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Exploring the impact of beauty vloggers' credible attributes, parasocial interaction, and trust on consumer purchase intention in influencer marketing

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The growing usage of digital platforms has made influencer marketing the most cost-effective marketing tool, especially for products consumed by young digital natives. Among other products, these include fashion and beauty-related items such as cosmetics, whose online marketing has created a particular category of influencers called 'beauty vloggers.' By applying the source credibility model, this study investigates whether beauty vloggers' credible attributes (trustworthiness, expertise, and attractiveness) help consumers build trust towards them and whether followers' trust leads to desirable marketing outcomes (increased purchase intention). Prior literature used the source credibility model in a fragmented manner. However, this study enhances the holistic framework of social media influencers' impact on purchase intention by investigating all three credible attributes. It specifically addresses the significance of cultivating trust between beauty vloggers and followers, exploring the impact of vloggers' credible attributes on consumer purchase intention. Additionally, beauty vloggers periodically engage in parasocial interactions to increase closeness with their audiences, affecting consumer behaviour. This study addresses the limited research on the consequences of parasocial interactions in an emerging market context, examining the impact of beauty vloggers' repeated interactions on consumer behaviour, contributing to a comprehensive understanding of purchase intention using parasocial interaction as an antecedent. The research was conducted on consumers belonging to the age group of 16-45 who use social media platforms daily. Using structural equation modelling via SmartPLS software, the statistical analysis was done on 357 North Indian respondents. The study explores the influence of beauty vloggers on consumers' purchasing behaviour in the Indian context. The results demonstrate that beauty vloggers' credibility traits help in influencing consumer behaviour. The findings also revealed that trust partially mediates the impact of credible attributes of beauty vloggers and consumers' purchase intention. Additionally, the results show that customers' purchasing decisions might be influenced by repeated parasocial interactions done by beauty vloggers if they perceive them as credible information sources. The findings of the study contribute to help industrial marketers and practitioners of cosmetic companies use influencer marketing strategically in order to increase market sales.

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Introduction

n contemporary times, gigantic expansion in internet and social media usage has been observed during the outbreak of Covid 19 (Kim & Kim, 2021). People use various social media sites for their entertainment and informational purposes, and for having virtual social experiences. Some social media users actively produce online content by sharing their product reviews, personal lives, feelings, opinions, ideas, etc., becoming opinion leaders for their audiences (Lee & Watkins, 2016). Opinion leaders may impact their followers' brand and product perceptions via their postings (Lee & Lee, 2022). Thus, they are called "influencers" or "social media influencers".

A social media influencer is an "autonomous third-party endorser who has amassed substantial social networks by openly disclosing information about their personal experiences, opinions and matters through various mediums such as texts, images, videos, hashtags, and location check-ins" (Freberg et al., 2011; Ki & Kim, 2019). Their success on social media has made them micro-celebrities. There are a lot of social media influencers making content in different sectors like health, food, gaming, travelling, lifestyle, technology etc. However, those influencers who specifically produce beauty-related content, such as review videos featuring cosmetic products, or tutorial videos on how to use a particular product, are generally known as beauty vloggers or beauty influencers. According to a global survey conducted by Marketing (2019), there is a notable disparity in consumer sentiment between photos and video content. This discrepancy has particular significance in the context of cosmetics marketing by beauty influencers, given the visual characteristics of the products and their application (Manchanda et al., 2022). In contrast to other forms of vlog marketing such as entertainment vlogs, health vlogs, food vlogs, and travel vlogs, beauty vlogging offers unique experiences to audiences due to its capacity to develop vicarious experiences for viewers. Young consumers watch makeup tutorials given by beauty vloggers to understand the step-by-step process of product application, making the marketing experience more realistic. Consequently, this practice enhances the authenticity of beauty vlogger marketing (Lee & Lee, 2022).

Prior researchers (Djafarova & Rushworth, 2017; Sokolova & Kefi, 2020; Kim & Kim, 2021; Manchanda et al., 2022) revealed that consumers get authentic and believable information from these beauty vloggers. They feel a sense of similarity and familiarity with these micro-celebrities. Additionally, beauty vloggers make regular interactions with their respective audiences making them more approachable and real than traditional celebrity endorsers (Tafheem et al., 2022). Marketers of cosmetic companies see this as an opportunity to promote their products using these beauty vloggers, giving rise to a new marketing phenomenon called "influencer marketing". Influencer marketing has witnessed significant growth globally as well as in India. According to a recent market analysis, influencer marketing is valued at 12.75 billion rupees in 2022 and it is expected to increase to 28 billion rupees by 2026 (Statista, 2023). Additionally, a survey found that 92% of consumers trust influencers more than traditional marketing tactics (Kim and Kim, 2021). Thus, this new marketing strategy has allowed cosmetic businesses to sell their goods more economically than with celebrity endorsements (Hassan et al., 2021).

It is evident from the literature that cosmetic companies have traditionally used celebrity endorsement to promote their products (Spry et al., 2011; Jin & Phua, 2014). Later on, marketers started shifting towards beauty vlogger marketing owing to the increased usage of social media (Ki & Kim, 2019). Prior literature posits that consumers rely more on social media influencers as compared to traditional celebrities (Manchanda et al., 2022). Still, there is a lack of extensive research on the specific traits of beauty vloggers that

are crucial criteria for their selection in brand collaborations. Additionally, the research on the effect of influencer marketing in an emerging economy like India is still unexplored. Prior investigations on the influence of social media influencers on purchase intention, such as Lee & Watkins (2016), Torres et al. (2019), and Wong & Wei, (2023), had employed the source attractiveness model only. Sokolova & Kefi (2019) measured credibility using source attractiveness, in an empirical study on bloggers. Ladhari et al. (2020) and Wiedmann & Mettenheim (2020) exclusively considered expertise. Nosita & Lestari (2019), Ramadanty et al. (2020), Schouten et al. (2020), and Mabkhot et al., (2022) concentrated on expertise and trustworthiness. However, the aforementioned research used credibility measures in a fragmented manner. The current study aims to comprehensively investigate all dimensions of the credibility model to enhance the robustness of the holistic framework. Additionally, theoretical studies on celebrity endorsement highlight trust as a crucial factor for determining the efficacy of messages being conveyed by celebrities (Jiang et al., 2015), correlating with a positive attitude toward sponsored messages (Wang et al., 2017). Social media has elevated the role of social media influencers (SMIs) to transcend even traditional celebrities. Moreover, prior research has examined the impact of SMIs on tourist purchasing intentions, considering trust (Chatzigeorgiou, 2017; Magno & Cassia, 2018) and attitudes towards advertisements and destinations as significant factors (Xu & Pratt, 2018). Additionally, previous studies lacked emphasis on the significance of cultivating trust between beauty vloggers and their followers. The present study aims to fill this gap by examining the impact of credible attributes of beauty vloggers that serve to create trust in them, which influences consumers' intention to purchase the endorsed product. Apart from credible attributes, parasocial interactions (PSI) are another major antecedent of purchase intention (Choi & Lee, 2019; Lee & Lee, 2022; Manchanda et al., 2022). People often turn to beauty vloggers' videos for advice before making a buying decision. Marketers use the fact that beauty vloggers and their fans connect with each other often to create the impression that they are friends. Moreover, prior literature postulates that regular interactions between beauty vloggers and their viewers can change consumers' attitudes towards a brand/product (Lee & Lee, 2022). It is vital to understand the importance of parasocial interactions for examining purchase intention. However, the investigation of the consequences of PSI in an emerging market context is still limited. Additionally, Lee & Lee, (2022) recommended investigating the impact of parasocial interactions on purchase intention. So, to fill this gap, the current study investigates the effect of repeated interactions (parasocial interactions) done by beauty vloggers on consumer behaviour. Moreover, while several studies have examined the influence of source credibility (Manchanda et al., 2022; Ashraf et al., 2023) and parasocial interactions (Lee & Watkins, 2016; Lee & Lee, 2022) on consumers' purchasing decisions, there remains a scarcity of research investigating the combined effects of these factors. Considering these gaps in the literature, this study attempts to address the following research questions:

RQ1: Do credible attributes of beauty vloggers help in changing the attitude of consumers towards the product they endorse/use?

RQ2: Does trust affect the relationship between source credibility attributes and purchase intention?

RQ3: Do repeated parasocial interactions by beauty vloggers affect the purchase intention of consumers?

The present study uses the holistic source credibility model given by Ohanian, (1991) and parasocial interaction theory given by Horton and Wohl, (1956) to examine how beauty vloggers influence consumers' purchase intention for cosmetic brands. This study shows how credible attributes (trustworthiness,

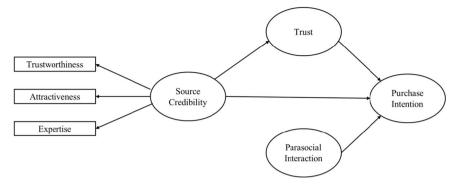


Fig. 1 Proposed conceptual framework. A representation of the relationship between all the variables used (source credibility, trust, parasocial interaction, and purchase intention). Here, source credibility is a second-order construct, and trustworthiness, attractiveness, and expertise are lower-order constructs.

expertise, and attractiveness) of beauty vloggers and parasocial interactions affect purchase intention by taking trust as a mediating variable (as shown in Fig. 1).

Significance of the study. The current study delves into contemporary digital marketing, emphasising the escalating influence of influencer marketing, particularly in the beauty industry targeting young digital natives. It reveals key credible attributes of beauty vloggers that affect consumer behaviour, highlighting trust as a pivotal mediator in purchase decisions. Marketers in the competitive beauty landscape can strategically enhance trust by recognising and leveraging these attributes. The study underscores the role of parasocial interactions in fostering connections with influencers, aiding marketers in crafting resonant messages for target demographics. In conclusion, leveraging beauty vloggers' credibility and parasocial interactions offers a potent strategy for marketers to build consumer trust and connect with specific audience segments.

In recent years, influencer marketing, particularly targeting tech-savvy natives, has gained prominence. This study focuses on beauty vloggers within this realm, recognising their unique impact on consumer behaviour, particularly in the cosmetics domain. The investigation stems from the understanding that influencer marketing effectiveness varies based on product type and influencer attributes. In the beauty vlogging niche, where personal credibility is paramount, understanding influence mechanisms is crucial. This choice is justified by the transformative influence of digital platforms on consumer behaviour. Beauty vloggers, shaping cultural and commercial landscapes, impact perceptions and preferences, especially among the younger demographic. The study emphasises that their influence extends beyond product endorsement to include credibility, parasocial interactions, and audience trust. By dissecting beauty vlogger influence within influencer marketing, the study aims to provide nuanced insights for tailored cosmetic marketing strategies.

The next section of the paper discusses the theoretical background and literature review that helps in forming a hypothesis for the current study. Section "Research design and methodology" provides the research framework and methodology. The results and findings of the study are displayed in the section "Results and findings" followed by the discussion portion in the section "Discussion". At last section "Implications, limitations and future research avenues" provides implications and limitations of the current study along with future research avenues.

Literature review and hypothesis development

This section contains theoretical background to support the proposed model by emphasising on source credibility theory and parasocial interaction theory. This section also presents the work done by previous researchers on similar variables that help in formulating a hypothesis for the current study.

Source credibility theory. Numerous marketing professionals and advertising experts believe that endorsers' attributes play a crucial role in guaranteeing the effectiveness of a message. It is imperative for marketers to carefully choose a suitable spokesperson to endorse their brand, as this can lead to an increase in purchase intention. Many empirical investigations have been conducted to examine the influence of an endorser's credibility on the purchasing behaviour of consumers (Choi & Lee, 2019; Manchanda et al., 2022). The notion in question was demonstrated in the source credibility model proposed by Ohanian (1991). The phrase "source credibility" is often used to denote the favourable attributes of a communicator that influence the recipient's willingness to accept a message. In other words, source credibility refers to the degree to which the intended audience perceives a source as having the necessary experience and knowledge to enhance their comprehension of a specific product or service (Ohanian, 1991). Initially, Hovland & Weiss (1951) illustrated trustworthiness and expertise as the two significant dimensions of the source credibility model. However, McGuire (1985) added another important dimension, namely, attractiveness to the source credibility model owing to the increasing use of celebrities to endorse products. Within the context of the cosmetic sector, the physical appeal of a spokesperson has a considerable influence in moulding customers' favourable perception of a product, thereby establishing it as a crucial factor (Lou & Yuan, 2019). The concept of source attractiveness encompasses both physical attractiveness (Ohanian, 1991) and non-physical attractiveness (McGuire, 1985). Lee and Watkins (2016) also examined the impact of physical and social attractiveness on the consumers' purchase intention for luxury cosmetic products. The results revealed that if a luxury product is reviewed by an attractive and familiar source, it creates more purchase intention. So, the present study involved the identification of all three primary dimensions given by Ohanian (1991), namely trustworthiness, expertise, and attractiveness, to assess the credibility of the endorser (specifically, a beauty vlogger).

The concept of "trustworthiness" pertains to the degree of acceptance and assurance the audience has in the message the speaker conveys. Moreover, an endorser with high trustworthiness and strong opinion is more effective in influencing consumer attitudes than an untrustworthy endorser (Giffin, 1967; Ohanian, 1991). Hovland et al. (1953), describe expertise as the degree to which the endorser is perceived as a credible source of information, and consumers may rely on the information presented by them to make their purchasing decisions. The term

"attractiveness" pertains to the observable physical and social characteristics of the individual endorsing a product or service. Physical and social attractiveness are the two constituents through which source attractiveness may be examined. Here, social attractiveness refers to the familiarity, likeability, and similarity between beauty vloggers and their respective audiences, whilst physical attractiveness primarily relates to the physical structure, facial characteristics, and overall personality of the beauty vlogger (Kim & Kim, 2021). McGuire (1985) revealed that an endorser who is perceived as attractive tends to be more wellliked and has a positive influence on the products they endorse. In the beauty industry, the perceived attractiveness of an endorser is a significant factor in influencing attitudinal shifts. Previous researchers have utilised the source credibility model in relation to celebrity endorsers (Roy et al., 2013; Bhatt et al., 2013; Wang & Scheinbaum, 2018). In contemporary times, individuals who create content related to beauty on online platforms are regarded as micro-celebrities or self-made artists. As a result, all three aspects of the source credibility model also fit in this context (influencer marketing) (Shan et al., 2019).

The credibility of the source is a multidimensional phenomenon primarily used to rate the information provided, hence possessing influencing powers. A listener's favourable attitude toward the source and consequent receptivity to the message can easily be influenced by source credibility. Prior studies have demonstrated that individuals are more susceptible to influence from individuals they perceive as trustworthy (Lee & Watkins, 2016; Sokolova & Kefi, 2019; Balabanis & Chatzopoulou, 2019). Also, if the remarks given by the endorser (beauty vlogger) are true, sincere, and concise, the information source is generally regarded as more credible, leading to higher purchase intention (Hovland & Weiss, 1951; Giffin, 1967; Ismagilova et al., 2020). Sokolova and Kefi, (2019), examined the importance of credible attributes in shaping the behaviour of consumers towards the product they endorse/use. The results of the study revealed that consumers become more inclined to purchase a product that has been endorsed by an opinionated person. Lou and Yuan, (2019) illustrated that when customers use or intend to purchase products that are associated with beauty vlogger's area of expertise, they are more inclined to accept or believe beauty vlogger's opinions. Another study conducted by Cheng et al. (2023) provided evidence indicating that the effectiveness of communication is heavily dependent on the perceived credibility of the influencer. Also, the familiarity, similarity, and acquaintance that consumers experience towards beauty vloggers have been found to influence their intention to purchase positively (Manchanda et al., 2022). Moreover, it has been observed that a visually appealing stimulus tends to garner greater attention, particularly in the cosmetic industry domain, resulting in increased inclination to purchase (De Veirman et al., 2017). The three dimensions of source credibility are instrumental in fostering trust towards beauty vloggers. The followers perceive the association between influencers and themselves as satisfying. Furthermore, the efficacy of the communication is amplified when the audience places confidence in the influencer. Followers anticipate that the influencer's endorsement will be helpful since they think the influencer's message will produce favourable results (Kim & Kim, 2021). Therefore, we put forth the subsequent two hypotheses:

H1: Source credibility of beauty vloggers positively influences trust towards beauty vloggers.

H2: Source credibility of beauty vloggers positively influences purchase intention of consumers towards the brands they endorse.

Trust. Trust can be delineated as the degree of confidence vested by a recipient in the communicator or speaker. Trust is significant in communication, as it contributes to the credibility of an individual's words and actions within a context characterised by uncertainty or potential harm (Giffin, 1967). Morgan and Hunt (1994) illustrated that trust exists when the viewer seeks integrity and reliability in the information provided by the spokesperson. The ability to supervise or control the actions of the other party is not a necessary condition for trust. Instead, trust is characterised by the willingness of one party to be vulnerable to the actions of another party with the expectation that the latter will perform a particular task that is important to the former (Mayer et al., 1995). Trust is commonly perceived as a characteristic that is cultivated over time through frequent interactions within relationships. The establishment of trust is a fundamental aspect in the cultivation of interpersonal connections, as it enhances efficacy, fosters adaptability, and contributes to the sustainability of the relationship between the involved parties (Atiq et al., 2022). Based on their relationships with their communicator, people may estimate and evaluate the worth of future trades (Kim & Kim, 2021). In influencer marketing, beauty vloggers establish credibility with their viewers through repeated engagements via live video sessions, reviewing audience feedback, and responding to their inquiries pertaining to products. Consumers tend to seek advice from beauty vloggers when they perceive similarities and familiarity between the vloggers' lifestyles and their own, prior to making any purchase decisions. The building of trust between an influencer and their audience is a fundamental factor that contributes to creating an atmosphere that is favourable to increasing purchase intention. The credibility of influencers plays a crucial role in shaping the audience's acceptance of the goods or services being marketed since influencers serve as mediators between businesses and customers (Ki et al., 2023). Thus, they establish a relationship that positively affects their purchase intentions for the products they use/endorse (Firman et al., 2021).

Research on trust spans several fields, including philosophy, sociology, economics, marketing, and organisational studies (Putnam, 2015; Koehn, 1996; Doney & Cannon, 1997; Mayer et al., 1995). As seen from a marketing standpoint, trust is considered a crucial element in establishing and sustaining successful relationships that last (Pennanen et al., 2007). According to Deborah et al., (2019), influencers are seen as socially engaged and empowered individuals on social media platforms who are perceived as credible information sources by other users. Numerous studies have been undertaken to explore trust as a multidimensional construct with respect to social media influencers operating in the tourism domain (Artigas et al., 2017; Mircică, 2020; Cohen et al., 2014; Seçilmiş et al., 2022). Consequently, it is crucial to analyse the significance of trust inside the cosmetics sector as well. In order to enhance the efficacy of influencer marketing, it is advisable for practitioners to prioritise the optimisation of consumers' trust in beauty vloggers (Ki et al., 2023). Therefore, we propose the following hypothesis:

H3: Trust on beauty vloggers positively influences the purchase intention of consumers towards the brands they endorse.

Mediating role of trust. The establishment of trust between beauty vloggers and consumers is a crucial factor in the decisionmaking process when it comes to purchasing beauty products. When consumers perceive that vloggers and influencers provide trustworthy information about products, they tend to develop a sense of loyalty towards them. Consumers tend to consistently rely on a particular vlogger for their product reviews (Kim & Kim, 2021). According to Konstantopoulou et al. (2019), customers are more likely to adopt advice that could potentially alter their purchase decisions if it comes from a trusted influencer. In the conventional marketing paradigm, consumers rely on their past experiences to bolster the efficacy of salespersons and establish

trust in them (Crosby et al., 1990). However, in the realm of influencer marketing, consumers rely on the credibility of beauty vloggers they follow to make informed purchasing decisions, drawing from their previous interactions with said vloggers. Therefore, the effectiveness of an influencer's message is enhanced when their followers have trust in them, leading to a perception of the relationship as being rewarding (Kim & Kim, 2021). Additionally, Dekavalla (2019) investigated the importance of trust in influencing consumer behaviour. The researcher revealed that authenticity, transparency, expertise, and reliability play a major role in building trust in online content creators. In the context of the online paradigm, consumers exhibit scepticism toward the authenticity of the material disseminated on social media platforms. Nevertheless, when individuals see beauty vloggers as reliable purveyors of knowledge, they are inclined to place their confidence in them, exerting an impact on customers' choices about purchases (Singh, 2021). Hence, trust is considered a crucial element in establishing and sustaining prosperous, enduring relationships from a marketing standpoint. In addition to trust, the attribute of trustworthiness holds significant importance in the realm of marketing strategy. Trustworthiness and trust are distinct concepts, with the former referring to the accumulation of antecedent perceptual experiences that give rise to trust (Pop et al., 2022). The level of confidence placed in an influencer is a significant characteristic that may be used to evaluate the truthfulness of their posts. This conduct, in turn, has an impact on an individual's interest and inclination to actively seek out further information offered by the influencer (Martínez-López et al., 2020). Additionally, in their recent study, Wijerathna and Wijesundara (2022) investigated the mediating effect of trust in the relationship between the perceived authenticity of microinfluencers and purchase intention within the fitness sector. Consequently, this study aims to investigate the mediating role of trust in the relationship between the credibility of beauty vloggers and the purchase intention of consumers. Therefore, we propose the following hypothesis:

H4: Trust mediates the relationship between the source credibility of beauty vloggers towards customers' purchase intention.

Parasocial interaction theory. The concept of parasocial interaction is not novel. Parasocial interactions were frequently used in communication even before the advent of the internet and hence the concept is very common among media researchers. Horton and Wohl (1956) introduced the term 'parasocial interactions' to describe the close connection that exists between an actor and their audience. Parasocial interaction (PSI) is characterized as an illusionary experience in which consumers engage with famous personalities (actors, singers, athletes) as if they are actively present and involved in a mutually beneficial relationship. These interactions were perceived as an innovative communication strategy that aimed to substitute traditional face-toface relationships. Parasocial interactions foster the perception among individuals that they are participating in a reciprocal exchange with public figures (Labrecque, 2014). The virtual communication between viewers and celebrities creates an illusory experience of friendship in the minds of viewers (Lee and Watkins, 2016).

Previously, PSI was employed within the domain of media outlets such as television and radio, as well as media consumers (Horton & Wohl, 1956). During that period, it became increasingly popular to engage with consumers by regularly interacting with their audience, as a means of capturing their attention. Consumers have begun to perceive that they coexist with a prominent personality. However, with the expanding technological landscape and increased use of social media, the scope of PSI has broadened beyond traditional media figures in the domains of television and radio. Now, celebrities are using social media platforms to interact with their audiences. The same phenomenon can be observed from beauty vloggers' viewpoint, as vloggers also create an illusionary friendship with their followers which is influential in nature (Kim et al., 2020). The stability of this illusionary or pseudo-friendship is based on contact frequency (Sokolova & Kefi, 2020). In order to establish a closer connection with their audience, beauty vloggers frequently upload regular content that relates to their daily lives (Lee & Watkins, 2016; Kim et al., 2020; Choi & Lee, 2019). Additionally, they conduct question-and-answer sessions to address queries from their audience pertaining to their personal life. Various social media platforms, such as YouTube, Instagram, and Facebook, provide a means for individuals to engage in dialogue with beauty vloggers by means of commenting on the videos they upload (Sokolova & Kefi, 2019; Shan et al., 2019). The interactions between beauty vloggers and their audiences foster the development of long-lasting relationships resulting in influencing their behaviour. Moreover, parasocial interactions have evolved into a form of interactive communication that involves reciprocal engagement (Horton & Wohl, 1956). Now, beauty vloggers provide both entertaining and informative content, and their audiences express their appreciation through engagement metrics such as video likes, subscriptions, and comments (Choi & Lee, 2019). Correspondingly, audiences tend to develop a sense of familiarity with beauty vloggers and place trust in the recommendations they provide. Consumers frequently rely on advice from sources (beauty vloggers) they trust, similar to how one might seek guidance from a close acquaintance when making purchasing decisions (Labrecque, 2014).

From a marketing standpoint, this presents a significant opportunity for cosmetic companies to promote their products through the use of beauty vloggers. Prior to finalising a purchase, consumers tend to seek guidance from beauty bloggers. This illusionary friendship between beauty vloggers and their viewers through repeated interactions is leveraged by marketers to promote their products (Hu et al., 2020; Manchanda et al., 2022).

Initially, parasocial interactions were identified as a unidirectional communication approach by previous researchers when they were confined only to television and radio channels (Horton & Wohl, 1956; Rubin et al., 1985). However, social media platforms like Facebook, Instagram, and YouTube provide an opportunity for viewers to comment and express their feelings by using emoticons and hence making these parasocial interactions a two-way source of communication (Lee & Lee, 2022). Given the significant impact that these interactions have on the daily lives of social media users, it is imperative that we incorporate them into our research in order to gain a comprehensive understanding of the concept of influencer marketing. Prior studies have also validated that parasocial interaction (PSI) serves as an antecedent to purchase intention (Lee & Watkins, 2016; Lee & Lee, 2022). Consequently, an increase in parasocial interactions results in a corresponding increase in purchase intention. Thus, we propose the following hypothesis.

H5: Parasocial interaction by beauty vloggers creates a positive influence on consumer purchase intention for the brands they endorse.

Research design and methodology

Measurement and scale. The questionnaire was adapted from various scholarly works found in the extant literature. The trustworthiness items were adapted from Ohanian's (1991) and Teng et al. (2020). The instruments for measuring expertise and

attractiveness consist of eight and nine items, respectively, and were adapted from three separate studies (Ohanian, 1991; Ki & Kim, 2019; Teng et al., 2020). The items for the mediating variable, trust, were adapted from the scale explored by Meng & Wei (2020). The items for parasocial interactions were adapted from Lee and Watkins (2016) and Lou and Kim (2019). The items for the endogenous variable, purchase intention, were adapted from different studies (Jiménez-Castillo & Sánchez-Fernández, 2019; Lou & Kim, 2019; Meng & Wei, 2020). The items were assessed using a 5-point Likert Scale with values ranging from 1 to 5, where 1 represents strongly disagree and 5 represents strongly agree. All the items are mentioned in Appendix 1 (see supplementary information).

Sample. The current investigation was carried out on consumers who view beauty vloggers' videos on social media platforms on a regular basis, to ascertain their inclination to purchase cosmetic products that are promoted by said beauty vloggers. The period designated for data collection spanned from June 2022 to March 2023. Ethical clearance for data collection was secured from the institution's ethical committee, accompanied by an authority letter. The survey was disseminated electronically to individuals within the age range of 16 to 45 who consume beauty vloggers' content for 1-3 h daily. The present study tried to incorporate diverse age groups to broaden its scope and assess the model's robustness across varying age demographics. The social media user population is vast and unknown, making the application of probability sampling impractical. Therefore, the data was collected using a non-probability convenience sampling method (Djafarova & Rushworth, 2017; Lee & Lee, 2022). At the outset, a total of 500 questionnaires were disseminated to customers residing in the northern states of India, namely Punjab, Harvana, Chandigarh, and Delhi NCR. However, the final dataset comprises respondents who were subjected to detailed scrutiny, specifically those who follow beauty vloggers daily and engage with their content for 1-3 h per day. Therefore, the final analysis was based on only 357 responses, which represents a response rate of 71.4%. Table 1 presents a comprehensive summary of the descriptive analysis conducted in the study. The final data consists of a few minor respondents (11), an informed consent from their guardians was obtained by enlightening them about their contribution to the study's relevance.

Methods. The final data was analysed by partial least squares structural equation modelling (PLS-SEM) using SmartPLS software 4.0 version. This method is preferred as it works best with complex path models and latent variables (Agyapong, 2021). PLS-SEM incorporates elements of both factor analysis and regression, resulting in a more comprehensive understanding of the connection between endogenous and exogenous variables (Hair et al., 2017; 2019; 2020; Sarstedt et al., 2017). Furthermore, it is noteworthy that PLS-SEM exhibits optimal performance when dealing with non-parametric data and does not necessitate multivariate normality of data to yield dependable results. Also, source credibility is a second-order construct, and PLS-SEM provides higher flexibility in such complex models (Hair et al., 2019; 2020).

Results and findings

This section of the paper contains the main results and findings of the study. Confirmatory factor analysis, convergent validity, and discriminant validity for both lower-order construct and higherorder construct were measured, followed by structural equation modelling and bootstrapping, respectively, for testing the hypothesis. PLS predict was also examined to check the predictive power of the proposed model.

Table 1 Descriptive analysis.

Participants	Frequency	Percentage			
Gender					
Male	201	56.30			
Female	156	43.69			
Region					
Punjab	102	28.57			
Haryana	78	21.84			
Chandigarh	69	19.32			
Delhi NCR	108	30.25			
Age					
Below 18	11	3.08			
18-30	343	96.07			
31–45 and above	3	0.84			
Social media platforms used					
YouTube	330	92.43			
Instagram	337	94.39			
Facebook	130	36.41			
Snapchat	227	63.58			
Twitter	123	34.45			
Time spent on social media					
Less than an hour	41	11.48			
1 h-3 h	196	54.90			
3 h-5 h	86	24.08			
5 h and above	34	9.52			
Source: Self-compiled by the author.					

Measurement model for lower-order construct. The primary task in evaluating the measurement model is to examine the model's reliability and validity. By using the repeated indicator approach, the lower-order construct and higher-order construct comprise the conceptual model's two divisions (Sarstedt et al., 2019). First investigation of the reliability and validity of the lower-order construct is done. The results are reported according to the guidelines given in the manual of PLS-SEM (Hair et al., 2017; 2019; Sarstedt et al., 2019). For the purpose of determining the construct's reliability, we examined if the factor loadings of all reflective constructs fall under the threshold of 0.708 (Hair et al., 2017; 2020). As shown in Fig. 2 and Table 2. almost all the values are above the permissible limits. However, one item from trustworthiness (TW1), one item from attractiveness (ATT7), and four items from parasocial interactions (PARA INT3,6,8,9) were deleted to improve the measurement model. Cronbach's α was likewise within the permissible range of 0.70 to 0.95. For evaluating the construct reliability for internal consistency, composite reliability, and Henseler's rho-A were employed and their values should be more than 0.70. The values are displayed in Table 2, indicating that internal consistency was established (Hair et al., 2017; 2020). The average variance extracted (AVE), which represents the variation in endogenous variables caused by exogenous variables, is evaluated for convergent validity. The threshold level for AVE is 0.50 (Cohen, 1988; Hair et al., 2017; Sarstedt et al., 2017; Hair et al., 2019). The AVE values of the constructs were within the acceptable range (as shown in Table 2), establishing the complete measurement model evaluation of the conceptual model.

Next, the study examines the discriminant validity as it assures the uniqueness of the constructs used in the PLS model (Sarstedt, et al., 2022). The discriminant validity for each construct is established using a new criterion, the ratio of correlations between heterotraits and monotraits (HTMT). According to the most recent criteria, all HTMT values must be less than 1, as recommended by the HTMT inference approach which is considered a liberal approach. However, to be more stringent, the Heterotrait-Monotrait (HTMT) ratio of correlations must not exceed 0.85 (Henseler et al., 2015). In the current study, all the values are below the permissible limit of 0.85. All the values of HTMT inference are explained in Table 3.

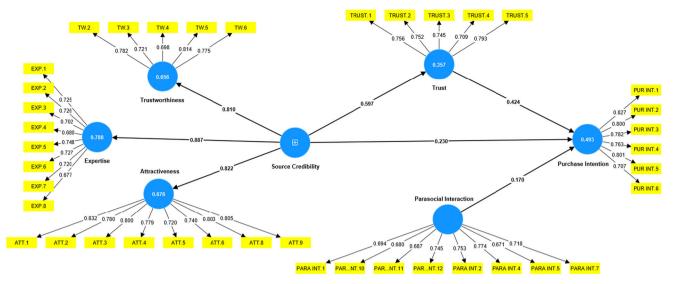


Fig. 2 Conceptual model analysis using SmartPLS. The figure contains the results for the measurement model. Source: self-structured through SmartPLS software.

Constructs	Indicators	Outer loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Trustworthiness	TW2	0.782	0.815	0.817	0.871	0.576
	TW3	0.721				
	TW4	0.698				
	TW5	0.814				
	TW6	0.775				
Expertise	EXP1	0.725	0.862	0.863	0.892	0.509
Expertise	EXP2	0.726	0.002	0.000	0.072	0.007
	EXP3	0.702				
	EXP4	0.680				
	EXP5	0.748				
	EXP6	0.748				
	EXP7	0.727				
A ++	EXP8	0.677	0.000	0.011	0.027	0 (12
Attractiveness	ATT1	0.832	0.909	0.911	0.927	0.613
	ATT2	0.780				
	ATT3	0.800				
	ATT4	0.779				
	ATT5	0.720				
	ATT6	0.740				
	ATT8	0.803				
	ATT9	0.805				
Parasocial interactions	PARA INT.1	0.694	0.865	0.869	0.894	0.513
	PARA INT.2	0.753				
	PARA INT.4	0.774				
	PARA INT.5	0.671				
	PARA INT.7	0.718				
	PARA INT.10	0.680				
	PARA INT.11	0.687				
	PARA INT.12	0.745				
Trust	TRUST1	0.756	0.808	0.814	0.866	0.565
	TRUST2	0.752				
	TRUST3	0.745				
	TRUST4	0.709				
	TRUST5	0.793				
Purchase intention	PUR INT1	0.827	0.871	0.874	0.903	0.610
	PUR INT2	0.800	0.071	0.07 -	0.200	0.010
	PUR INT3	0.782				
	PUR INT4	0.763				
	PUR INT5	0.801				
	PUR INT6	0.707				

Measurement model for higher-order construct. After testing the measurement model of the lower-order construct, the latent variable scores obtained from the PLS algorithm for all three dimensions of source credibility are transferred to the main dataset in order to investigate the higher-order construct in the proposed model using the repeated indicator approach. As the proposed model (shown in Fig. 2) is a Type 1 higher-order model, i.e., reflective-reflective, the repeated indicator method would be more appropriate for measuring (Becker et al., 2012; Perez-Vega et al., 2018; Agyapong, 2021) and the results of higher-order

construct were reported in Table 4. The source credibility of beauty vloggers was modelled to reflect three main attributes in the context of this study, namely trustworthiness, expertise, and attractiveness. The Cronbach α was above the threshold value (0.795). The composite reliability and Henseler's rho-a were 0.827 and 0.879, respectively, and hence above the permissible limits. The path coefficient of lower-order construct becomes the indicator of higher-order constructs and hence the values are considered as outer loadings for the higher-order construct (Agyapong, 2021). In the proposed model, outer loadings for three dimensions were above the permissible limit of 0.708 (Hair et al., 2017; 2019; 2020).

After reporting the results of internal reliability and convergent validity of the higher-order construct, next we examined the discriminant validity using the same criterion used in the lower-order construct. All the values of HTMT are within the threshold limit and hence did not exceed 0.85 (Henseler et al., 2015). The results of HTMT for higher-order construct is reported in Table 5.

Structural model assessment. After the measurement model was assessed successfully, the next step is validation of the structural model and hypothesis testing to understand the relationship between the constructs and their predictive relevance (Hair et al., 2017). The first step is to check the multicollinearity issue between the constructs. For doing so, each construct is assessed separately by considering them as formative construct and the tolerance and variance inflation factor (VIF) values are checked for the inner model. All the values in the inner model are below 3 and hence assuring no multicollinearity between the constructs (Diamantopoulos, 2008; Shiva et al., 2020). Next, we investigate

the coefficient of determination (R^2) for each endogenous latent variable in the path model. The R² value explains the variance in the endogenous variables caused by the exogenous variable. The R^2 of both endogenous constructs, Trust (0.394) and Purchase Intention (0.490) were moderately significant as visible in Table 6 and Fig. 3. Any value of R² 0.20 or above is viewed as significant in the behavioural sciences as in social sciences we are measuring someone's behaviour (Rasoolimanesh et al., 2017; Hair et al., 2017; Shiva et al., 2020). For hypothesis testing, it is necessary to check the significance and relevance of path coefficients using bootstrapping at 10000 subsamples in SmartPLS. The source credibility is a second-order construct and the path coefficient values of its three dimensions becomes the outer loadings which is significant at 5 percent as shown in Fig. 3 (Hair et al., 2017; Henseler, 2017; Agyapong, 2021; Shiva et al., 2020). The values of direct effect are reported in Table 6. All the values are significant at 5 percent and hence supporting hypothesis H1, H2, H3, H5. There is a positive significant relationship between source credibility and trust towards beauty vloggers ($\beta = 0.628$, t = 16.268, p < 0.000), trust towards beauty vlogger and purchase intention $(\beta = 0.416, t = 7.352, p < 0.000)$, source credibility and purchase intention ($\beta = 0.226$, t = 3.280, p < 0.001), and parasocial interaction and purchase intention ($\beta = 0.179$, t = 3.326, p < 0.001).

In the latest marketing research using PLS-SEM Models, the goodness of fit of the model is assessed by examining Standardised Root Mean Square Residual (SRMR) (Hair et al., 2020) and the value should be less than 0.08. The value of SRMR of the present model is 0.069, which is below the threshold value of 0.08 is reported in Table 6. The satisfying critical SRMR value shows that the model under the research has sufficient explanatory power (Henseler et al., 2016). Additionally, in order

	Trustworthiness	Expertise	Attractiveness	Parasocial interactions	Trust	Purchase intention
Trustworthiness						
Expertise	0.816					
Attractiveness	0.537	0.569				
Parasocial Interaction	0.570	0.573	0.570			
Trust	0.751	0.693	0.395	0.533		
Purchase Intention	0.628	0.605	0.489	0.569	0.755	

Source: Self-compiled by the author.

Table 4 Higher-order measurement model assessment.						
Constructs	Indicators	Outer loadings	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
Source credibility	Trustworthiness Expertise Attractiveness	0.879 0.898 0.742	0.795	0.827	0.879	0.710

Table 5 Discriminant validity assessment for higher-order construct.					
	Source credibility	Parasocial interaction	Trust	Purchase intention	
Source credibility					
Parasocial interaction	0.707				
Trust	0.752	0.533			
Purchase intention	0.708	0.569	0.755		

Source: Self-compiled by the author.

	Original sample (β)	Mean sample	Standard deviation	t-statistics	p-value
Direct effects					
H1: Source credibility > Trust	0.628	0.629	0.039	16.268	0.000
H2: Source credibility > Purchase Intention	0.226	0.224	0.069	3.280	0.001
H3: Trust > Purchase Intention	0.416	0.418	0.057	7.352	0.000
H5: Parasocial interaction > Purchase intention	0.179	0.183	0.054	3.326	0.001
Indirect effect					
H4: Source characteristics > Trust > Purchase intention	0.261	0.263	0.040	6.580	0.000
	R-square		Adjusted <i>R</i> -square		SRMR
Trust	0.394		0.392		0.069
Purchase intention	0.490		0.486		

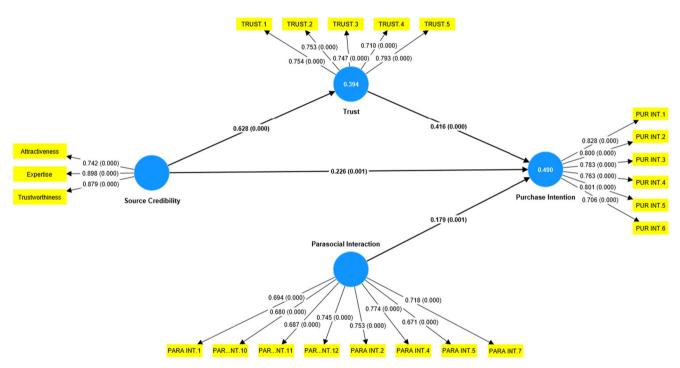


Fig. 3 Structural model analysis. The figure shows the statistical relationship between variables. It contains the results for the structural model. Source: self-constructed through SmartPLS software.

to assess the robustness of the model, the influence of gender was investigated as a control variable in both the direct and indirect relationships. The findings indicate that there is no statistically significant effect of gender on both the direct relationship ($\beta = -0.068$, p = 0.392) and the mediated relationship ($\beta = -0.095$, p = 0.253) (Collier, 2020).

Mediation analysis. The findings indicate that the acceptance of H1 and H3 provides evidence for the mediating role of trust in the relationship between source credibility and purchase intention. Given the empirical support for H2, it is imperative to conduct a comparative analysis of the direct and indirect impact of source credibility on purchase intention. The results indicate that the β -value for the direct impact of source credibility on purchase intention is applied, the β -value increases to 0.261(H1*H3: 0.628*0.416). The findings indicate that source credibility has a noteworthy and direct impact on purchase intention. However, this association is strengthened when trust serves as a mediator, indicating a

complementary partial mediation effect of trust on both source credibility and purchase intention (Zhao et al., 2014).

PLS predict. Effect size (f^2) tells the importance of exogenous variables on the coefficient of determination of endogenous variables. According to Cohen (1988), the value of effect size (f^2) should lie between 0.02 to 1. A value range of 0.02-0.15 represents a weak effect, 0.15-0.35 represents a moderate effect, and values above 0.35 represent a strong effect. In the current study, source credibility ($f^2 = 0.049$) has a weak effect size on purchase intention. However, source credibility ($f^2 = 0.650$) has a strong effect size on trust. Moreover, there is a high effect size of trust $(f^2 = 0.202)$ on purchase intention. Additionally, parasocial interaction ($f^2 = 0.040$) has a weak effect size on purchase intention. For checking the predictive relevance of the model, Q^2 predict values are estimated. The Q^2 predict the value of endogenous variables trust (Q^2 predict = 0.385) and purchase intention (Q^2 predict = 0.372) is greater than 0. Moreover, the PLS predict procedure creates a tenfold sample-based prediction for estimating predictive error metrics for the indicators of

Table 7 PLS predict.					
	Q square predict	PLS SEM_RMSE	LM_RMSE		
PUR INT.1	0.283	0.838	0.860		
PUR INT.2	0.200	0.877	0.909		
PUR INT.3	0.197	0.853	0.878		
PUR INT.4	0.209	0.827	0.854		
PUR INT.5	0.262	0.761	0.784		
PUR INT.6	0.199	0.821	0.835		
Source: Self-compiled by the author.					

endogenous variables (Shmueli et al., 2016). The values of Q^2 predict for each indicator of endogenous variable are also greater than 0 and they are reported in Table 7. Since the errors are symmetrically distributed so, root mean square error values are examined to establish the predictive relevance of the proposed model. In terms of root mean square error (RMSE), all indicators yield lower prediction errors than the linear regression model resulting in higher predictive power of the model (Shmueli et al., 2019; Singh & Bala, 2020). All the values of PLS SEM_RMSE, LM-RMSE, or each indicator of endogenous variable (Purchase Intention) are reported in Table 7.

Discussion

This study aimed to examine the impact of source credibility and parasocial interactions done by beauty vloggers on consumers' purchase intention using a trust-based model. The findings obtained from the application of Partial Least Square Structural Equation Modelling (PLS-SEM) provide support for all the hypotheses (H1-H5). The research outcomes indicate that the buying behaviour of consumers is impacted by beauty vloggers, provided that the consumers perceive these vloggers as credible sources of information and have faith in their opinions. The findings of the study are in line with the previous studies (Kim & Kim, 2021: Lee & Watkins, 2016; Lee & Lee, 2022, Sokolova & Kefi, 2019; Manchanda et al., 2022; Lou & Yuan, 2019). The results of the study reveal that both credible attributes and parasocial interactions impact purchase intention. However, a closer examination demonstrated that the impact of credibility is slightly more than that of parasocial interaction. This finding contradicts the outcomes of Sokolova and Kefi (2019) for the younger generation belonging to the 16-18 age group, who depicted that parasocial interaction has more impact than credibility. For younger generations, visiting daily vlogs of their favourite beauty vlogger becomes mere addiction rather than a friendship. However, the role of credibility predominates the role of parasocial interactions among older generations belonging to the age group of 25 and above and the results are in line with the study conducted by Sokolova and Kefi, (2019) for older generations. These findings can be explained by a study conducted by Bailey et al., (2023) who used Indian respondents to examine the effect of consumer scepticism. The findings indicate that consumer scepticism towards information sources, notably social media influencers, possesses the capability to impact consumers' parasocial relationships with beauty influencers. This, in turn, exerts an influence on consumers' responses to these sources, revealing the heightened scepticism among Indian consumers towards internet reviews. However, to establish trust in a beauty vlogger, consumers exhibit a proclivity to consistently engage with and follow their content. Consumers will only form an illusionary friendship with a beauty vlogger after establishing credibility and familiarity. In developed countries with more advanced digital infrastructure, individuals might have different patterns of engagement with media personalities. Prior

researchers used parasocial interaction as a mediating variable within diverse developed economies has yielded different outcomes (Shan et al., 2019; Ashraf et al., 2023). The cultural norms and sensitivities in India could shape how individuals respond to certain media content, impacting the strength of parasocial interactions. Developed countries may have different cultural sensitivities, and the types of content that foster credibility or parasocial connections could differ. Indian consumers first establish trust in a specific vlogger by evaluating attributes such as expertise, trustworthiness, and attractiveness. Only upon the establishment of trust in these dimensions, do they proceed to cultivate an enduring virtual companionship with the aforementioned vlogger. Additionally, the weak effect size of parasocial interaction in the Indian context can be attributed to other cultural factors as well, such as the country's collectivist culture, where individuals prioritise real-life relationships within their immediate social circles over connections with influencers. Moreover, the high-context communication style in India, relying on contextual cues and shared experiences, may diminish the resonance of social media interactions, contributing to the observed weaker impact. Furthermore, the cultural emphasis on respect for authority and elders poses a challenge for influencers, often perceived as younger individuals, as they may struggle to automatically garner trust and authority, thereby resulting in a weakened influence.

This research used Ohanian's (1991) source credibility theory to examine how credibility affects purchasing intention. The source credibility model initially included trustworthiness and expertise. During that time, the model was designed for celebrity endorsement. However, attractiveness is a crucial dimension in influencer marketing. Therefore, this study applies source credibility as a second-order concept using all three dimensions. The findings indicate that the trustworthiness and expertise of beauty vloggers are more significant in contrast to attractiveness. This is because, in influencer marketing, trustworthiness is vital, significantly influencing follower decision-making and brand evaluations (Fowler & Thomas, 2023). Additionally, influencers, possessing expertise, offer valuable insights, instilling confidence in followers to choose endorsed brands and products (Alboqami, 2023). The results are in line with Nosita and Lestari (2019) and Ramadanty et al., (2020). Balabanis & Chatzopoulou, (2019) revealed that trustworthiness and expertise have a significant effect on purchase intention. However, the attractiveness of the source does not impact purchase intention. In contrast, Lou and Yuan (2018) conducted a comprehensive analysis of all three dimensions of credibility. However, the results reveal that purchase intention for the products endorsed by beauty vloggers is only influenced by trustworthiness. The effects of expertise and attractiveness had negligible impact. Nonetheless, the significance of the attractiveness characteristic of beauty vloggers in endorsing a cosmetic brand or product cannot be ignored. When an appealing source reviews a cosmetic product, people are more likely to buy it (Djafarova & Rushworth, 2017; Kim & Kim, 2021). The findings of Torres, et al., (2019) also exhibited positive impact of source attractiveness on purchase intention when endorsed by influencers. Additionally, Ladhari et al., (2020) illustrated the significant impact of source expertise on purchase intention. Thus, all three components of the source credibility model are equally important in understanding influencer marketing. The results of the present study are in line with the original theory Ohanian (1991) and previous literature (Choi & Lee, 2019; Manchanda et al., 2022).

Prior scholarly work yields ambiguous results regarding the efficacy of the credibility model (Lee & Watkins, 2016; Torres et al., 2019; AlFarraj, et al., 2021). This has given rise to the coexistence of an alternative mediating factor that transmits the

effect of credible attributes of beauty vloggers on consumer behaviour (Hayes, 2017). Hence, the current study examined the mediating role of trust. The results reveal that if consumers perceive beauty vloggers as credible sources of information, consumers will be likely to develop trust in them and subsequently exhibit loyalty towards them. They repeatedly visit the profile of their preferred beauty vlogger for advice on product recommendations. This builds long-term partnerships between beauty vloggers and their viewers which can be leveraged by marketers for promoting their products. The findings also illustrate that there is partial complementary mediation between source credibility and purchase intention. This demonstrates that consumers are more likely to be influenced by beauty vloggers when they have a higher level of trust in them. Hence, trust plays a mediating role in the mechanism of deploying beauty vlogger resources aimed at influencing consumer behaviour. Similar results were illustrated by Kim and Kim (2021) who have examined the impact of influencer marketing on US participants taking trust as a mediator. The results are in line with the studies showing the mediating effect of trust conducted in the tourism domain (Pop et al., 2022; Seçilmiş et al., 2022).

Another main finding of the current study indicates parasocial interaction as an antecedent to purchasing intention. The study used the parasocial interaction theory given by Horton and Wohl (1956) and found that parasocial interactions between beauty vloggers and their viewers impact purchase intention. Beauty vloggers try to establish a friendly camaraderie with their viewers by periodically engaging in parasocial interactions. The findings indicate that while the credible attributes of vloggers have a greater influence than parasocial interaction, the significance of the latter cannot be ignored (Sokolova & Kefi, 2020). This is because parasocial interactions play a crucial role in fostering enduring connections between beauty vloggers and their respective viewers. It helps in building an effective relationship between beauty vloggers and their audiences. With recurring interactions, consumers start seeing the beauty vlogger as their "surrogate friend" and seek their advice before buying like a close friend (Handriana et al., 2019). The repeated interactions with these micro-celebrities lead to heightened feelings of intimacy and likeness, resulting in the development of a "ritualistic viewing" behaviour towards their favourite beauty vloggers' content that can be used by marketers (Lou & Kim, 2019). The results of the current study are in line with the previous literature (Labrecque, 2014; Hwang & Zhang, 2018; Lee & Lee, 2022). Also, cosmetic products are experiential in nature, since beauty vloggers often demonstrate makeup application steps and provide personal recommendations based on their expertise in their videos during interactive sessions. Therefore, viewers may virtually experience cosmetic items via beauty vloggers' videos unlike celebrities (Lee & Lee, 2022).

Implications, limitations, and future research avenues

Theoretical implications. The present study provided significant theoretical contributions. First, this empirical research used two theories, namely source credibility theory and parasocial interaction theory, illustrating the combined effect of both the theories on purchase intention of consumers. Therefore, this study contributes to the extant literature on the emerging phenomenon of influencer marketing. Second, prior scholarly research has been limited to the identification of the credible characteristics shown by social media influencers. The researchers did not extend their investigation to explore the potential use of vloggers' credibility qualities for boosting the efficiency of influencer marketing. This empirical research used trust as a mediator to provide empirical evidence supporting the heightened impact of source credibility attributes on purchase intention. Third, research on parasocial interaction in the field of influencer marketing is still a growing area of study. Previous scholars have examined the indirect effect of parasocial interaction on consumer behaviour (Lee & Watkins, 2016; Handriana et al., 2019; Kim et al., 2020; Lee & Lee, 2022). However, the present study explored its direct impact on purchase intention and the results reveal that parasocial interactions help in changing behavioural outcomes of social media users. Fourth, the present study used male as well as female respondents to empirically test the impact of influencer marketing on consumer behaviour. The findings of the study demonstrated that influencer marketing is a gender-neutral phenomenon. This increases the generalisability of the present study and hence contributes to the existing literature.

Practical implications. Apart from theoretical implications, there are a few managerial implications as well. First, increasing usage of the internet and social media has boosted the number of content creators in different domains. However, marketers face a challenging task in selecting the appropriate beauty vloggers to invest in while allocating their advertising budget. The current investigation discussed the three primary dimensions of source credibility. Marketers may consider these influencer traits before investing. Second, the study indicated that beauty vloggers' credibility influences consumer behaviour. Brands try to choose trusted influencers to enhance the credibility of the message sent through them (Martínez-López et al., 2020). Marketers and practitioners know that reliable sources boost purchase intent (Hovland et al., 1953; Lou & Yuan, 2019; Lee & Lee, 2022). The current research will help emerging cosmetic companies with limited marketing budgets. This can be achieved by engaging in collaborations with beauty vloggers who share similar interests with the target consumers and possess expertise in providing informative online content. By doing so, the negative repercussions stemming from consumers' lack of trust can be mitigated (Ki et al., 2023). The present study illustrated that beauty vloggers affect consumers' purchase intention for recommended products. Since consumers connect more to beauty vloggers than celebrity endorsers, marketers cannot ignore this novel marketing approach (Nosita & Lestari, 2019; Schouten et al., 2020). Third, the findings of the study demonstrated that parasocial interactions help in the formation of illusionary friendships with their followers. Understanding the dynamics of beauty vlogger influence goes beyond the conventional examination of marketing strategies. It delves into the realms of consumer psychology, social interactions, and trust-building in the digital age. Beauty vloggers share their personal lives on these social media platforms resulting in increased connectedness between the two. Beauty vloggers usually make content that is familiar to their regional audience. With repeated interactions, consumers feel that they share similar cultural beliefs and mindsets as that of beauty vloggers. The impact of closeness between beauty vloggers and their audiences can be used by companies with a global outlook. They can collaborate with multiple beauty vloggers across various regions, while also considering the cultural uniqueness of each region. For instance, various cosmetic brands like Estée Lauder, Clinique, Becca Cosmetics, L'Oréal, Mac, NYX, Glossier, Kylie Cosmetics, Lush, and Milk Makeup use several beauty vloggers for different regions for endorsing their products worldwide (Ladhari et al., 2020; Delbaere et al., 2021; Hassan et al., 2021). This may benefit cosmetic businesses in the long-term. Fourth, previous research only used female participants (Djafarova & Rushworth, 2017; Choi & Lee, 2019; Sokolova & Kefi, 2020; Lee & Lee, 2022) and showed how influencer marketing affects women. The present study includes male respondents to broaden the influencer marketing approach. The findings indicate that male participants are also susceptible to the impact of this innovative marketing strategy. Therefore, companies that exclusively offer cosmetic products for males can also consider utilising influencer marketing through beauty vloggers.

Limitations and future research avenues. Despite our best efforts, we were unable to completely eliminate the drawbacks of the research. Like any other empirical study, the present investigation exhibits certain limitations contingent upon the surveyed sample. The majority of the data was collected from individuals between the ages of 18 and 30, as those aged 31 to 45 and above exhibit infrequent engagement with beauty vloggers. A potential avenue for future research involves conducting a comparative analysis of the impact of influencer marketing on various age groups. Second, the data was collected from the northern states of India. However, the outcome can be different across India's Southern, Eastern, and Western states, where attitudes towards beauty products, brands, and influencers may vary, which presents opportunities for further research. Third, the present investigation has solely considered two facets of beauty vlogging, namely source credibility and parasocial interactions, and their impact on the intention to purchase. Nonetheless, future scholars may also consider audience characteristics such as self-concept (Choi & Rifon, 2012) and congruence with the influencer (Belanche et al., 2021), as these factors help in developing consumer attitudes towards a brand or product that beauty vloggers endorse. Fourth, the current investigation has exclusively focused on beauty vloggers and their impact on the purchasing intentions of consumers. The proposed framework of beauty vlogger marketing can also be replicated in food, travel, gaming, and health vlogging as well by future researchers in the field. They can conduct comparative investigations for different vlogging segments. Among the three credible attributes, source attractiveness has been least explored by previous researchers. Future researchers can study this specific characteristic for a more profound understanding. Moreover, forthcoming researchers may consider incorporating moderating factors such as relationship strength to enhance the comprehensiveness of influencer marketing. Given the growing integration of AI tools in marketing, upcoming researchers can apply the suggested credible model to virtual influencers. This allows for a comparative analysis between beauty vloggers and virtual influencers.

Data availability

The datasets generated and/or analysed during the current study are not publicly available due to confidentiality agreement with participants but are available from the corresponding author upon reasonable request.

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Author contributions

The first author conceived and designed the research, conducted data collection and analysis, drafted the manuscript, and participated in critical revisions. The second author significantly contributed to the research design, conducted literature reviews, provided crucial intellectual input, assisted in data interpretation and statistical analysis, participated in manuscript writing, and played a key role in revisions. Both authors approved the final version of the manuscript for submission.

Competing interests

The authors declare no competing interests. All authors have approved the paper and agree with its submission.

Ethical approval

The procedures used in this study adhere to the principles of the Declaration of Helsinki. The corresponding author obtained permission to conduct the study. The research was carried out in accordance with the Helsinki Declaration guidelines and has been reviewed by the Ethical Committee of Thapar Institute of Engineering & Technology (TIEC/EC/2022-16). Informed consents were obtained from participants prior to the survey to ensure respondents had a good understanding of the study objectives. Additionally, the authors have obtained verbal informed consent from the guardians of the minor respondents to safeguard their rights and ensure their appropriate and responsible contribution to the study.

Informed consent

The survey was conducted upon informed consent previously gained from participants, who agreed to provide data for data analysis for this study. We informed each respondent of their rights and to safeguard their personal information. Similar information regarding keeping respondents' identities anonymous and confidential was provided to the guardians of the minor respondents.

Additional information

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