate between the perceived claim quality and the consumer's evaluation in the estimated parallel-mediation model.

Table 5. Structural relationships and hypothesis testing

<i>Hypothesis</i>	<i>Relationship</i>	β	<i>STDEV</i>	<i>t</i>	<i>p</i>	<i>95% CI</i>	<i>F</i> ²	<i>Decision</i>
H1	GAC $\rightarrow$ CEGAC	.247	.044	5.609	<.001	[.162, .334]	.074	<i>Supported</i>
H2	GAC $\rightarrow$ PTA	.552	.034	16.292	<.001	[.483, .616]	.437	<i>Supported</i>
H3	PTA $\rightarrow$ CEGAC	.545	.038	14.156	<.001	[.467, .617]	.413	<i>Supported</i>
H4	GAC $\rightarrow$ GAS	-.418	.042	10.045	<.001	[-.497, -.335]	.212	<i>Supported</i>
H5	GAS $\rightarrow$ CEGAC	.012	.037	.322	.747	[-.060, .086]	<.001	<i>Not supported</i>
H6	GAC $\rightarrow$ PTA $\rightarrow$ CEGAC	.300	.029	10.493	<.001	[.247, .358]	—	<i>Supported</i>
H7	GAC $\rightarrow$ GAS $\rightarrow$ CEGAC	-.005	.016	.318	.750	[-.037, .026]	—	<i>Not supported</i>

Note: β = standardized coefficient; *STDEV* = bootstrap standard deviation; *CI* = percentile bootstrap confidence interval. The mediation effects were assessed from the specific indirect effects rather than from significance of the constituent paths alone.

Source: SmartPLS 4 bootstrapping results based on Survey data ($N = 406$; 5,000 bootstrap subsamples).

5. Discussion

The purpose of the present study was to investigate the effect of consumer's perceived quality of the green advertising claims on perceived green advertising, focusing on perceived transparency and perceived authenticity as parallel explanatory mechanisms as well as on green advertising scepticism. Three substantive findings are revealed. First, there was a positive relationship between perceived quality of advertising claim and consumer evaluation. Second, perceived transparency and authenticity was a significant mediation mechanism between claim quality and consumer evaluation. Third, whilst higher quality claims were associated with lower green advertising scepticism, this didn't in itself predict consumer evaluation and so scepticism didn't mediate the claim quality evaluation relationship.

5.1 Direct effect of green advertising claim quality on consumer evaluation

The positive direct linkage between the quality of the green advertising claims and the consumers' evaluation shows that consumers are more favorably responded when the environmental claims are perceived as specific, informative, relevant, meaningful and factually credible. The result is in line with the studies that revealed that environmental advertising information's quality and characteristics affect consumers' response to green messages. For instance, perceived usefulness, attractiveness, and truthfulness of green advertising information positively lead to positive consumer responses (Wang & Li, 2022). Likewise, Chan (2000) has shown that effectiveness of advertising is dependent on the type of environmental claim, indicating that consumers do not react to environmental communication in the same way.

The finding also corresponds with an information-processing interpretation of green advertising. Before environmental information can have an impact on attitudes or responses, the information needs to be understood and assessed by consumers. Yoon et al. (2020) indicated that cognitive and affective perceptions of green advertisements affect the attitude, Lee et al. (2020) indicated that advertising information framing affects the value perception and purchase related responses of the consumers. This current finding adds to the aforementioned thought by suggesting that even when the proposed mediating mechanisms are taken into account, perceived quality of the claim itself is still relevant to the overall evaluation of the green advertisement by consumers.

This discovery, however, must be viewed as an association and not as evidence of causality, due to the cross-sectional design of the present study. If consumers already have a positive impression of a green advert, they also might see its claims as more high quality. It would take experimental claim quality manipulation to be more definitive on the direction of this relationship.

5.2 As a mediator: Perceived transparency and authenticity

Perceived transparency and authenticity were the strongest explanatory mechanism in the model. Perceived claim quality was related to higher perceptions of open, sincere and consistent communication from the company, and open, sincere and consistent communication was positively related to consumer evaluation. The large indirect path, along with the remaining direct path from claim quality to consumer evaluation is consistent with the finding of complementary partial mediation. So, the quality of the claim seems to have a direct influence on the consumer evaluation and also via the consumer interpretation of the authenticity and transparency of the company's behavior in the environmental communication. This finding is especially in line with Pittman et al. (2022), which produced that “brand authenticity” might act as a persuasive tool in green advertisements on social media. They found that authenticity was beneficial in conveying the impact of ad appeals to variables like purchase intention and digital engagement. The current model allows for a similar effect at a higher level: green claims will be more believable, if consumers understand that they are an expression of a genuine environmental approach rather than isolated one-off promotional claims.

Comparing the transparency component is more complicated than for the other two studies. Rahman and Nguyen-Viet (2023) explored transparency in the context of a broader model of green marketing and greenwashing, and did not find transparency to be a significant predictor of green brand trust in their sample. Hence, their finding does not lend consistent support for direct beneficial impact of transparency. However, transparency was integrated in the present study in a more complex higher order construct and the result was consumer evaluation, not green brand trust. This discrepancy might thus be due to variation in the specification of the construct, in the dependent variables, in the market context and the role of authenticity in conjunction with transparency. These results, in principle, indicates that information alone may not be enough. It seems that consumers judge not only what a company says about its environmental performance, but whether the communication is open and consistent with other commitments that a company has in place. Authenticity can consequently imbue informational quality with an interpretational character: Certain substantiated claims can serve as indication from which the consumer can infer if the environmental message is authentic. This interpretation is in line with persuasion research which indicates that consumers actively process persuasive messages and motives of the persuasive agent, instead of passive responding to the advertising content (Friestad & Wright 1994).

5.3 Green advertising scepticism

The scepticism pathway led to a more complex finding. There was a negative relationship between perceived claim quality and green advertising scepticism, which suggests that the more consumers trusted that the information presented in the ad was clear, the less scepticism they felt. The connection is conceptually sound, due to the fact that vague, unsupported or exaggerated claims give consumers more reason to doubt marketers' intentions and the validity of environmental claims. The Persuasion Knowledge Model suggests that a consumer must acquire knowledge of persuasion tactics and then can interpret and deal with the persuasion attempt (Friestad & Wright, 1994). Providing information that is accurate and high quality may decrease the amount of suspicion that the advertisement is attempting to manipulate. But scepticism was not able to significantly predict consumer

evaluation once claim quality and transparency/ authenticity were taken into account together. Thus, the indirect route from claim quality to scepticism was also not supported. The study is significant because it demonstrates that decreased scepticism does not necessarily reflect a more positive overall advertising appraisal.

Past studies also suggest the effects of green advertising scepticism are not standardized at consumer effects. For instance, Nguyen-Viet and Nguyen (2024) discovered that Green advertising scepticism had a negative effect on green brand trust and willingness to pay but did not significantly impact all behaviour intentions (e.g., green purchase intention and word of mouth). Ulusoy and Barretta (2016), also found heterogeneous relationships between environmental concern, brand trust and purchase intention in the case of brands making green claims. The results indicate that scepticism might not only shape evaluative outcomes but also that it can shape some trust-related or behavioural outcomes.

A possible reading is that consumers may choose to be skeptical of the environmental claims, but may still have a positive attitude to the ad on other merits. If claim quality and perceived transparency/authenticity are measured at the same time, scepticism may not provide anything extra to the overall evaluation. Second, maybe scepticism has a greater impact on more important products (trust, willingness to pay, verified purchase behaviour) than on general advertising evaluation. The explanations are still tentative, and should be tested rather than assumed as working mechanisms, in future studies.

5.4. Theoretical Contributions

This study contributes to the literature on green advertising because it moves the focus from the question of the effectiveness of environmental advertising to the process whereby perceived claim quality is related to consumer evaluation. Previous research has confirmed that environmental claim characteristics, information quality, and advertising framing can affect consumer reactions (Chan, 2000; Wang & Li, 2022; Yoon et al., 2020). The current framework links these findings by making perceived green advertising claim quality a precursor for consumer evaluation; the intervening evaluative mechanisms through which this connection can take place are examined. *The second* contribution is the ability to separate out transparency and authenticity from scepticism, and not mapping these on a single continuum of credibility. These results suggest that the relationship between a claim's quality and consumer evaluation is accounted for significantly by perceived transparency and authenticity. The finding adds to the evidence that authenticity can serve as a persuasive mechanism in the green advertising (Pittman et al., 2022). Concurrently, it gives a better understanding of transparency—prior studies have not demonstrated a consistent downstream effect of transparency, as can be seen in Rahman and Nguyen-Viet (2023). *Third*, the parallel mediation framework illuminates an important asymmetry with respect to consumer processing. The higher the perceived claim quality, the more transparent/authentic and the less sceptical the consumer was; however, only the pathway of transparency/authenticity led to consumer evaluation. Therefore, the development of positive evaluations cannot simply be interpreted as a decrease in scepticism. This finding aligns with previous studies that found that scepticism may have an impact on certain consumer outcomes while not others (Nguyen-Viet & Nguyen, 2024).

The study thus proposes a more nuanced description of the process of green-advertising processing: positive judgements about authenticity/transparency and scepticism judgements are both related but empirically separate evaluations. This separation helps to explain the persuasive nature of green advertising in the sense that it demonstrates that the processes of forming favourable responses and lowering scepticism are not necessarily the same.

5.5. Managerial Implications

The results have some implications for managers in charge of sustainability and environmental communication. Most significantly, the relationship between perceived claim quality and consumer evaluation was positive, indicating that firms would be better off emphasizing specific, relevant, understandable, and evidence-based environmental claims, rather than using labels like “green,” “eco-friendly,” or “sustainable” without any supporting information. Previous studies also suggest that information quality and the characteristics of

environmental claims influence consumers' reactions to green advertising (Chan, 2000; Wang & Li, 2022). According to the mediation outcome, managers ought to additionally take into account how claims share openness and authenticity. Environmental statements should be supplemented (where possible) by information that is accessible that will explain what environmental improvement has been brought about, how, and what evidence supports the statement. Communication must also be consistent with visible corporate policies and practices. The recommendation aligns with the findings of Pittman et al. (2022), who state that authenticity was a persuasive factor in green advertising, but, in other contexts, transparency does not necessarily imply trust. Furthermore, the non-significant scepticism-to-evaluation relationship is also of practical value. However, by lowering scepticism, managers do not necessarily ensure a positive evaluation. The findings suggest that a rebuttal-only approach to communication might not be as effective as a communication strategy that also clearly demonstrates a commitment to the environment, albeit in a credible manner. Scepticism should be considered as it has been shown to have a negative impact on trust and certain behavioural outcomes in previous studies (Nguyen-Viet & Nguyen, 2024).

Therefore, companies should refrain from overstated environmental claims, from making claims about superiority that are not substantiated, and from mismatches between their advertising messages and their actions. The goal of the manager should not be to make claims seem greener, but rather to make sure that environmental communication is adequately substantiated, transparent and consistent for consumers to evaluate it on credible grounds.

5.6. Limitations

The results are subject to some constraints. *First*, the cross-sectional design fails to provide causal ordering of perceived quality of the claim, transparency/authenticity, scepticism, and consumer evaluation. While theoretically directed relationships are given in the structural model, reciprocal effects are possible. Future research could experiment with the quality of the environmental claims in an actual product and contrast specific claims (that are substantiated with evidence) to weak or poorly substantiated claims to examine whether differences in the quality of the claims lead to differences in authenticity, scepticism and advertising evaluation. *Secondly*, all the constructs of the focus were assessed by self-reported perceptions within the same survey. This design also has the potential for common method effects and it is unclear if positive ratings would lead to real-world actions in the marketplace. Evidence of downstream consequences would be more robust if it came from experimental study, behaviour in purchase, click-through behaviour, verified product choices or from longitudinal data. *Thirdly*, a standardised stimulus was not tested; rather, participants rated advertisements or brands that they remembered seeing that were green. This enhances contextual realism but response variation across products, brand familiarity, prior reputation, advertisement format and environmental claim type could all be uncontrolled factors contributing to observed responses. Industry-specific contexts should be investigated in future and controlled advertising stimuli should be used to isolate the effects of the characteristics of the claims. *Fourth*, the higher-order transparency and authenticity construct was a parsimonious representation of the proposed positive evaluative mechanism, yet transparency and authenticity are still conceptually distinct. The evidence for authenticity is provided by Pittman et al. (2022) and different result for transparency is given by Rahman & Nguyen-Viet (2023). A higher-order specification should therefore be compared with models that specify transparency and authenticity as separate mediators. *Last*, however, the generalisability of the results will rely on the sampling procedure and geographical context. It would be interesting to see if the same relationships were found with replication across countries, age groups, product categories, and regulatory environments so as to ascertain whether the relationships are the same when environmental awareness and green-advertising regulations differ.

6. Conclusion

This study tested the relationship between the perceived quality of green advertising claims and consumer evaluation, as well as if perceived transparency and authenticity and green advertising scepticism can explain this relationship. The results suggest that this relationship of consumer evaluation with the perceived quality of the

claim is partly mediated by the perception of transparency and authenticity, with the higher these perceptions, the more positive the consumer evaluation will be. The scepticism mechanism was more skilled. The results showed that claim quality was negatively related to scepticism whereas scepticism was not significantly related to consumer evaluation when claim quality was taken into account. So it is not all the same to address consumer uncertainty and establish a positive image of openness and authenticity.

The core message is that the use of environmental claims in green advertisements is not enough; it is what they are understood as that makes a difference. Specific and meaningful environmental information can help in the favourable evaluation, especially when the information is perceived as transparent, sincere and faithful to corporate behaviour. To practitioners, it means extra focus on substantiation and message integrity as opposed to just green messages being visible. The results suggest a more nuanced investigation of the process through which consumers engage with environmental advertising for research purposes.

Declaration of Competing Interest

The authors declare that they have no known financial or non-financial competing interests that could have influenced, or appeared to influence, the work reported in this article.

AI Use Statement

Grammarly AI was used for grammar and language refinement, while SciSpace and Claude AI supported literature screening. All outputs were reviewed and verified by the authors.

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