

## **INFLUENCER CHARACTERISTICS IN SOCIAL MEDIA INFLUENCER MARKETING: A SYSTEMATIC LITERATURE REVIEW**

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**Abstract.** In light of rising interest in research on influencer marketing, this paper aims to analyse the impact of influencer characteristics on consumer behaviour. The study was based on a systematic analysis of 127 peer-reviewed articles published or accepted from 2000 to 2021. The paper included 52 influencer characteristics classified into four categories: psychological, social, behavioural and demographic characteristics. The findings show that influencers' psychological characteristics, such as trustworthiness, expertise, and attractiveness, have been over-studied. However, research gaps exist in the area of influencers' social characteristics, such as envy and betrayal, as well as behavioural characteristics, such as facial expression, body language, speaking speed and sharing secrets. In addition, there is also a lack of research on the importance of demographic characteristics such as gender, age and ethnicity.

**Keywords:** influencer characteristic, influencer marketing, social media, consumer behaviour, systematic literature review.

**JEL Classification:** M31.

### **Introduction**

The wide adoption of social media has rapidly changed the ways in which marketing content is created, spread and received among users. Not only traditional celebrities but also many social media users have gained online fame and become a source of advice for their followers. By sharing their interests, knowledge and opinions on social media platforms, they develop into social media influencers (referred to as *influencers* in this article) or micro-celebrities (Gaenssle & Budzinski, 2020). For an increasing number of brands, collaboration with influencers has become an effective marketing tool and is referred to as influencer marketing (Hudders et al., 2020).

In parallel with business practices, influencers and influencer marketing have also drawn the growing interest of academics, especially since 2020. A number of literature reviews in this field have been published; Sundermann and Raabe (2019) reviewed the impact of influencers on strategic communication. Other reviews on influencer marketing have focused on consumer groups, such as youth (De Veirman et al., 2019), and on industries, such as travel (Nafi & Ahmed, 2019). Ye et al. (2021) conducted a thematic content analysis of influencer marketing, and

Vrontis et al. (2021) systematically analysed the antecedents, mediators and moderators of social media influencers' impact on consumer behaviour.

Influencer characteristics have been broadly studied as independent variables, mediators, dependent variables and moderators, and have been proven to impact consumer behaviour. For example, influencers' attractiveness, expertise and trustworthiness are positively related to consumers' trust in brands and purchase intention (Lou & Yuan, 2019; Weismueller et al., 2020). Influencers' parasocial relationships with consumers (Sokolova & Kefi, 2020; Reinikainen et al., 2021) and influencers' homophilic relationships with consumers (Lou & Yuan, 2019; Li & Peng, 2021; Sokolova & Kefi, 2020) have been shown to impact consumer attitudes towards influencers and brands. However, there has been little exploration into past research in order to systematically analyse influencer characteristics. It is not clear which influencer characteristics have been over-studied and which may be potentially important for future research. This paper aims to generate collective insights on the impact of online influencer characteristics on consumer behaviour during the past 20 years, and answer the following research questions:

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- a. Which influencer characteristics impacted consumer behaviour?
- b. How should influencer characteristics be classified?
- c. In the field of consumer behaviour, which influencer characteristics have been over-studied and which influencer characteristics need to be addressed in future studies?

### 1. Methodology

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) statement was used for the systematic review. The study searched relevant literature across nine major electronic databases: Emerald, Business Source Complete, JSTOR, Sage, Taylor & Francis, Web of Science, Wiley Online Library, Scopus and Springer. The search was limited to peer-reviewed journal articles written in English. The keywords “Influencer”, “Opinion leader” and “Blogger” were searched using the Boolean operator “OR”. The time range was delimited between 2000 to 2021.

The initial step yielded 2612 articles. After excluding duplicate articles (1202), 1410 relevant studies remained for further examination. The next step was to manually read the title and abstract of all articles and remove non-English language studies (20), studies without an empirical research methodology (33), studies less than four pages (25) and studies not related to consumer behaviour (1002). For the remaining 330 articles, a full-text screening was conducted. Because the methods of measuring influencer characteristics are different in quantitative research and qualitative research, this paper focuses on articles that used quantitative research methods only. Articles with qualitative research methods (65) and data observation (18) were excluded and only articles with research methods such as surveys or experiments were

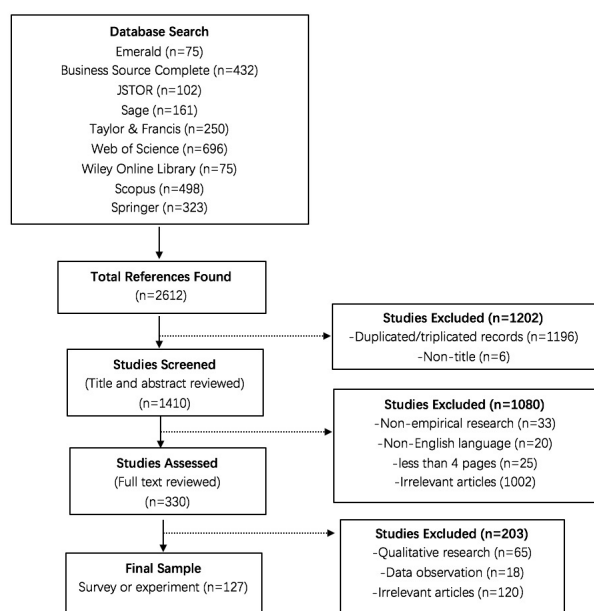


Figure 1. Search strategy

left for further analysis. The domain of influencer characteristics was targeted and any articles not related to influencer characteristics (120) were disregarded. This resulted in a final sample of 127 articles for the literature analysis. The final selection of articles covers research in 35 countries with more than 30,000 respondents. The overall strategy of the review methodology is illustrated in Figure 1.

### 2. Descriptive analysis

The oldest article included in the systematic review was published in 2008. The sample contained only one article published in each of 2008, 2010, 2013, 2014 and 2015, respectively, representing only 3.9% of all included samples, indicating that research progress on this topic from 2008 to 2015 was quite slow. The topics of all articles from 2008 to 2014 focused on the term “blogger”, and the article published in 2015 investigated the concept of “friend as a social media opinion leader”. As the usage of the terms “influencer” and “social media influencer” became more common in the titles of articles in 2017, a significant increase in the number of articles appeared. The majority of articles used in the sample were published in 2020 and 2021 (87), accounting for 68% of those included. The 8 articles published in 2022 were at the acceptance stage in 2021, and therefore included in the sample, as shown in Figure 2.

The publication with the highest number of included articles on this subject was the International Journal of Advertising, with eight articles included, followed by the Journal of Business Research, the Journal of Interactive Advertising and the Journal of Retailing and Consumer Services, with five articles included, respectively. Four articles were included from the journal Computers in Human Behaviour, the Journal of Fashion Marketing and Management, the Journal of Marketing Management, the Journal of Product and Brand Management, and Psychology and Marketing, respectively. A total of 81 articles were included from 72 other journals, each of which contained either one or two articles, as shown in Table 1.

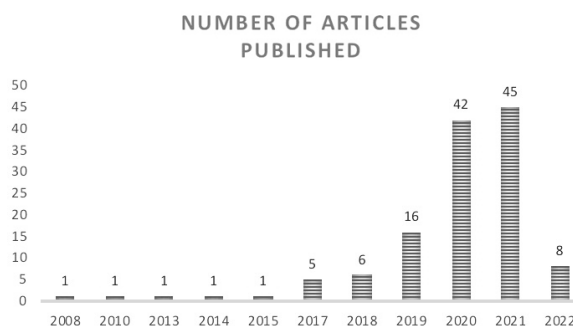


Figure 2. Year of publication and number of articles published

Table 1. Name of journals

Name of the journal	Number of articles
International Journal of Advertising	8
Journal of Business Research	5
Journal of Interactive Advertising	5
Journal of Retailing and Consumer Services	5
Computers in Human Behaviour	4
Journal of Fashion Marketing and Management	4
Journal of Marketing Management	4
Journal of Product and Brand Management	4
Psychology and Marketing	4
Australasian Marketing Journal	3
72 other journals	81

### 3. Thematic analysis

#### 3.1. Categories of influencer characteristics

This paper summarised 52 influencer characteristics from the final sample of 127 studies and classified them into four categories: psychological characteristics, social characteristics, behavioural characteristics and demographic characteristics. The psychological category includes those characteristics related to consumers' impressions of influencers, such as credibility, trustworthiness and expertise. The social category represents characteristics related to influencers' social and interpersonal connections with consumers, brands and products, such as parasocial relationships, homophily and congruence of influencer and brand. The behavioural category includes how influencers conduct themselves on social media platforms when creating content and interacting with followers, or influencers' self-presence, including interactions and body language. The demographic category includes influencers' gender, occupation and other demographic information.

#### 3.2. Psychological characteristics

The psychological category includes influencers' self-features as they are perceived by consumers subjectively through psychological processes. Characteristics such as credibility, trustworthiness, expertise and attractiveness are the most commonly researched features. Table 2 shows the total of 27 influencer psychological characteristics from the analysis of selected samples. Due to the size of the table, the full list of influencer psychological characteristics with citations is included in the Appendix Table A1.

Perceived source credibility has long been shown to be positively related to the effectiveness of endorsements (Hovland & Weiss 1951; Bhatt et al., 2013; Munnukka et al., 2016). Based on the implications of findings concerning the relationship between source credibility and consumer behaviour, many researchers believe that a

Table 2. Psychological characteristics

Psychological characteristics	Number of articles
Credibility	27
Trustworthiness	40
Expertise	32
Attractiveness	36
Identification	5
Authenticity	4
Involvement	3
Authority	3
Fame/prestige	3
Uniqueness	2
Originality	2
Enjoyability	1
Interestingness	1
Reliability	1
Reputation	1
Warmth	1
Coolness	1
Usefulness	1
Effectiveness	1
Passion	1
Motivation	1
Benevolence	1
Competence	1
Morality	1
Importance	1
Sincerity	1
Respect	1

social media influencer's perceived high credibility is one of the main attributes impacting consumers' attitudes towards the influencer (Stubb et al., 2019; Chetioui et al., 2020; Belanche et al., 2021a), the advertisement (Lee & Kim, 2020; Janssen et al., 2021) and the brand (Stubb & Colliander, 2019; Chetioui et al., 2020; Pick, 2021). By applying a source credibility model (Ohanian, 1990), influencer credibility has frequently been identified as consisting of trustworthiness, expertise and attractiveness (Breves et al., 2019; Schouten et al., 2020; Wu, 2020).

Attractiveness can be described as physical attractiveness or social attractiveness (Rubin & Step, 2000; Sokolova & Kefi, 2021). Physical attractiveness has been shown to positively impact trust in influencers (Kim & Kim, 2021b) and brand image (Reinikainen et al., 2020; Duh & Thabethe, 2021), whilst social attractiveness is commonly related to likeability and familiarity (Torres et al., 2019), and can induce a parasocial relationship with consumers (Sokolova & Kefi, 2021).

Involvement, authority and fame can be interrelated. A high level of network involvement or social presence, i.e. frequent posts and intense participation in the network, can increase influencers' fame and consumers'

trust in the influencer (De Veirman et al., 2017; Renchen, 2020). An influencer is authoritative when they are perceived as powerful and important, and they are more likely to be believed than other sources (Balabanis & Chatzopoulou, 2019). The creation of links to an influencer from different online sources can also confer authority to the influencer (Kleinberg, 1999).

### 3.3. Social characteristics

Although social characteristics are also perceived by consumers, the primary difference between the social and psychological categories lies in the social category's focus on the "relationship" between influencers and others whilst the psychological category is focused on the influencer's "self". The most common social characteristics include congruence, homophily and parasocial relationships. The paper identified 16 influencer social characteristics from the analysis of the selected articles as shown in Table 3. The full list of influencer social characteristics with citations is listed in the Appendix Table A2 due to the size of the table.

Congruence refers to the fit or match-up between an influencer and a product or brand in terms of image (Till & Busler, 2000; Fink et al., 2004), personality (Mishra et al., 2015), expertise regarding the type of product (Till & Busler, 1998) and shared cultural values (Choi et al., 2005). Similar to the congruence between a celebrity and a brand or product in the traditional domain, an influencer's congruence with a brand or product has been shown to be related to consumer attitudes towards the influencer's credibility (Breves et al., 2019; Belanche et al., 2021a; Janssen et al., 2021), the advertisement (Xu & Pratt, 2018; Torres et al., 2019; Schouten et al., 2020;

Jansen et al., 2021) and the brand or product (Torres et al., 2019; Belanche et al., 2020; Kim & Kim, 2021a).

Homophily, or similarity, refers to the perceived likeness between influencer and followers in terms of demographic or ideological factors such as attitudes, sense of worth and personality (Lou & Yuan, 2019; Chen, 2020). Influencers engage in a two-way interaction with their followers via social media and develop a relationship with their followers. Based on parasocial interactions, a parasocial relationship is similar to an illusory friendship, indicating a socioemotional bond between influencers and their followers (Lou & Yuan, 2019). Parasocial interactions (Jin & Muqaddam, 2019) and parasocial relationships (Breves et al., 2021; Agnihotri & Bhattacharya, 2021; Reinikainen et al., 2021) can shape brand perception. A higher level of homophily between influencers and their followers can lead to increased parasocial interactions (Folkvord et al., 2020) and stronger parasocial relationships (Yuan & Lou, 2020; Shan et al., 2020).

As a strong indicator of popularity, the number of followers can impact how influential influencers are (De Veirman et al., 2017; Balabanis & Chatzopoulou, 2019). As an effect of herd behaviour, a higher number of followers can indicate a higher level of credibility and identification for an influencer (Janssen et al., 2021). Popularity metrics can also be measured by a mix of the number of followers, likes (Pittman & Abell, 2021) and views (Lee & Theokary, 2021) an influencer receives.

Similar to interpersonal relationships, followers may develop positive feelings for an influencer, such as admiration (De Cicco et al., 2021) and inspiration (Ki et al., 2020; Balabanis & Chatzopoulou, 2019), as well as negative feelings, such as envy (Jin & Ryu, 2020) and betrayal (Reinikainen et al., 2021). Envy, functioning together with parasocial relationships, increases the influencer's credibility and followers' purchase intention (Jin & Ryu, 2020). Conversely, feelings of betrayal can harm the parasocial relationship and diminish positive feelings about an influencer, which results in a negative impact on purchase intention (Reinikainen et al., 2021).

Interestingly, the construct of likeability is measured by different dimensions in studies. Likeability can be triggered by physical attractiveness (Duh & Thabethe, 2021), social attractiveness (Torres et al., 2019) or friendliness/approachability (Saima & Khan, 2020). However, De Veirman et al. (2017) and Janssen et al. (2021) claimed that likeability is determined by users' perceptions of an influencer's popularity, such as the number of followers.

### 3.4. Behavioural characteristics

The behavioural category is centred on influencers' behaviours, such as interactions, language and style of communication. Table 4 shows the six influencer behavioural characteristics that were included in the study.

Influencers' interaction with followers is the most commonly studied behavioural characteristic. Interaction has three dimensions: real-time conversation, no-delay and engagement (McMillan & Huang, 2002). Social

Table 3. Social characteristics

Social characteristics	Number of articles
Homophily of influencer and follower	22
Congruence of product and influencer	17
Parasocial relationship	19
Likeability	6
Popularity by number of followers or likes	5
Leadership	5
Familiarity	3
Perceived power	3
Inspiration	2
Influence	3
Envy	1
Betrayal	1
Approachability	1
Admiration	1
Role modelling	1
Social advocacy	1

Table 4. Behavioural characteristics with citations

Behavioural characteristics	Citations
Interaction	6 articles: Chen, 2020; Li & Peng, 2021; Meng & Wei, 2020; Ki & Kim, 2019; Jun & Yi, 2020; Yang & Sia, 2018
Self-disclosure (sharing secret)	3 articles: Pornsrimate & Khamwon, 2021; Yang & Sia, 2018; Leite & Baptista, 2021
Body language	1 article: Kim & Read, 2021
Light-hearted entertainment (jokes, stories)	1 article: Yang & Sia, 2018
Showing body parts	1 article: Su et al., 2021
Outfit style	1 article: Tiggemann & Anderberg, 2020

media influencers can have more and deeper interactions with followers compared with traditional celebrities (Meng & Wei, 2020). Influencers may respond to their followers quickly and directly, which makes followers feel valued (Jun & Yi, 2020) and enhances their emotional attachment (Yang & Sia, 2018; Jun & Yi, 2020), thereby increasing their trust in advertisements (Li & Peng, 2021) and brands (Jun & Yi, 2020) promoted by their favourite influencers.

People tend to build intimate connections with individuals who disclose personal details about themselves (Yang & Sia, 2018; Pornsrimate & Khamwon, 2021; Leite & Baptista, 2021). Sharing one's life and secrets is a specific method of interaction, and self-disclosures increase followers' emotional attachment to influencers (Yang & Sia, 2018; Pornsrimate & Khamwon, 2021).

Body language and facial expressions are additional behavioural characteristics that have been minimally explored, though some research has shown that smile frequency can increase influencers' perceived warmth and competence, and generate positive attitudes towards influencers (Kim & Read, 2021).

### 3.5. Demographic characteristics

Demographic characteristics such as age, gender and occupation are often studied in consumer behaviour. This study identified three influencer demographic characteristics from the selected samples, as shown in Table 5.

The most studied demographic characteristic is commercial orientation, which examines whether influencers disclose their commercial sponsorship (Stubb & Colliander, 2019; Lou et al., 2021; Naderer et al., 2021). Most studies have shown that influencers who disclosed their sponsorship enhanced followers' ad recognition and persuasion knowledge (Boerman, 2020; Stubb & Colliander, 2019). However, a few studies (Kay et al., 2020) have indicated non-significant results of sponsorship disclosure.

Typologies of influencers by occupational nature, such as celebrity and influencer, are also often studied

Table 5. Demographic characteristics with citations

Demographic characteristics	Citations
Disclosure / commercial orientation	22 articles: Stubb & Colliander, 2019; Lou et al., 2021; Breves et al., 2021; Johnson et al., 2021; Boerman & van Reijmersdal, 2020; Evans et al., 2017; Naderer et al., 2021; van Reijmersdal & van Dam, 2020; Han et al., 2021; Lee et al., 2021; Kim & Kim, 2021a; Weismueller et al., 2020; Holiday et al., 2021; Lee & Kim, 2020; Martínez-López et al., 2020a; Stubb et al., 2019; Argyris et al., 2021; Kim et al., 2021; Woodroof et al., 2020; Kay et al., 2020; Trivedi & Sama, 2020; Woodroof et al., 2020
Influencer type	17 articles: Martínez-López et al., 2020b; Schouten et al., 2020; De Jans et al., 2021; Agnihotri & Bhattacharya, 2021; Jin et al., 2021; Sudha & Sheena, 2017; Lee et al., 2021; Kapitan et al., 2022; Jin & Muqaddam, 2019; Pittman & Abell, 2021; Jin et al., 2019; Folkvord et al., 2020; Trivedi & Sama, 2020; Gerrath & Usrey, 2021; Piehler et al., 2022; Kay et al., 2020; Tobon & García-Madariaga, 2021
gender	4 articles: Tiggemann & Anderberg, 2020; Renchen, 2020; Kim & Read, 2021; Su et al., 2021

(Schouten et al., 2020; Gräve & Bartsch, 2022). Studies have shown that social media influencers can be more effective at promoting brands and products because consumers feel they have more in common with influencers than with celebrities (Schouten et al., 2020; Kapitan et al., 2022). However, Gräve and Bartsch (2022) found that endorsements from influencers were more effective than those from celebrities only when the advertisements were subtle rather than intrusive. In contrast, intrusive advertising was more effective through celebrities (Gräve & Bartsch, 2022).

Influencers can be classified by the number of followers at low, moderate and high levels, referred to as micro-influencers, meso-influencers and macro-influencers (Kay et al., 2020). Influencers with fewer than 10,000 followers are classified as micro-influencers, those in the 10,000 to one million-follower range are meso-influencers and those with more than one million followers are macro-influencers (Boerman, 2020). The number of followers of macro-influencers can be comparable to the followers of "regular" celebrities (Marwick, 2015). Scholars have compared the marketing effectiveness across different types of influencers according to their number of followers. Kay et al. (2020) claimed that micro-influencers were more attractive than macro-influencers in the condition of disclosure of sponsorship. Boerman (2020), however, found that this classification had no moderating effect on the impact of sponsorship disclosure on consumer behaviour.

Some studies have compared human, fictitious (Folkvord et al., 2020) and AI influencers (Thomas & Fowler, 2021). Similar to human celebrities, AI influencers can produce positive brand benefits but are less likely to be viewed as unique entities (Thomas & Fowler, 2021). Folkvord et al. (2020) found that human influencers generated more positive attitudes towards products due to higher parasocial interactions. Other studies focused on fictitious influencers without additional comparison with influencer types (Pick, 2021; Piehler et al., 2022; Kim et al., 2021).

Different types of influencers can also be classified by different industries. Gerrath and Usrey (2021) found that lifestyle influencers attracted followers based on communication whilst review influencers attracted followers by offering unique review content. Many studies have examined influencers in the fashion industry (Wu, 2020; Belance et al., 2021a; Malek & Ligaraba, 2020), beauty industry (Le et al., 2021; Sokolova & Kefi, 2020) and travel industry (Silva & da Costa, 2021; Yilmazdoğan et al., 2021).

Gender, as one of the most commonly researched demographic characteristics, is not often studied as a variable in the influencer marketing field. However, a specific gender was usually used as a pre-set condition of study. Many scholars have analysed female influencers' marketing impact in the fashion and beauty industries (Renchen, 2020; Kim & Read, 2021), and some studies have attempted to explore the impact of male influencers on their male followers (Tiggemann & Anderberg, 2020) or female followers (Su et al., 2021).

#### 4. Discussion and limitation

Four categories of characteristics have been classified in this study: psychological characteristics, social characteristics, behavioural characteristics and demographic characteristics. The results indicate that influencer psychological characteristics such as trustworthiness (Breves et al., 2019), attractiveness (Wu, 2020), and expertise (Silva & da Costa, 2021) have been over-studied. There is also a great deal of research on social characteristics such as congruence (Torres et al., 2019), homophily (Yuan & Lou, 2020) and parasocial relationships (Jin & Ryu, 2020). Further research is needed to investigate psychological and social characteristics, which have not yet been well studied. For example, in the social category, envy and betrayal could be linked to influencers' psychological or behavioural characteristics, which could yield interesting insights.

In connection with behavioural characteristics, a few studies on influencer interactions have been published (Yang & Sia, 2018; Jun & Yi, 2020). Future research is needed to investigate behaviours related to specific content, such as sharing intimate secrets and emotional personal stories, or aspects of communication style, such as speaking speed. In addition, further research on influencers' facial expressions and body language is recommended.

Sponsorship disclosure and commercial transparency have also been well studied (Stubb & Colliander, 2019; Lou et al., 2021). Many studies have compared celebrities and influencers in the context of social media marketing (Schouten et al., 2020) but relatively few studies have compared the influence of mega-, meso- and micro-influencers. Although some articles examined either female influencers or male influencers (Renchen, 2020; Kim & Read, 2021), there is a surprising lack of research comparing the impact of influencers' gender on consumer behaviour. Unlike research in other fields, the impact of an influencer's age, nationality, race or ethnicity was not found to have been examined in any of the selected samples in this review. In order to fill these gaps, future study is needed to compare the impact of influencers' gender on specific groups of consumers. Furthermore, further research should be conducted to compare influencers from different age groups, ethnic groups, nationalities (local or international), or the types of influencers by follower size (mega, meso or micro).

Notably, some characteristics, such as likeability, can be measured in different dimensions; the term "like" can refer to attraction (Duh & Thabethe, 2021; Torres et al., 2019) and friendliness/approachability (Saima & Khan, 2020) or as a symbol of popularity (De Veirman et al., 2017; Janssen et al., 2021). Although different dimensions of likeability all belong to the social category, these differences can cause confusion in a research context.

Similarly, attractiveness has two dimensions as well: physical attractiveness and social attractiveness (Rubin & Step, 2000; Sokolova & Kefi, 2021). Physical attractiveness, as a self-feature of an influencer that is perceived by users, should be classified as a psychological characteristic. However, social attractiveness, similar to likeability and familiarity, should be classified as a social characteristic. As physical attractiveness is the prime concept, this study has included attractiveness in the psychological category.

The limitations of this study become apparent when there are certain difficult classifying characteristics due to a specific characteristic being multi-dimensional. For example, power can also be measured across different dimensions, such as personal power (Hamdan & Lee, 2022), expert power (Hsu et al., 2014; Wang et al., 2021), referent power (Hu et al., 2020; Wang et al., 2021) or reciprocity power (Wang et al., 2021). Personal power and expert power, which are related to influencers' ability to manage themselves (Hamdan & Lee, 2022) and their skills and knowledge (Hsu et al., 2014), should be classified as psychological characteristics. However, power has a social dimension, as seen in referent power, reciprocity power and reciprocity, which should be classified as social characteristics. This study has classified power into social characteristics because a majority of studies collected explored the social dimensions of power. This paper recommends future scholars work to improve preciseness in classifications and measurements of some constructs to better address the specific dimensions of these constructs in research.

## Conclusions

This study has important implications for researchers. This study provides a systematic overview of which influencer characteristics have been studied in relation to consumer behaviour using quantitative research methods. Some previous systematic research (Vrontis et al., 2021) also explored influencer characteristics, but a small number of characteristics were included. To our knowledge, this study provides the most complete list of influencer characteristics in the domain of influencer marketing from previous research. It provides unique insights into how influencer characteristics can impact consumer behaviour, enabling researchers to conveniently locate influencer characteristics with relevant references.

The four categories (psychological, social, behavioural and demographic) of characteristics offer a logical way to comprehend and classify influencer characteristics. In addition, this method provides a framework to further distinguish more potential influencer characteristics that have not yet been studied. For example, body language has been identified as one of the behavioural characteristics that impacts on consumer behaviour. Similarly, facial expressions and speaking speed are also in the same behavioural category, and further research is needed on these characteristics.

The most important theoretical implication of this paper is the finding that influencer psychological characteristics such as expertise, trustworthiness, attractiveness have been over-studied. However, research gaps exist in the areas of influencer social characteristics, such as envy and betrayal, and behavioural characteristics, such as facial body language and sharing secrets. In addition, the importance of demographic characteristics, such as gender, age, or ethnicity, is another area recommended for future research.

This study also provides practical implications for businesses in the form of insights into the importance of influencer characteristics for companies when choosing influencers for endorsements. For example, the importance of congruence and homophily shows that an endorsement will be much more effective when a marketing manager finds a credible influencer who best fits the brand and demonstrates similarities with target consumers. When choosing different types of influencers, social media influencers can be more effective than traditional celebrities when advertisement messages are delivered in a subtle way, whilst celebrities can achieve more effective endorsements with more intrusive advertising. Furthermore, marketers and influencers should pay attention to specific behaviours, such as interaction and sharing secrets, which can also boost the effects of endorsements. Overall, the theoretical analysis provided in this paper offers information to marketers in business practice, enabling them to more effectively select influencers when designing marketing campaigns.

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## Appendix

Table A1. Psychological characteristics with citations

Psychological characteristics	Citations
Credibility	27 articles: Jin & Ryu, 2020; Wu, 2020; Stubb & Colliander, 2019; Breves et al., 2021; Belanche et al., 2021a; Theocharis & Papaioannou, 2020; De Jans et al., 2021; Saima & Khan, 2020; Malek & Ligaraba, 2020; Chetioui et al., 2020; Janssen et al., 2021; Lee & Kim, 2020; Stubb et al., 2019; Sokolova & Kefi, 2020; Pick, 2021; De Cicco et al., 2020; Leite & Baptista, 2021; Nunes et al., 2018; Chia et al., 2021; Satria et al., 2019; Gerrath & Usrey, 2021; Lim et al., 2017; Mainolfi & Vergura, 2022; Urrutikoetxea Arrieta et al., 2019; Reinikainen et al., 2021; Roman, 2020; Breves et al., 2019
Trustworthiness	41 articles: Wiedmann & von Mettenheim, 2020; Wu, 2020; Ing & Ming, 2018; Silva & da Costa, 2021; Wiedmann & von Mettenheim, 2020; Duh & Thabethe, 2021; Martínez-López et al., 2020a; Johnson et al., 2021; Trivedi, 2021; Saima & Khan, 2020; Naderer et al., 2021; AlFarraj et al., 2021; Chetioui et al., 2020; Yuan & Lou, 2020; Le et al., 2021; Lee et al., 2021; Weismueller et al., 2020; Tabellion & Esch, 2019; Martínez-López et al., 2020b; Lou & Yuan, 2019; Jin et al., 2019; Koay et al., 2021; Cheng et al., 2021; Guerreiro et al., 2019; Chu & Kamal, 2008; Hsu et al., 2013; Pop et al., 2022; Yilmazdoğan et al., 2021; Ki & Kim, 2019; Breves et al., 2019; Silva et al., 2019; Piehler et al., 2022; Balabanis & Chatzopoulou, 2019; Alsaleh, 2017; Fink, 2021; Balaban et al., 2020; Su et al., 2021; Yang & Xia, 2018; Reinikainen et al., 2020; Monge-Benito et al., 2020; Xiao et al., 2018
Expertise	33 articles: Wiedmann & von Mettenheim, 2020; Wu, 2020; Silva & da Costa, 2021; Wiedmann & von Mettenheim, 2020; Duh & Thabethe, 2021; Theocharis & Papaioannou, 2020; Johnson et al., 2021; Trivedi, 2021; Saima & Khan, 2020; AlFarraj et al., 2021; Chetioui et al., 2020; Yuan & Lou, 2020; Pornsrimate & Khamwon, 2021; Le et al., 2021; Bakar & Musa, 2020; Lee et al., 2021; Weismueller et al., 2020; Tabellion & Esch, 2019; Lou & Yuan, 2019; Li & Peng, 2021; Meng & Wei, 2020; Koay et al., 2021; Trivedi & Sama, 2020; Yilmazdoğan et al., 2021; Ki & Kim, 2019; Breves et al., 2019; Piehler et al., 2021; Kim & Kim, 2021; Balabanis & Chatzopoulou, 2019; Yang & Xia, 2018; Reinikainen et al., 2020; Monge-Benito et al., 2020; Xiao et al., 2018
Attractiveness	36 articles: Wiedmann & von Mettenheim, 2020; Wu, 2020; Silva & da Costa, 2021; Torres et al., 2019; Wiedmann & von Mettenheim, 2020; Duh & Thabethe, 2021; Theocharis & Papaioannou, 2020; Johnson et al., 2021; Trivedi, 2021; Saima & Khan, 2020; AlFarraj et al., 2021; Wang et al., 2021; Chen, 2020; Yuan & Lou, 2020; Le et al., 2021; Bakar & Musa, 2020; Weismueller et al., 2020; Lou & Yuan, 2019; Li & Peng, 2021; Ki et al., 2020; Sokolova & Kefi, 2020; Koay et al., 2022; Cheng et al., 2021; Trivedi & Sama, 2020; Nunes et al., 2018; Chia et al., 2021; Satria et al., 2019; Lim et al., 2017; Yilmazdoğan et al., 2021; Ki & Kim, 2019; Balabanis & Chatzopoulou, 2019; Taillon et al., 2020; Fink, 2021; Yang & Sia, 2018; Reinikainen et al., 2020; Monge-Benito et al., 2020
Identification	5 articles: Janssen et al., 2021; Folkvord et al., 2020; Lee, 2021; Hu et al., 2020; Croes & Bartels, 2021
Authenticity	4 articles: Gerrath & Usrey, 2021; Theocharis & Papaioannou, 2020; Pornsrimate & Khamwon, 2021; Kim & Kim, 2021b
Involvement	3 articles: Renchen, 2020; Huang et al., 2010; Meng & Wei, 2020
Authority	3 articles: Renchen, 2020; Balabanis & Chatzopoulou, 2019; Jun & Yi, 2020
Fame/prestige	3 articles: Meng & Wei, 2020; Ki & Kim, 2019; Hu et al., 2020
Uniqueness	2 articles: Cheng et al., 2021; Hu et al., 2020
Originality	2 articles: Li & Peng, 2021; Cheng et al., 2021
Enjoyability	1 article: Ki et al., 2020
Interestingness	1 article: Martínez-López et al., 2020b
Reliability	1 article: Roman, 2020
Reputation	1 article: Alsaleh, 2017
Warmth	1 article: Kim & Read, 2021
Coolness	1 article: Reinikainen et al., 2021
Usefulness	1 article: Nunes et al., 2018
Effectiveness	1 article: Gräve & Bartsch, 2022
Passion	1 article: Hamdan & Lee, 2022
Motivation	1 article: Renchen, 2020
Benevolence	1 article: Al-Harbi & Badawi, 2022
Competence	1 article: Kim & Read, 2021
Morality	1 article: Roman, 2020
Importance	1 article: Johnstone & Lindh, 2018
Sincerity	1 article: Lee & Eastin, 2020
Respect	1 article: Monge-Benito et al., 2020

Table A2. Social characteristics with citations

Social characteristics	Citations
Homophily of influencer and follower	23 articles: Duh & Thabethe, 2021; Schouten et al., 2020; Thomas & Fowler, 2021; Chen, 2020; Yuan & Lou, 2020; Le et al., 2021; Lou & Yuan, 2019; Li & Peng, 2021; Ki et al., 2020; Sokolova & Kefi, 2020; Folkvord et al., 2020; Xu & Pratt, 2018; von Mettenheim & Wiedmann, 2021; Mainolfi & Vergura, 2022; Roman, 2020; Kim & Kim, 2021b; Balabanis & Chatzopoulou, 2019; Hu et al., 2020; Taillon et al., 2020; Fink, 2021; Shan et al., 2020; Monge-Benito et al., 2020; Xiao et al., 2018
Congruence of product and influencer	17 articles: Torres et al., 2019; Martínez-López et al., 2020a; Belanche et al., 2021a; Al-Harbi & Badawi, 2022; Schouten et al., 2020; Belanche et al., 2020; Chetioui et al., 2020; Janssen et al., 2021; Kim & Kim, 2021a; Folkvord et al., 2020; Xu & Pratt, 2018; von Mettenheim & Wiedmann, 2021; De Cicco et al., 2021; Chia et al., 2021; Lim et al., 2017; Breves et al., 2019; Belanche et al., 2021b
Parasocial relationship	19 articles: Jin & Ryu, 2020; Wu, 2020; Silva & da Costa, 2021; Breves et al., 2021; De Jans et al., 2018; Agnihotri & Bhattacharya, 2021; Yuan & Lou, 2020; Pornsrimate & Khamwon, 2021; Sokolova & Kefi, 2020; Reinikainen et al., 2021; Jin & Muqaddam, 2019; Folkvord et al., 2020; Leite & Baptista, 2021; Dhanesh & Duthler, 2019; Huhn Nunes et al., 2018; Yilmazdoğan et al., 2021; Hu et al., 2020; Shan et al., 2020; Reinikainen et al., 2020
Popularity by number of followers or likes	5 articles: Janssen et al., 2021; Renchen, 2020; Pittman & Abell, 2021; Lee & Theokary, 2021; Balabanis & Chatzopoulou, 2019
Likeability	7 articles: Duh & Thabethe, 2021; Saima & Khan, 2020; Janssen et al., 2021; Taillon et al., 2020; Fink, 2021; Monge-Benito et al., 2020; Xiao et al., 2018
Leadership	5 articles: Casaló et al., 2020; Turcotte et al., 2015; Farivar et al., 2021; Ki & Kim, 2019; Sashittal & Jassawalla, 2020
Familiarity	3 articles: Duh & Thabethe, 2021; Fink, 2021; Monge-Benito et al., 2020
Perceived power	3 articles: Hsu et al., 2014; Hamdan & Lee, 2022; Wang et al., 2021; Jiménez-Castillo & Sánchez-Fernández, 2019
Inspiration	2 articles: Ki et al., 2020; Balabanis & Chatzopoulou, 2019
Influence	3 articles: Casaló et al., 2020; Balabanis & Chatzopoulou, 2019; Khodabandeh & Lindh, 2021
Envy	1 article: Jin & Ryu, 2020
Betrayal	1 article: Reinikainen et al., 2021
Approachability	1 article: Balabanis & Chatzopoulou, 2019
Admiration	1 article: De Jans et al., 2021
Role modelling	1 article: Yang & Sia, 2018
Social advocacy	1 article: Xiao et al., 2018