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# Impact of social media advertising on consumer behavior: role of credibility, perceived authenticity, and sustainability

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**Introduction:** Social media advertising is a crucial factor for predicting consumer behavior. Further credibility, authenticity, and sustainability of social postings enhance consumer purchase intentions in general and online shopping in particular. This empirical study investigated the impact of social media advertising on consumer behavior and the role of credibility, perceived authenticity and sustainability. The study also investigated the mediating effect of trust in the relationship between social media advertising and consumer behavior.

**Methods:** To measure the impact of the social media advertising effect on consumer behavior, eight reflective constructs, namely, credibility, sustainability, perceived authenticity, social media advertising effectiveness, satisfaction, purchase intentions and perceived value, were assessed. For the mediation analysis, consumer behavior was modeled as a higher-order construct with three sub-dimensions: satisfaction, perceived value and purchase intentions. Furthermore, the construct social media effectiveness is also modeled as a higher-order construct with four sub-dimensions: credibility, sustainability, authenticity and social media advertisement effectiveness. The data were collected from active social media users who engage in brand advertising and online shopping. A total of 500 valid responses were subjected to exploratory and confirmatory factor analysis, and the hypotheses were tested via structural equation modeling.

**Results and discussion:** The SEM results reveal that constructs credibility and sustainability are strong predictors of consumer behavior in the context of social media advertising effectiveness. The mediating variable of trust partially mediated the relationship between social media effectiveness and consumer behavior. The outcome has several practical theoretical implications for industry. The brand managers should identify that consumer trust and engagement are not only by-products of risk but also actively cultivated through strategic advertising efforts. To maximize the effectiveness of their social media campaigns, brands should focus on building reliability through transparency, enhancing authenticity through reliable storytelling and promoting sustainability with real commitment.

#### KEYWORDS

credibility, authenticity, sustainability, trust, social media advertising effectiveness

# Introduction

Social media has revolutionized the advertising landscape, providing innovative brands to join consumers. With billions of users on platforms such as Instagram and Facebook, social media advertisements play an important role in shaping consumer perceptions and behaviors. Unlike traditional media, social media allows for interactive, targeted and data-making campaigns that meet consumer preferences and online activities. The success of social media advertisement is the determination of reliability and credibility. Trust consumer advertisements that arise from sources are considered authentic and reliable. Research indicates that advertisements with reliable effectiveness or brand pages often perform better than do common sponsored materials in consumer engagement. In addition, historical reputation and continuity in the message of a brand greatly affect how reliable it is as an advertisement (Kim and Kim, 2022; Pop et al., 2020; Saxena and Khanna, 2013).

Another important aspect of social media advertising is authenticity. In an era where consumers are suspicious of excessively polished advertisements, the authenticity of messages promotes deep emotional relationships. The economy is often associated with transparency, honesty, and alignment with consumer values, which affects purchase decisions. A growing trend in consumer behavior is the demand for durable and moral advertising practices. Modern consumers, especially those with young demographics, prefer brands that align with their environment and social value. A study of how Instagram images with expressive facial and visual esthetics influence consumers' evaluation of a source and brand builds on the literature on social media and brand authenticity. The study revealed that a smiling facial expression and a snapshot photography esthetic led to greater perceived source genuineness. The authors reported that the perceived source of authenticity positively influences brand authenticity, trustworthiness, and consumer attitudes, influencing brand intentions and behavioral intentions (Yang J. et al., 2021). Belief through brand trust and faith-related advertising and environmentally friendly messages, permanent product offerings, or social initiative responsibility are important. However, issues such as greenwashing can reduce consumer trust, making transparency an important factor in sustainability marketing. Given the increasing dependence on digital advertisements, understanding the differences among reliability, authenticity and sustainability in social media advertisements is necessary to optimize consumer engagement. In another study, the authors explored the impact of perceived authenticity on socially conscious advertising strategies and reported that while it does not increase engagement, it enhances brand attitudes, suggesting a potential disconnect (Shoenberger et al., 2021).

# Role of reliability/credibility in social media advertisements

Social media advertisements involve many factors, including source reliability, message clarity and sustainability. Unlike traditional advertising, social media marketing is often interactive and requires brands to connect with consumers instead of broadcasting messages only. The reliability of an advertisement significantly affects the possibility of connecting with consumer trust and materials. One of the primary indicators of credibility is the reliability of the source of the advertisement. Studies show that impressive marketing, when executed by individuals with real expertise or strong followers, increases perceived reliability (Li and Suh, 2015). Consumers are more likely to rely on the affected who provides constant honest reviews and avoid excessive sponsorship. This trust and honest reviews, in turn, promote high engagement rates and loyalty to the brand (Xiang et al., 2018).

Another aspect affecting credibility is the design and format of advertisements. Research suggests that native advertisements that were originally blended with organic content perform better in terms of reliability than pop-ups or banner advertisements do. The native advertisements that appear in the user feed, especially those that mirror the specific material style of the platform, are considered to be disruptive and more reliable. Social proofs also play an important role in shaping the credibility of advertisements. To assess if an advertisement is reliable, consumers often prefer matrices such as choices, shares and comments. High engagement rates signal reliability, whereas negative feedback or low interaction can prevent potential consumers from attaching to advertisements. Transparency in advertising further enhances reliability (Balaban et al., 2022). The brands that disclose partnerships clearly communicate products and boundaries and provide accurate information, forming strong consumer trust. On the other hand, misleading advertisements may result in reputation damage, and decrease in consumer trust (Sharma and Sharma, 2021).

Finally, reliability and credibility in social media advertisements are important for consumer engagement. Advertisements should prioritize transparent communication, take advantage of social evidence, and cooperate with affected people to increase the effectiveness of their advertisements. The alleged authenticity of social media advertising is a major determinant of the influence of advertising on consumer perception. Consumers rapidly prefer brands that demonstrate a human viewing for honesty, transparency and marketing. The alleged authenticity strengthens consumer–brand relations, leading to high levels of trust, and brand authenticity works as a pathway and affects different appeals for purchase intent and digital engagement (Pittman et al., 2022).

A type of authenticity is established through user-related material (UGC). On traditional promotional advertisements, consumers rely on organic content, such as customer reviews, admirers, and shared experiences. Consumers can increase confidence by promoting the spirit of the brand community by taking advantage of UGC in their advertising strategies. Another driver of authenticity is brand storytelling (Georgakopoulou, 2022). Advertisements that describe the actual stories, show the contents of the back, or expose the brand values purely resonate with consumers rather than with promotional messages. Emotional appeal, especially through individual narratives, strengthens the alleged authenticity and encourages deep engagement. Visual esthetics also contribute to the alleged authenticity. Research suggests that raw, low-polarized imagery-like clear shots and back-off footage-offers perform better than highly staged materials do. Consumers combine such imagination with real brand identity, strengthening confidence in the brand. Additionally, authenticity extends beyond advertisements to brand work. If a brand keeps itself in the market moral or durable but fails to implement the same business practices, it is labeled inhuman. The consistency between messages and real-world functions is important for maintaining authenticity (Wellman et al., 2020).

## Consumer behavior

Consumer behavior encompasses the psychological, social, and emotional processes individuals engage in when choosing, purchasing, and using products or services (Solomon, 2018). In the context of social media advertising, consumer behavior is shaped by digital engagement, brand perception, peer influence, and interactive content (Dwivedi et al., 2021). Consumers interact with advertisements on the basis of perceived credibility, the authenticity of the message, and the alignment of advertisements with their personal values and beliefs.

## The role of digital engagement

The interactive nature of social media has changed consumer behavior by allowing users to be attached directly to brands through choices, comments, shares and user-related materials. Research suggests that social media engagement strongly affects consumers' approach to brands and increases the possibility of purchase (Hudson et al., 2016). Additionally, e-word-of-mouth (eWOM) has emerged as a powerful driver of consumer decision making, with online reviews and colleagues' recommendations being more impressive than traditional advertisements are (Cheung and Thadani, 2012).

## Influence of brand perception

The perception of a brand is important in determining the effectiveness of social media advertising. According to social identity theory, individuals align themselves with brands that reflect their self-concept and social identity (Tajfel and Turner, 1979). Brands that create authentic and reliable materials on social media are more likely to build strong consumer–brand relations, leading to increases in loyalty and advocacy (Morhart et al., 2015). In addition, the perceived reliability of an advertisement, including the reliability of the source and the stability of the message, directly affects the consumer approach to the brand (Erdem and Swait, 2004).

## Peer influence and social evidence

Social evidence theory suggests that people see others while making decisions, especially in uncertain situations (Cialdini, 2009). In social media advertisements, co-activist verification, shares and comments through choice strengthen consumer trust in brands (De Vries et al., 2012). Consumers are more likely to engage with advertisements that have high social approval, as they consider such brands more reliable and desirable (Lou and Yuan, 2019).

## Effect of interactive and personal materials

Unlike traditional advertising, social media marketing allows for customized and interactive experiences. Research indicates that users increase individual advertisements on the basis of behavior and preferences to increase the intention of consumer engagement and purchase (Bleier and Eisenbeiss, 2015). The brands that use interactive storytelling and user-related materials experience high consumer retention rates, as these strategies promote increasingly more emotional connections (Malthouse et al., 2013).

This empirical study evaluated the impact of social media advertisement effectiveness, credibility, perceived authenticity, and sustainability on consumer behavior, which was measured with the constructs of satisfaction, perceived value and purchase intentions. The study also evaluated the mediating effects of trust on the relationship between the social media effect and consumer behavior (Suo and Huang, 2023; Yang S. et al., 2021).

# Theoretical framework and hypothesis development

Research has established how we believe that credibility is important for effective marketing (Erdem et al., 2002; Erdem and Swait, 2004). High reliability promotes positive results, such as wordof-mouth recommendations and customer loyalty (Sweeney and Swait, 2008), as well as quality perceptions and purchase intentions (Baek et al., 2010). However, understanding how alleged account reliability especially affects social media marketing effectiveness is different. In the purview of individual branding on social media, three major goals emerge: promoting a favorable impression of profiles, encouraging users to follow, and persuading them to recommend accounts, and word-of-mouth is an important indicator of marketing. By implementing research findings on reliability on social media, we can estimate a strong positive relationship between alleged account reliability and these effectiveness indicators. Moreover, there is likely an optimal ratio of likes to followers. When posts receive an unusually high number of likes in relation to their follower count, it can lead to doubts about the authenticity of those likes, potentially harming credibility. On the other hand, posts with too few likes compared with followers might suggest the presence of purchased, inactive followers, which also undermines perceived credibility and decreases marketing effectiveness.

## Credibility

#### Definition and importance of credibility

The credibility of an advertisement refers to the degree to which consumers see an advertisement as truth, reliable and fair (MacKenzie and Lutz, 1989). Consumers are naturally doubted about marketing messages, making reliability an important determinant of advertising effectiveness (Erdem and Swait, 2004). Reliable advertisements increase message acceptance, reduce alleged risk, and improve trust, eventually leading to a high probability of purchase (Baek et al., 2010; Sweeney and Swait, 2008). In the social media advertising scenario, credibility plays an even more important role because of the use of user-related materials and impressive marketing prevalent on these platforms. Unlike traditional media, where reliability is often associated with well-established brands, social media credibility is shaped by colleagues' recommendations, impressive endorsements and community-conducted reviews (Lou and Yuan, 2019).

Credibility is a critical factor influencing the effectiveness of advertising, particularly in the context of social media. It refers to the extent to which consumers perceive an advertisement as truthful and believable (MacKenzie and Lutz, 1989). Credibility enhances the

receiver's approval of the message, making it a vital characteristic for successful advertising (Ohanian, 1990). In social media, the credibility of advertisements can significantly affect user engagement and their willingness to act on the advertisement. Research indicates that consumers may express skepticism toward ads that direct them away from the social media platform, as this can interrupt their experience and lead to doubts about the advertisement intentions (Kelly et al., 2010). Advertisements that keep users within the social media environment, such as those directing them to a brand's Facebook page, tend to be perceived as more credible. This is because they align with the users' current interactions and do not disrupt their engagement with the platform (Pelet and Ettis, 2022). The perceptions of consumer credibility play a vital role in marketing effectiveness (Erdem et al., 2002; Erdem and Swait, 2004). Credibility increases word-of-mouth and loyalty (Sweeney and Swait, 2008), quality perceptions and purchase intentions (Baek et al., 2010). However, a very few sources are available on construct credibility in the context of social media advertising effectiveness.

#### Factors influencing advertisement credibility

#### Source reliability

Consumer sources evaluate the reliability of an advertisement on the basis of the alleged reliability and expertise of the source. Affected brands and brands with a strong reputation are more likely to be considered reliable (Ohanian, 1990). Research indicates that when affected individuals have a high level of specialization, reliability and attraction, they significantly affect the consumer approach to the advertised product (De Veirman et al., 2017).

#### Message stability and transparency

Advertisements that correspond to the previous messages of a brand and provide transparent information are considered more reliable. Transparency, especially in sponsored materials and impressive marketing, is necessary to avoid doubts among consumers (Boerman et al., 2017).

#### Platform trustworthiness

The credibility of an advertisement is also affected by the platform on which it is displayed. Research shows that ads on trusted platforms such as LinkedIn and YouTube are perceived as more credible than those on less-regulated platforms (Kim and Koh, 2023). Additionally, advertisements that appear in organic formats (e.g., brand pages, usershared content) rather than intrusive pop-ups tend to be more accepted (Kelly et al., 2010).

#### Influencer credibility and endorsement Style

The rise of influencer marketing has reshaped credibility in advertising. Consumers tend to trust influencers who authentically engage with their audience, display genuine product endorsements, and avoid excessive sponsorships (Lou and Yuan, 2019). A previous study revealed that influencers with credible and sincere communication styles significantly enhance brand credibility (Evans et al., 2017).

#### Credibility effect on consumer behavior

#### Trust development

When advertisements are perceived as credible, they foster consumer trust in the brand (Erdem and Swait, 2004). Trust, in turn,

influences consumer loyalty and advocacy, increasing the likelihood of repeat purchases and positive word-of-mouth marketing (Sweeney and Swait, 2008).

#### Engagement and interaction

Credibility encourages higher levels of interaction with social media advertisements. Consumers are more likely to like, comment on, and share advertisements that they perceive as credible, enhancing the vitality and reach of marketing campaigns (Baek et al., 2010).

#### Purchase intention and conversion rates

Several studies have shown a direct correlation between credibility and purchase intent. When consumers trust an advertisement, they are more likely to consider and purchase the promoted product (Lou and Yuan, 2019). A meta-analysis on digital marketing revealed that credibility accounted for 34% of purchase variance, making it one of the most influential factors in consumer decision-making (Yang J. et al., 2021).

The discussion necessitated the formulation of the following hypotheses:

*H1*: Credibility is positive and statistically significant, impacting consumer perceived value.

*H2*: Credibility is positively and statistically significantly related to consumer satisfaction.

*H3*: Credibility is positive and statistically significant and impacts consumer purchase intentions.

## Perceived authenticity

The term "authenticity" comes from the Latin word "authenticus" and the Greek word "authentikos," both of which imply a sense of trustworthiness (Cappannelli and Cappannelli, 2004). However, marketing research rarely pinpoints a clear definition of authenticity. Instead, various researchers offer a mix of interpretations and associations around the term (Grayson and Martinec, 2004; Leigh et al., 2006).

Researchers have taken various approaches to defining authenticity in relation to brands (Grayson and Martinec, 2004; Leigh et al., 2006). Brand authenticity refers to how genuine market offerings-such as products and services-are, especially in comparison to what we might consider authentic in human terms. Unlike the inherited qualities of a brand, how individuals perceive authenticity plays a crucial role (Beverland and Farrelly, 2010). The idea of brand authenticity can encompass many attributes, as there is no single definition tailored for the branding sphere. Importantly, brand authenticity is distinct from brand satisfaction, which reflects a positive emotional reaction stemming from a consumer's desire for a particular brand. Rather than being contingent on the act of consumption, perceptions of authenticity can arise from an individual's preexisting notions. Moreover, brand authenticity emerges not from an apparent gap between expectations and reality but rather from a singular concept grounded in the consumer's mindset about the brand.

Authenticity in branding involves not only considering the authenticity of products and services but also how it relates to the perceptions of brands themselves. Unlike human authenticity, which is more straightforward, brand authenticity hinges on how individuals evaluate and perceive a brand rather than just its inherent qualities (Beverland and Farrelly, 2010). This fluid nature of brand authenticity means that it can encompass a range of attributes, leading to no single, universally accepted definition, especially in branding discussions.

Importantly, brand authenticity is different from brand satisfaction. While brand satisfaction emerges from the positive feelings experienced during consumption, brand authenticity is not reliant on actual consumption experiences. Instead, consumers often form judgments about a brand's authenticity beforehand on the basis of prior beliefs or thoughts about the brand. Furthermore, it is not tied to perceived discrepancies but rather is deeply rooted in the consumer's mindset regarding the brand. Research indicates that perceived authenticity hinges on three main components: continuity, which involves honoring brand heritage; credibility, which is rooted in transparent communication; and symbolism, where brands resonate with consumer values. When brands manage to harmonize these aspects, they often forge stronger emotional bonds with their audience (Morhart et al., 2015). Social media significantly influences how authenticity is perceived. Brands engaging in spontaneous, genuine interactions and utilizing user-generated content are frequently seen as more authentic. In contrast, marketing that feels overly polished or meticulously crafted can come off as less genuine.

Authenticity conveys the meaning of being truthful, real, and genuine. In the branding literature, brand authenticity is often studied as a multidimensional construct that reflects consumers' subjective evaluations of brands' performance in terms of continuity, originality, reliability, naturalness, credibility, symbolism, integrity, and genuineness (Akbar and Wymer, 2017; Bruhn et al., 2012; Morhart et al., 2015). Perceived brand authenticity leads to a positive brand approach, resulting in high practical intentions toward the brand. Yang S. et al. (2021) reported that alleged brand authenticity positively affects brand trust and engagement, leading to an increase in intentions.

Authenticity in Marketing: Authenticity clearly illustrates that authenticity is vital for building consumer trust and ensuring brand loyalty.

*Conceptual Differences*: Clarifies how brand authenticity stands apart from other marketing concepts such as brand satisfaction.

*Consumer Perspective:* This perspective emphasizes that how consumers perceive authenticity often stems from personal interpretations rather than objective characteristics.

Building upon the foundational understanding of brand authenticity, recent empirical studies have delved deeper into its impact on consumer behavior, particularly within the realm of social media advertising. On the basis of this discussion, the following hypotheses are formulated:

*H4*: Authenticity is positive and has a statistically significant effect on perceived value.

*H5*: Authenticity is positive and statistically significantly affects consumer satisfaction.

*H6*: Authenticity is positive and statistically significantly affects purchase intentions.

## Sustainability

Sustainability has emerged as a major term, hugging environmental leadership by both individuals and businesses, often overlapping with concepts such as being environmental friendly. Sustainability has developed into a word often employed by both individuals and businesses to express environmental awareness. It is often used with words such as "green" or "environmental friendly" (Williams et al., 2014; Petty et al., 2009).

The United Nations provides one of the fundamental definitions of sustainability and prepares it as "development that fulfills the current needs without compromising the ability of future generations to meet its needs of future generations" (Brundland, 1987). The data indicate that investment in green marketing continues to increase (Tillinghast, 2010). While green advertisements can increase a variety of reactions in consumers, research indicates a common reluctance between them to engage in permanent practices (Zinkhan and Carlson, 1995). Often, consumers can adopt sustainability as a socially acceptable stance without working on it (Zinkhan and Carlson, 1995). According to Chang (2011), consumer reactions to green advertisements are multidimensional, given that efforts to communicate high-level green claims may cause discomfort and doubt, especially with respect to stability among those who wear mixed feelings. Research shows that investment in eco-conscious marketing is increasing (Tillinghast, 2010). While green advertising can elicit varying responses from consumers, studies have revealed that they are hesitant to adopt sustainable practices (Zinkhan and Carlson, 1995). The consumers express environmental awareness as a way to fit socially but may fall short of acting on those sustainable beliefs (Zinkhan and Carlson, 1995).

According to Chang (2011), consumer reactions to green advertisements are multifaceted. Bold green claim advertisers can trigger feelings of doubt or discomfort among consumers who are indifferent to sustainability. Despite the increase in investment in green marketing (Tillinghast, 2010), there is noticeable inequality between the saying and how they act. While many individuals voice their support for permanent practices, their actual engagement in such behavior often decreases (Zinkhan and Carlson, 1995). Chang (2011) emphasized that consumer doubt toward green advertisements is a significant obstacle, as consumers can doubt claims of ambitious sustainability, especially those who are uncertain or indifferent. Further research suggests that for brands that focus on sustainability, it is important to prioritize transparency in their communication to address this doubt. The success of sustainability initiatives are closely associated with the clarity and verification of their claims; examples of greenwashing can cause severe reputed risks. There is a possibility of promoting more confidence and engagement with the brand, with consumers showing real commitment to sustainability through thirdparty certificates and average environmental impacts.

In addition, sustainability marketing focuses its attention beyond only environmental friendly messages to incorporate elements of social sustainability, including fair labor practices and moral sources. Increasing consumers' moral responsibility is motivating brands to embrace a more comprehensive approach that integrates environmental initiatives with wide social good efforts. Sustainability has become a central theme in contemporary marketing, and businesses have integrated environmental friendly practices into their branding strategies. This change reflects increasing consumer demand for environmentally responsible products and services. However, the effectiveness of sustainability marketing relies on various factors, including consumer perceptions, the authenticity of green claims and the role of social media in shaping purchasing behavior. Recent research underlines the important role of social media in promoting permanent brands. Sipos (2024) conducted a comprehensive study in which how social media affects consumer trust, engagement and intentions related to sustainable products was investigated. The conclusions revealed that transparency in social media communication significantly increases consumer trust, which in turn increases purchase intentions. In addition, the reliability of the effect of supporting durable products was identified as an important factor in running consumer engagement.

The conversation of the younger generation with green marketing on social media platforms has also been the subject of study. Xie and Madni (2023) investigated how social media affects the green consumption behavior of young consumers in China. His research revealed that the information shared on social media positively affects the intentions of green purchases among youth. The subject criteria and the alleged green value were identified as mediators in this regard, suggesting that social media shapes behavior through the environmental approach of young consumers and social expectations and the alleged benefits of green products. However, the rise of "greenwashing," where companies make unbalanced or misleading claims about the environmental benefits of their products, is an important challenge. Greenwashing can cause consumer doubt, eradicating confidence in both a brand and its sustainability claims. This susceptibility underlines the importance of authenticity in sustainability marketing. Brands should ensure that their environmental claims are transparent and verified and that consumers reflect real, durable practices to maintain trust and loyalty. Finally, while sustainability marketing provides a route to meet the growing consumer demand for environmental friendly products, its success is rooted in the strategic use of transparency and confidence and the authenticity of social media strategic use. These factors effectively help brands positively affect consumer behavior and achieve long-term engagement.

Therefore, the following hypotheses were formulated.

*H7*: Sustainability has a positive and statistically significant effect on perceived value.

*H8*: Sustainability has a positive and statistically significant effect on consumer satisfaction.

*H9*: Sustainability has a positive and statistically significant effect on purchase intentions.

## Social media advertising effectiveness

Social media and advertising are crucial components of integrated marketing communication. Social platforms offer vast outreach opportunities, promote interactivity, and are often cost-effective (Kahle and Valette-Florence, 2012). Additionally, they enable advertisers to tap into self-defined consumer lifestyle groups, simplifying targeted marketing strategies (Kahle and Valette-Florence, 2012). Advertisers must adapt to consumers' shift toward online communication and embrace social media as a new advertising medium (Tuten et al., 2019). Traditional advertising relies on one-way communication, whereas social media advertising encourages two-way communication, offering unique marketing opportunities in terms of credibility, originality, authenticity, and sustainability.

The engaging nature of social media presents marketers with a unique opportunity to go beyond simple observations of consumer behavior. It enables them to foster meaningful conversations that help uncover what consumers truly desire. In fact, social media has proven to be a dynamic platform for green advertising and social campaigns, leveraging electronic word of mouth (eWOM) as a more authentic way to connect rather than sticking to traditional commercial ads (Hung et al., 2011).

As consumers increasingly shift their interactions online, it is essential for advertisers to adopt social media as a fundamental component of their marketing strategies (Tuten and Solomon, 2014). Unlike traditional advertising, which is often one-sided and controlled, social media provides the right to a two-way dialog that invites participation and response from users. Social media plays an important role in the scope of integrated marketing communication, offering extension access and interactive opportunities at the minimum cost (Kahle and Valette-Florence, 2012). For advertisers, the ability to tap into consumer lifestyle groups significantly simplifies target marketing efforts (Kahle and Valette-Florence, 2012). The social media presents an ideal platform for green advertising and social initiatives, allowing the message to spread through electronic word of mouth (eWOM) instead of traditional commercial advertising methods (Hung et al., 2011). To keep pace with the developed landscape of communication, advertisers must adapt by taking advantage of social media as a major advertising channel (Tuten and Solomon, 2014). Unlike traditional advertising, which often maintains a unilateral flow of information, social media provides a two-way dialog that enriches the relationship between brands and their audience. Furthermore, social media is not just effective in driving communication; it enhances marketing efforts by offering broad reach, encouraging interactivity, and improving cost efficiency (Kahle and Valette-Florence, 2012). These platforms also allow for precise targeting, making it easier to connect with specific lifestyle groups that have self-identified interests.

Social media interactive dynamics enable the abolition to observe and actively engage in consumer behavior, leading to deep insight into consumer preferences. Thus, for green advertising and social campaigns, the role of social media through eWOM can cross traditional advertising methods (Hung et al., 2011). With the growing reliance on digital communication, adapting to new platforms is nonnegotiable for advertisers (Tuten and Solomon, 2014). Social media advertising not only promotes two-way interaction but also encourages valuable consumer participation and input. Another key aspect that enhances the effectiveness of social media marketing is influencer partnerships. Influencer marketing stands out as a robust method for brands to authentically connect with their target audience through credible endorsements. Studies show that influencers who are perceived as knowledgeable and trustworthy significantly impact consumer attitudes and purchasing choices (Lou and Yuan, 2019). Additionally, brands that harness social media analytics and AI-driven insights can fine-tune their marketing tactics in real time. By scrutinizing consumer sentiment and engagement data, companies are equipped to refine their content, maximizing its impact. This strategic, data-informed approach ultimately enhances marketing outcomes. Thus, the hypotheses formulated are as follows:

*H10*: Social media advertising effectiveness is positive and statistically impacts perceived value.

*H11*: Social media advertising effectiveness is positive and statistically impacts customer satisfaction.

*H12*: Social media advertising effectiveness is positive and statistically impacts purchase intentions.

## The mediating role of trust

Trust serves as a critical mediating factor in the relationships among credibility, authenticity, sustainability, and social media advertising effectiveness. Prior studies indicate that when consumers trust a brand, they are more likely to respond positively to advertisements, even in cases where the content may not be highly persuasive (Chaudhuri and Holbrook, 2001). Trust mitigates skepticism and enhances consumer willingness to engage with brand messages on social media (Morgan and Hunt, 1994).

*H13*: Trust has a positive and statistically significant on perceived value.

*H14*: Trust has a positive and statistically significant effect on customer satisfaction.

*H15*: Trust has a positive and statistically significant effect on purchase intention.

*H16*: Trust mediates in the relationship between social media effectiveness and consumer behavior.

## Perceived value

The consumer's assessment of the feeling he/she has (whether good or bad) after an online purchase and price comparison is what value perception refers to. The value customers perceive is influenced by the hopes generated by the advantages provided by using a product and what it genuinely provides (Yin and Qiu, 2021). Customers' value is influenced byproduct benefits and values, with perceived symbolic and functional value being the most important factors in determining a product's purchase decision (Peña-García et al., 2018). The symbolic value of a product reflects the consumer's social, emotional, esthetic, and reputational aspects, reflecting their type or desired persona (Chen and Hu, 2010). Functional value is determined by consumers' perceptions of utility or economic benefits and is influenced by the quality, price, and convenience features of a product. This study focuses primarily on the perceived value of a product from emotional, social, and convenience aspects rather than its functional value.

## **Purchase intentions**

An online consumer's purchase intention pertains to their willingness to purchase from a specific online store (Peña-García et al., 2018). The action reasoning theory posits that the intention to

purchase comes before the immediate action of making the purchase. This action can be enduring and linked to the consumer's emotions and attitudes (Fishbein and Ajzen, 1975; Vargas Rocha et al., 2020). Research indicates that the intention to buy online is influenced byproduct value, brand trust, and the expectations consumers seek to meet.

## Satisfaction

It involves assessing the attributes of a product or the product itself that align with consumer expectations, encompassing virtual engagement with the store and the perception of having enjoyed a satisfactory online shopping experience (Sarmiento Guede, 2017; Sasono et al., 2021; Fang et al., 2011).

# Methodology

A quantitative research design is employed, utilizing a surveybased approach to collect data from social media users who engage with brand advertisements and are actively engaged in online shopping. The study uses a structured questionnaire incorporating validated scales to ensure reliability and accuracy in measuring key constructs. Credibility (5 items) was assessed via the scale developed by Newell and Goldsmith (2001), which emphasizes expertise, trustworthiness, and attractiveness as critical dimensions influencing consumer perceptions of advertising messages. Perceived authenticity (4 items) was measured following the framework established by Napoli et al. (2014), which considers consistency, originality, and reliability in brand communications. Sustainability (4 items) perceptions are evaluated via the scale proposed by White et al. (2019), which highlights consumer attitudes toward a brand's commitment to environmental and social responsibility. Trust (3 items) was measured on the basis of the well-established commitment-trust theory of Morgan and Hunt (1994), which underscores the role of relational exchange, shared values, and communication in fostering consumer confidence in brands. Finally, advertising effectiveness (5 items) is assessed via the model developed by MacKenzie and Lutz (1989), which captures cognitive, affective, and conative responses to advertisements, reflecting how consumers process, engage with, and react to brand messaging. Perceived value (3 items), satisfaction (3 items) and purchase intentions (3 items) were measured via the scales of García-Salirrosas and Acevedo-Duque (2022). The authors model (Figure 1) and mediation model presented in Figure 2.

## Sampling strategy

A nonprobability purposive sampling technique was used to collect data from social media users who had prior exposure to social media advertisements. The sample included 546 respondents from different demographics to ensure diversity and generalizability. However, only 500 valid responses were considered for data analysis. The 46 records were dropped from the analysis because of incomplete responses and misbehavior (Table 1).





Purposive sampling a non-probability samples that are selected based on the characteristics present within a specific population group and the overall study were employed in this study considering heterogeneity and variation. The reason for using this sampling technique is to achieve a specific goals of the study through the lens of quantitative research. The idea is to select the respondents with specific characteristics in a targeted population, say social media users and active online shoppers. Furthermore, purposive sampling allows researchers to utilize diverse qualitative research designs, requiring different sampling strategies and techniques to achieve their goals, allowing for more adaptive research designs and specific techniques when needed. Purposive sampling techniques allow researchers to make generalizations from their sample, but cannot extrapolate information about an entire population. These methods require logical, analytic, or theoretical approaches, and researchers determine their approach.

The authors used a careful research design and sampling procedure to minimize the sampling bias by collecting data from diverse culture, educational and income backgrounds protecting the samples if the representative of the population. The data were collected from various sources, rather than the single source, through various channels like linked in, databases, and emails.

#### Justification of sample size

The needed sample size for unknown population is 383 (Cochran, 1977). The suggested sample size for maximum likelihood estimation with multivariate data should be in the rage of  $\geq$ 200–400 with a 5:1 ratio of items to free parameters (Anderson and Gerbing, 1988). Based on the several studies using structural equation modeling, Gaskin (2022) proposed 50 + 5x (where 50 is the constant and x is the number of statements/questions in the study). Further the used sample size of 302 far greater than required sample size for SEM analysis (Wolf et al., 2013).

TABLE 1 Demographic characteristics of the study variables.

Category	Subcategory	Frequency	Percentage (%)	
Gender	Male	293	58.4	
	Female	207	41.6	
Age (Years)	20-25	107	21.6	
	26-30	123	22.4	
	31-35	101	19.8	
	36-40	59	12.2	
	40-50	60	11.6	
	>50	50	10.4	
Education	SSC	15	3.2	
	Graduate	136	27.3	
	Postgraduate	261	51.5	
	Professionally qualified	88	18.0	
Income (₹ Lakhs)	0-1	192	38.4	
	2-3	187	37.4	
	3–5	131	26.2	
	above 5	36	7	

#### Power analysis

A power analysis carried out using SPSS version 29 to measure the power of the sample used in the study (Faul et al., 2009). With an alpha value of 0.05, and sample standard deviation 1.178 with sample mean of 3.93, the assessed power is 0.995 indicating the relationship among the variables are strong and significant. Therefore, the sample sized used 302 is more than adequate to test the hypotheses (Kyriazos, 2018; Goulet-Pelletier and Cousineau, 2018).

## Factor analysis

Factor analysis and structural equation modeling were used to test the authors' theoretical framework and hypotheses. Both the inner and outer models were evaluated. The exploratory factor analysis distributed 30 items into 8 components with a cumulative variance of 81.11, which is >50% of the benchmark value (Hair et al., 2013). The Kaiser–Meyer– Olkin (KMO) value of 0.925 indicates that the sample is adequate and suitable for factor analysis. A Bartlett's sphericity value of <0.001 reveals that the data's correlation matrix is not an identify matrix, making it reasonable to proceed with further analysis. The outer and inner loadings of study variables presented in Table 2.

#### Data analysis and findings

The results of the normality of distribution are checked to assess the normality of the data. The findings of skewness and kurtosis are checked for data normality. The skewness and kurtosis are significant when the finds are between +2 and -2 (Royston, 1992), and kurtosis values < 3 indicate data normality (Table 3).

The convergent and discriminant validity is checked with the AMOS measurement model assessment findings. Convergent validity is assessed to determine the reliability and validity of individual items. The findings of the factor loadings are considered to check the reliability of individual items. The threshold factor loading is >0.60 (Shevlin and Miles, 1998; Fornell and Larcker, 1981). The data of the factor loadings confirmed that all the items achieved reliability and validity (Table 3). Furthermore, the average variance extracted is checked to determine the variance between the data for items loaded on a single construct. The significance threshold for the average variance extracted is >0.50. The results highlighted more than 50% variance between the constructs loaded on a single construct (dos Santos and Cirillo, 2023). Accordingly, the results of Cronbach's alpha and composite reliability are tested to determine the internal consistency between the item data. The findings of Cronbach's alpha and composite reliability >0.70 are considered significant (Alarcón et al., 2015; Tavakol and Dennick, 2011). The results reported in Table 2 highlighted that there is internal consistency between the research data.

The discriminant validity test aims to determine the multiple collinearity issues in the research data. The results of the heterotrait-monotrait (HTMT) ratio analysis method are considered to determine multi-collinearity issues between the items of the constructs under investigation. The findings of the HTMT analysis are less than 0.90, and no multi-collinearity issues are reported (Henseler et al., 2014). The data for the HTMT reported in Table 4 highlight that discriminant validity is significantly achieved.

#### Measurement model

All the model fit indices indicate that the model fits well with the data. The model fit values "CMIN/df 1.822, CFI 0.975, SRMR 0.030, RMSEA 0.041, NFI 0.974, IFI 0.975, TLI 0.971 and PClose 1.000" indicate that the model is perfectly fit. Furthermore, the average loadings of all eight constructs are >0.70 (Ullman, 2001; Hu and Bentler, 1998; Bentler, 1990; Kline, 2012; Byrne, 2013).

#### Common method variance

When the same individuals complete self-report questionnaires to gather data, common method variance (CMV) may result (Spector et al., 2019). A significant portion of the variation that can be accounted for by a single factor is represented by the CMV (Iverson and Maguire, 2000). The statistical significance of CMV in the dataset was assessed via Harman's single-factor test. The study combined all 30 components from the 8 constructs into a single factor after multiple iterations to determine the CMV; however, this factor contributed 21.09% of the total variation, suggesting that common method bias did not affect the study dataset (Erum et al., 2020).

#### Testing of hypotheses

Structural equation modeling was used to test the hypotheses, and the  $R^2$  values for perceived value (0.33), satisfaction (0.23) and purchase intentions (0.66) indicate that the five predictor variables of credibility, authenticity, sustainability, social media advertising effect and trust

#### TABLE 2 Factor loadings of study variables.

Item	Description	Outer loading
Credibility (Newell and Golds	mith, 2001; Ohanian, 1990)	
Cronbach's alpha = 0.948, CR	0.949, AVE 0.787	
CRD1	"The advertisement provides accurate and reliable information."	0.90
CRD2	"The brand being advertised seems trustworthy."	0.92
CRD3	"The advertisement source (e.g., influencer or brand) is knowledgeable"	0.87
CRD4	"The advertisement appears unbiased and authentic."	0.88
CRD5	"I believe the claims made in this advertisement."	0.87
Perceived Authenticity (Napol	li et al., 2014; Moulard et al., 2015).	
Cronbach's alpha 0.920, CR 0.	921, AVE 744	
AUT1	"The advertisement feels genuine rather than staged."	0.88
AUT2	"The content in this advertisement aligns with the brand's values."	0.82
AUT3	"This advertisement presents an honest image of the product/service."	0.89
AUT4	"I feel that this advertisement is designed to connect with consumers sincerely."	0.85
Sustainability (White et al., 20	19; Grewal et al., 2021).	
Cronbach's alpha = 0.945 CR (	0.946, AVE 0.815	
SUS1	"The advertisement promotes environmentally responsible practices."	0.92
SUS2	"The brand in this advertisement supports sustainability efforts."	0.88
SUS3	"This advertisement makes me more aware of sustainable consumption."	0.93
SUS4	"I am more likely to engage with brands that prioritize sustainability."	0.89
Trust (Morgan and Hunt, 1994	4; Chaudhuri and Holbrook, 2001 <b>)</b> .	
Cronbach's alpha 0.911, CR =	0.911, AVE 0.773	
TRS1	"I trust the brand being advertised on social media."	0.89
TRS2	"The advertisement increases my confidence in the brand."	0.86
TRS3	"I believe this brand delivers what it promises."	0.89
Social media advertising effect	tiveness MacKenzie and Lutz (1989) and Shareef et al. (2019).	
Cronbach's alpha 0.909, CR =	0.913, AVE 0.679	
SAE1	"The advertisement captures my attention"	0.83
SAE2	"I find this advertisement to be persuasive."	087
SAE3	"This advertisement increases my likelihood of purchasing the product/service."	0.86
SAE4	"I am likely to engage (like, share, comment) with this advertisement."	0.79
SAE5	"The advertisement enhances my perception of the brand."	076
Purchase intentions (García-S	alirrosas and Acevedo-Duque, 2022 <b>).</b>	
Cronbach's alpha 0.900, CR =	0.905, AVE 0.761	
PI1	"After seeing social media advertisement I am more likely to consider purchasing the advertised product"	0.86
PI2	"After seeing social media advertisement I intend to purchase the product promoted on social media"	0.91
PI3	"After seeing social media advertisement I plan to buy products based on social media advertising"	0.84
Perceived Value (García-Saliri	rosas and Acevedo-Duque, 2022 <b>)</b> .	
Cronbach's alpha 0.849, CR =	853, AVE 0.660	1
PV1	"My perception of brands advertised on social media offer valuable and innovative products"	0.77
PV2	"My perception of brands advertised on social media ads provide meaningful recommendations"	0.80
PV3	"My perception of brands advertised on social media ads enhanced my brand experience"	0.87
Satisfaction (García-Salirrosas	and Acevedo-Duque, 2022).	
Cronbach's alpha 0.897, CR =	0.900, AVE 0.751	
SAT1	"I am satisfied with the quality of information provided in social media advertisement"	0.89
SAT2	"The relevance of the ads to my interests and preferences are high"	0.89

Source: Primary data processed. CRD: Credibility; AUT: Authenticity; SUS: Sustainability; TRS: Trust; SAE: Social media advertise effectiveness; PI: Purchase intentions; PV: Perceived value; SAT: Satisfaction.

TABLE 3	Data	normality.
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No	Item	Minimum	Maximum	Mean	SD	Skewness	Kurtosis
1	CRD1	1	7	6.11	1.029	-1.659	2.758
2	CRD2	2	7	6.17	0.977	-1.640	3.469
3	CRD3	1	7	6.09	1.055	-1.570	2.901
4	CRD4	2	7	6.07	1.048	-1.480	2.674
5	CRD5	1	7	6.20	0.985	-1.610	3.300
6	PURI1	4.0	7.0	6.316	0.8182	-1.126	0.739
7	PURI2	2.0	7.0	6.135	0.9349	-1.056	1.041
8	PURI3	1.0	7.0	6.045	0.9922	-0.981	0.991
9	PV1	1	7	6.03	1.010	-1.272	2.554
10	PV2	1	7	6.11	0.915	-1.264	2.840
11	PV3	2	7	6.22	0.871	-1.108	1.340
12	SAE1	2	7	6.12	0.883	-0.956	0.841
13	SAE2	2	7	6.18	0.871	-1.129	1.683
14	SAE3	2	7	6.22	0.807	-0.944	1.119
15	SAE4	2	7	6.08	0.934	-1.007	0.855
16	SAE5	1	7	6.30	0.882	-1.477	3.150
17	AUT1	2	7	6.13	1.046	-1.430	2.179
18	AUT2	1	7	6.23	1.078	-2.051	2.368
19	AUT3	1	7	6.12	1.047	-1.505	2.743
20	AUT4	1	7	6.22	0.988	-1.737	2.141
21	TRUST1	3	7	6.55	0.657	-1.689	2.993
22	TRUST2	3	7	6.49	0.671	-1.320	2.104
23	TRUST3	3	7	6.52	0.674	-1.393	2.074
24	SUST1	2	7	5.67	1.046	-0.799	0.545
25	SUST2	1	7	5.60	1.143	-0.929	1.004
26	SUST3	2	7	5.61	1.094	-0.859	0.639
27	SUST4	1	7	5.77	1.063	-0.940	1.121
28	SAT1	1	7	5.52	1.246	-0.982	1.014
29	SAT2	1	7	5.20	1.341	-0.656	0.177
30	SAT3	1	7	5.11	1.438	-0.697	0.076

Source: Primary data processed.

explain 33% of the variance in perceived value, 23% of the variance in satisfaction and 66% of the variance in purchase intentions (Figure 3).

The AMOS bootstrapping method is used to verify the results of the structural model assessment. This research has directional hypotheses (Table 5). Therefore, a t value greater than 1.64 is deemed suitable for a significant path (Hair et al., 2020). The findings indicated that the constructs of credibility, authenticity and sustainability are important predictors of consumer behavior (Table 5). Our results confirm the outcomes of past studies on credibility (Chekima et al., 2020; Chen et al., 2023; Kumar and Tripathi, 2022) and sustainability (Yang et al., 2022; Haque et al., 2024; Nazish et al., 2024). The constructs authenticity, social media advertisement effectiveness and trust partially predict consumer behavior (Hamid et al., 2022; Ebrahim, 2020; Tümer et al., 2019) for trust (Hasan et al., 2023; Agnihotri et al., 2023) and authenticity (Wibowo et al., 2020; Rehman and Zeb, 2023) for the social media advertising effect.

## Mediation analysis

The study investigated the mediating effects of trust in the relationship between social media effectiveness and consumer behavior. For the mediation analysis, social media advertising was modeled as a higher-order construct with 4 sub-dimensions— credibility, authenticity, sustainability and social media advertising effectiveness. The outcome variable consumer behavior is also modeled as a higher-order construct with three sub-dimensions: perceived value, satisfaction and purchase intentions. The reliability, discriminant validity, convergent validity and model fit were assessed. The model fit indices indicate an excellent model fit: "CMIN/df 2.012 CFI 0.955, SRMR 0.036, RMSEA 0.081, NFI 0.964, IFI 0.955, TLI 0.961 and PClose 0.875." The model maintained its reliability and discriminant validity, with Cronbach's alpha values for all the constructs >0.7 and AVEs >0.5.

#### TABLE 4 Discriminant validity-HTMT ratio analysis.

	CRED	SAEF	SUSTN	AUTH	SAT	TRUST	PRVL	PURI
CRED								
SAEF	0.463							
SUSTN	0.426	0.370						
AUTH	0.255	0.319	0.242					
SAT	0.345	0.276	0.374	0.216				
TRUST	0.491	0.457	0.423	0.394	0.294			
PRVL	0.441	0.383	0.343	0.277	0.278	0.373		
PURI	0.650	0.378	0.525	0.236	0.443	0.619	0.438	

Source: Primary data processed.



Therefore, the mediation analysis is carried out. The study followed the mediation analysis similar to Hayes and Preacher (2014) method.

The mediation analysis reveals partial mediation of the relationship between social media advertising and consumer behavior as the direct effect of social media advertising  $\rightarrow$  consumer behavior ( $\beta = 0.677$ , t = 7.454, p < 0.001) and the indirect effect of social media advertising  $\rightarrow$  trust  $\rightarrow$  consumer behavior ( $\beta = 0.203$ , t = 3.845; p < 0.001) (Figure 4) are significant. Therefore, H16: partially supported.

## Discussion

The evolution of digital marketing and the widespread use of social media have fundamentally altered the way brands engage with consumers. Unlike traditional advertising, which relies heavily on one-way communication, social media advertising fosters interactive, real-time engagement, allowing brands to build relationships with their target audiences. However, the effectiveness of these advertising efforts is highly contingent on key factors such as credibility, perceived authenticity, and sustainability, which shape consumer perceptions,

#### TABLE 5 Testing of hypotheses.

	ß	SE	t value	<i>p</i> value	Result
H1: Credibility $\rightarrow$ Perceived value	0.234	0.047	4.951	***	Accepted
H2: Credibility $\rightarrow$ Satisfaction	0.226	0.068	3.329	***	Accepted
H3: Credibility $\rightarrow$ Purchase Intentions	0.328	0.033	9.914	***	Accepted
H4: Authenticity $\rightarrow$ Perceived value	0.093	0.041	2.277	0.023	Accepted
H5: Authenticity $\rightarrow$ Satisfaction	0.085	0.060	1.417	0.157	Rejected
H6: Authenticity $\rightarrow$ Purchase intentions	-0.051	0.028	-1.817	0.069	Rejected
H7: Sustainability $\rightarrow$ Perceived value	0.105	0.041	2.559	0.010	Accepted
H8: Sustainability $\rightarrow$ Satisfaction	0.292	0.060	4.829	***	Accepted
H9: Sustainability $\rightarrow$ Purchase intention	0.173	0.028	6.128	***	Accepted
H10: Social media advertisement effectiveness $\rightarrow$ Perceived value	0.166	0.058	2.854	0.004	Accepted
H11: Social media advertisement effectiveness $\rightarrow$ Satisfaction	0.275	0.084	3.273	0.004	Accepted
H12: Social media advertisement effectiveness $\rightarrow$ Purchase intention	-0.064	0.039	-1.634	0.102	Rejected
H13: Trust $\rightarrow$ Perceived value	0.336	0.079	4.253	***	Accepted
H14: Trust → Satisfaction	0.132	0.116	1.141	0.254	Rejected
H15: Trust $\rightarrow$ Purchase Intention	0.500	0.056	8.884	***	Accepted

Source: primary data processed. \*\*\* with <0.001.



attitudes, and purchase intentions. The findings of this research underscore the importance of these variables, demonstrating that when consumers perceive social media advertisements as credible and authentic, their engagement levels increase, ultimately leading to greater brand trust and loyalty. Additionally, sustainability messaging plays a crucial role in influencing consumer behavior, as modern consumers increasingly prioritize ethical and environmentally responsible brands. This study investigated the effects of social media advertising on consumer behavior in terms of credibility, authenticity and sustainability. Furthermore, credibility and sustainability are important predictors of consumer behavior in the context of social media advertising effectiveness. The role of credibility in social media advertisements cannot be eliminated. Consumers today are submerged with campaigner content; which they are more intelligent about the sources they trust. Advertisements from reliable sources, such as verified brand accounts or reliably affected accounts, produce more favorable reactions. The results of the study confirm that when consumers consider an advertisement to be reliable, which means that it provides truth, transparent and verified information, they are more likely to connect with the brand and purchase its products and even advocate for it within their social circles. In contrast, a lack of credibility in social media advertisements can cause doubt, advertising avoidance and iconic damage. This discovery aligns with source reliability theory (Hovland and Weiss, 1951), which suggests that the reliability of a message is largely affected by the reliability and expertise of its source.

Similarly, alleged authenticity has emerged as an important determinant of social media advertising effectiveness. Consumers are rapidly becoming ready for advertisements that feel real, unscripted and alliance with the main values of the brand. Brands that successfully include storytelling, user-related materials and trusted messages have strong emotional relationships with their audience. The results of this study indicate that authenticity in advertisements not only promotes trust but also increases consumer engagement and purchase intentions. When advertisements appear to be disconnected from highly polish, highly preacher, or real missions of a brand, consumers can see them as misleading or rebel, leading to negative brands leading to unions. This finding supports previous research showing that authentic brand communication enhances consumer confidence and loyalty (Napoli et al., 2014; Moulard et al., 2015).

In addition to reliability and authenticity, sustainability in advertising has become an important factor affecting consumer decision making. With the growing importance of environmental issues and CORPOR, consumers are increasingly inclined to interact with brands that prioritize ethical and sustainable business practices. The study outcome implies that advertisements that promote the initiative of sustainability, such as environmentally friendly packaging, fair trade policies, and a decrease in the carbon footprint, affect the consumer approach and behavior. Consumers who consider a brand environmentally responsible are not only more likely to buy their products but also more inclined to advocate for it and remain loyal in the long term. These findings align with White et al. (2019), who argue that sustainability-oriented advertising enhances the notion of the brand and promotes deep consumer trust. However, it is important for brands to ensure that their claims of sustainability are real and supported by real functions, such as misleading or exaggerated sustainability messages-which are often referred to as greenwashingby destroying consumer trust and resulting in backlash.

A particularly important discovery of this study is the mediating role of trust in social media advertising effectiveness. Trust acts as an important buffer against consumer suspects, allowing brands to establish long-term relationships with their audiences. When the level of trust is high, consumers are more likely to connect with advertisements, believe in the credibility of brand messages, and make a purchase decision on the basis of those advertisements. Conversely, when the level of trust is low, even the best-prepared advertisements may fail to generate engagement. Morgan and Hunt (1994) suggested that commitment– trust theory provides a strong basis for understanding this phenomenon, suggesting that trust is an essential component of successful brand– consumer relationships. Brands that continuously fulfill their promises, maintain transparency, and engage in open communication with consumers are more likely to maintain faith, which improves the effectiveness of their social media advertising efforts.

# Conclusion

While this study provides valuable insight into the effectiveness of social media advertising, there are many areas for future discovery. A potential direction for advertisement has to examine cross-cultural diversity in consumer perceptions of reliability, authenticity and sustainability. Cultural differences can affect how consumers evaluate advertisements, and they rely on social media marketing efforts. Additionally, the platform-specific effect affects warrants in further examination, as consumer reactions may vary across platforms such as Instagram, Facebook, LinkedIn, and YouTube, depending on the type of materials and advertising formats used. Another avenue for future research is how confidence in social media advertisements develops over time and whether continuous reliability, authenticity and sustainability efforts cause high consumer lifetime value (CLV). In addition, discovering the impacts of emerging technologies, such as artificial intelligence (AI), augmented reality (AR), and virtual reality (VR), in shaping consumer reactions to social media advertisements and disasterrelated technological advancements can provide valuable insight.

As the digital landscape continues to develop, brands must prefer consumer-centric, authentic and reliable advertising strategies to flourish in a rapidly suspicious and information-rich environment. The findings of this study emphasize that advertising effectiveness is not only about visibility but also about the creation of meaningful, confident relationships with consumers. Organizations that align their advertising messages with transparency, authenticity and moral responsibility obtain a competitive advantage, consumer engagement, and secure long-term brands. As social media continues to shape consumer behavior, successful brands will be those that understand and embrace these developed dynamics, providing value-driven and reliable advertising experiences to their audience.

## **Practical implications**

From a managerial point of view, the implications of this study are deep. The brand managers should identify that consumer trust and engagement are not only by-products of risk but also actively cultivated through strategic advertising efforts. To maximize the effectiveness of their social media campaigns, brands should focus on building reliability through transparency, enhancing authenticity through reliable storytelling and promoting sustainability with real commitment. Marketers should also take advantage of impressive collaboration with individuals who align with brand values, as research suggests that micro-influencers are often famous for their perceived relativity and authenticity (Djafarova and Rushworth, 2017) compared with high belief levels.

Additionally, brands should adopt data-operated approaches to track consumer spirit and refine their advertising strategies accordingly. A real-time feedback mechanism, arrangement analysis and consumer engagement can help metric brands assess the effectiveness of their social media ads and make the necessary adjustments to increase the necessary adjustments to increase the effectiveness of their social media ads and to increase the reliability, authenticity and sustainability of messages. In addition, brands should prioritize two-way communication on social media platforms, actively respond to consumer questions, address concerns, and engage in meaningful conversations to strengthen confidence and loyalty.

## Limitations

The study carried out surveying social media users and active online shoppers assessing eight reflecting constructs. The care to be taken to protect the sample is representative of the population. The data was cross-sectional and the data were collected at a single point of time. Sometimes this type of design makes it challenging to establish causal relationships between the variables. While SEM can suggest pathways of influence, it cannot definitively prove that changes in social media advertising characteristics cause changes in consumer behavior. Further, the factors like emotional appeal, ad fatigue, platform-specific engagement mechanics, or influencer marketing dynamics may also influence behavior, but not considered for this study. The longitudinal studies gathering the samples from diverse culture and educational background can be helpful to generalize the findings.

#### Future scope

This study explores the impacts of credibility, perceived authenticity, sustainability and social media advertising effectiveness, with trust as a mediating factor. Future research should explore emerging trends, technological advancements, and cultural differences in consumer behavior. Cultural and regional contexts influence consumer perceptions of credibility, authenticity, and sustainability. Collective cultures prioritize the brand community, whereas individualist cultures prioritize individual brand engagement. Understanding these cultural dimensions can help brands improve global social media strategies.

Further research is needed to understand the impact of platformspecific advertising on effectiveness, considering demographics and engagement behavior. Future studies should explore different advertising formats, algorithm changes, data privacy policies, and platform-specific advertising guidelines.

The role of emerging technologies in social media advertisements is another important field to investigate in the future. Technologies such as artificial intelligence (AI), augmented reality (AR), and virtual reality (VR) are changing digital marketing by offering immersive and hyper-practical advertising experiences. The AI-powered Future-Giving Analytics and personal recommendations are redesigning how consumers interact with advertisements, which requires how to study AI Trust and engagement and how they affect decisions. Similarly, ARand VR-based advertisements actually allow consumers to experience products before purchasing them, questioning how these technologies affect the credibility and authenticity of the advertisement. A longitudinal study on social media advertisement confidence can reveal consumer trust development over time. Future research should track long-term brand-consumer relationships, identify factors eroding trust, and develop long-term strategies to maintain confidence, such as misleading advertisements and fake endorsements.

Future research should explore the psychological and emotional drivers of consumer behavior in social media marketing, including factors such as FOMO, apathy, humor, and causes, to create more effective advertising campaigns. Further research is needed to understand the role of micro influencers in impressive marketing, as their small but highly engaged audiences are considered more authentic and reliable than celebrities or large-scale affected individuals are. Consumer-related materials and brand advocacy significantly influence consumer perceptions. Brands should leverage user-borne materials, including colleague recommendations and organic word-of-mouth marketing, to increase their effectiveness.

Research explores social media advertisements' moral implications and data privacy, focusing on consumer trust, transparency, and balancing advertising strategies with moral marketing practices to avoid hyper-personalization. Future social media advertising research should integrate technology, consumer psychology, cultural effects, and moral ideas. Brands should remain adaptable, reliable, authentic, and stable, incorporating marketing, psychology, behavior economics, and artificial intelligence.

# Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

# **Ethics statement**

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The participants provided their written informed consent to participate in this study.

## Author contributions

HK: Formal analysis, Resources, Validation, Visualization, Project administration, Supervision, Writing – original draft, Software. AC: Data curation, Investigation, Validation, Writing – original draft. AJ: Conceptualization, Data curation, Formal analysis, Software, Writing – review & editing, Visualization. SS: Investigation, Project administration, Supervision, Visualization, Writing – review & editing. KP: Conceptualization, Methodology, Writing – original draft, Writing – review & editing, Resources, Validation. UV: Conceptualization, Data curation, Investigation, Methodology, Visualization, Writing – original draft, Writing – review & editing.

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# Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

# **Generative AI statement**

The authors declare that no Gen AI was used in the creation of this manuscript.

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