

Original Article

# The Future of Influencer Marketing: Human Authenticity versus Artificial Intelligence – A Literature Review

<sup>1</sup>Shabira Maharani, <sup>2</sup>Rista Nurdianasari, <sup>3</sup>Zelika Nidya Damarani  
<sup>1,2,3</sup>Department Management, Diponegoro University, Semarang, Indonesia.

Received Date: 08 April 2026

Revised Date: 25 April 2026

Accepted Date: 30 April 2026

Published Date: 06 May 2026

**Abstract:** *The rapidly evolving influencer marketing industry faces a paradox between human authenticity and the sophistication of artificial intelligence (AI). This article examines literature from 2015–2026 on the future of influencer marketing in relation to authenticity and virtual influencers (AI influencers) using a systematic literature review approach. The conceptual framework draws on source credibility theory (Ohanian, 1990), the persuasion knowledge model (Friestad & Wright, 1994), cognitive dissonance theory (Festinger, 1957), and parasocial interaction theory (Horton & Wohl, 1956), highlighting the role of authenticity in building consumer trust and shaping engagement and purchase intention. Key findings indicate that human influencers (HIs) are generally perceived as more authentic and credible than digital avatars, although virtual influencers (VIs) can excel in message consistency and content innovation. Consumer trust and engagement are confirmed as critical mediators of campaign effectiveness. Comparative studies reveal that human endorsers tend to generate more positive brand attitudes and purchase intentions than virtual influencers; however, virtual influencers attract greater visual attention and can increase purchase intention among specific Gen Z cohorts. Ethical concerns including deception, disclosure obligations, and algorithmic bias are also discussed. Practical recommendations include adopting mixed influencer strategies (human + virtual) based on campaign objectives, with an emphasis on communication transparency. This article contributes to the development of digital marketing theory and offers managerial implications for industries integrating AI into brand communication strategies.*

**Keywords:** *Influencer Authenticity, Virtual Influencers (AI), Consumer Trust, User Engagement, Purchase Intention, Parasocial Relationship, Digital Marketing Ethics.*

## I. INTRODUCTION

In the digital age, while influencer marketing has transformed how brands use celebrity endorsements to communicate (Pan et al., 2025; Spörl-Wang et al.). Instead of regular advertising, influencers (human (HIs) and intelligent digital avatars (virtual influencers/VIs), tell a personal story, presenting new ways to appeal to consumers in genuine social media interactions. This method exploits source credibility: the intuition behind the strategy is that because influencers interact directly with their audience, they can appear more genuine and credible than through traditional advertising (Ohanian, 1990; Pan et al., 2025).

The global influencer marketing industry is expected to grow up to US\$84.9 billion by 2028 (Statista, 2024), with more than 75% of multinational corporations having already incorporated influencers into their marketing communications mix (Influencer Marketing Hub, 2024). The vast market, supported by the high penetration of social media (167 million active users in 2024) in Indonesia (Hootsuite, 2024), makes Indonesia one of the biggest influencer marketing markets in Southeast Asia.

But this growth also brought with it a fundamental problem: authenticity. Influencers must appear to be authentic (their recommendations of products should come across as honest rather than paid for), and congruent (the influencer's true identity fits with the claims made) so that followers see influencers as credible sources (Audrezet et al., 2020; Nunes et al., 2021). This authenticity can be chipped away at by the commercial pressure from brands and eventually, consumer trust (Audrezet et al., 2020; Kim & Kim, 2021). Additionally, progress in artificial intelligence has led to a new group of influencers digital personalities algorithmically designed to imitate real-life influencers (Audrezet et al., 2025). Unlike traditional influencers, virtual influencers such as Lil Miquela, Rozy and Allysa Gladys offer full control of the narrative, scalable messages and protection from real life scandals; however, their artificial nature can diminish authenticity and lead to non-genuine consumer trust (Zhou et al., 2026; Khalfallah & Keller, 2025).

This begs the central question: How do human vs AI influencers differ on authenticity, trust and marketing for brands? How do we moderate this relationship, and what are the implications for brand communication strategy? The goal of this literature review is to provide comprehensive answers to these questions through synthesizing state-of-the-art research conducted in the years 2015–2026. Specifically, this review will present the following objectives: (1) map relevant theoretical frameworks to understand influencer authenticity and consumer trust, (2) synthesize empirical findings on how HIs compare as an effective



strategy versus VIs, (3) identify key ethical ambiguities in adopting AI influencers, (4) map measurement approaches used; and finally from our points 1–4 identify research gaps and practical recommendations.

## II. LITERATURE REVIEW

Understanding the dynamics of influencer marketing, particularly around authenticity and trust rests on several complementary foundational theories. This section outlines the key theoretical frameworks drawn upon in the literature.

### A) *Source Credibility Theory*

Source credibility theory, Hovland et al. (1953), and later operationalised by Ohanian (1990), suggests that persuasive communication is effective to the degree that the audience considers a source to be an expert, trustworthy, and attractive on three dimensions. For influencer marketing, expert and trusted influencers lead to more positive brand attitudes and purchase intentions (Pan et al., 2025; Schouten et al., 2020). In contrast to traditional celebrities, influencers do not rely solely on status but continue to develop credibility through authentic content and regular interaction with their audience (Djafarova & Rushworth, 2017). When it comes to virtual influencers, physical attractiveness can be algorithmically engineered (superior) [Zhou et al., 2026; Djafarova and Davies, 2025], whereas the trustworthiness and expertise dimensions are harder to forge without real-world experience.

### B) *Persuasion Knowledge Model (PKM)*

The Persuasion Knowledge Model (Friestad & Wright, 1994) describes how consumers acquire knowledge about persuasion attempts made upon them. Consumers have learned to activate what is known as persuasion knowledge the consumer protection model, specifically when they realize that influencer content is a type of paid advertising; their minds might go into defense mode, which in turn can dampen the message effectiveness. This is especially relevant during the influencer marketing era where any content that is sponsored or AI-generated art, and plugging these features in can be flagged by consumers (Boerman et al., 2017; Campbell & Grimm, 2019). As consumers' persuasion knowledge increases, this can lead to more skeptical evaluations of an influencer's persuasive message (Kim & Kim 2021). However, other studies suggest that honesty may increase long-term trust through disclosure (Khalfallah & Keller, 2025); thus, transparency emerges with a more complex moderating role.

### C) *Parasocial Interaction Theory*

Parasocial Interaction Theory (Horton & Wohl, 1956)[31] explains how audiences relate to a media figure in much the same way as a close relationship with quasi-emotional intimacy. Parasocial relationships (PSRs) are the main mechanism that connects influencer authenticity to consumer trust and purchase intention (Dibble et al., 2016; Lee & Watkins, 2016) in the field of influencer marketing. Since authenticity fosters the foundation of the PSR, influencers posting highly personal content or acting vulnerable, and taking the time to directly respond to follower comments, subsequently develop higher PSRs with them and consequently greater engagement rates and conversion (Colliander & Dahlén, 2011; Hwang & Zhang, 2018). An important question is whether PSRs would form with virtual influencers who are blatantly non-human. Some studies suggest that consumers especially Gen Z, who are used to digital entities are able to develop PSRs even with fictional characters (Siyabend & Thordardottir, 2023), while other research indicates that the knowledge of AI nature is a strong inhibitor of PSR strength (Khalfallah & Keller, 2025).

### D) *Cognitive Dissonance Theory*

The Cognitive Dissonance Theory (Festinger, 1957) is also applicable to address the internal and psychological conflict a consumer faces when they find that some influencer whom they trusted was bioengineered rather than human. For instance, there can be cognitive dissonance between saying "this influencer appears believable" and "this influencer is, in fact AI." Zhou et al. (2026) explicitly apply this theory, where they show that highly credible virtual influencers serve as a dissonance-reduction mechanism consumers "resolve" the inconsistency by focusing on positive non-factual attributes that consumers believe are real. This suggests that if virtual influencers are designed with the goal of being consistently credible communicators, perceived inauthenticity can be neutralised.

### E) *Integrative Framework: The VITEM Model*

Khalfallah & Keller (2025) developed an integrative model called VITEM (Virtual Influencer Trust and Engagement Model) based on the synthesis of 51 articles. The model positions consumer trust as the central mediating variable linking VI characteristics (authenticity, credibility, transparency) with marketing outcomes (engagement, purchase intention, brand loyalty). VITEM also accounts for contextual moderating factors such as culture, consumer demographics, and product type making it one of the most comprehensive frameworks for comparative HI vs VI research. The model can be extended by integrating ethical dimensions (disclosure, algorithmic bias) as antecedents shaping authenticity perceptions.

### III. METHODOLOGY

This review takes the form of a Systematic Literature Review (SLR) driven by the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) to ensure breadth, depth, and reproducibility in reporting from August 2023 to October 2023 (Moher et al., 2009; Page et al., 2021). The SLR protocol followed a modified PICO (Population, Intervention, Comparison and Outcome) framework for marketing review: Population (consumers/social media users), Intervention( Human vs AI influencer exposure), Comparison between types of influencers, and Outcome (trust, engagement, and intention to purchase authenticity).

#### A) Literature Search Strategy

Searches were conducted across reputable academic databases—Scopus, Web of Science (WoS), Google Scholar, JSTOR, and EBSCO supplemented by industry sources including Influencer Marketing Hub, Statista, and platform reports (TikTok, Meta, YouTube). The search window covered 2015–2026, with a focus on 2019–2026 literature to capture the most recent developments. Core keywords used included:

- "influencer authenticity", "virtual influencer", "AI influencer", "digital influencer"
- "consumer trust influencer marketing", "parasocial relationship influencer"
- "purchase intention social media influencer", "influencer marketing effectiveness"
- "source credibility influencer", "persuasion knowledge model social media"
- "ethics AI influencer", "disclosure influencer marketing", "algorithmic bias influencer"

#### B) Inclusion and Exclusion Criteria

Inclusion criteria comprised: (a) peer-reviewed articles indexed in Scopus or WoS; (b) proceedings from reputable conferences; (c) industry reports and official platform documents; (d) studies relevant to influencer authenticity, consumer trust, virtual influencers, or digital marketing ethics; and (e) availability in English or Indonesian. Exclusion criteria included: (a) articles lacking a clear abstract and methodology; (b) studies not directly related to influencer marketing contexts; and (c) non-academic opinion content without empirical or theoretical grounding.

#### C) Selection Process and Data Extraction

The process began with identification, where all search results were compiled and deduplicated to include more than 400 documents; this was followed by PRISMA-aligned screening, eligibility and inclusion stages: (1) Identification—compilation and deduplication of all records; (2) Screening—sieve out irrelevant titles and abstracts based on topical focus from literature search strategy; (3) Eligibility—all full-text articles read to assess methodological quality alongside substantive quality as per measures established within Protocol above; Final stage is inclusion—process goes from richest record count to most relevant. More than 60 primary sources cited in this thematic synthesis were identified through this selection process, including meta-analyses (Pan et al., 2025; Spörl-Wang et al., 2025), experimental studies (Du & You, 2026; Zhou et al., 2026), field surveys (Shi, 2023; Djafarova & Davies, 2025) and systematic reviews (Khalfallah & Keller, 2025). Extracted data included author, year, journal, research design, sample, theoretical framework, key variables, findings, and limitations.

#### D) PRISMA 2020 Flow Diagram

Figure 1 presents the PRISMA 2020 flow diagram illustrating the complete record selection process, from initial database identification through to the final set of studies included in the synthesis.

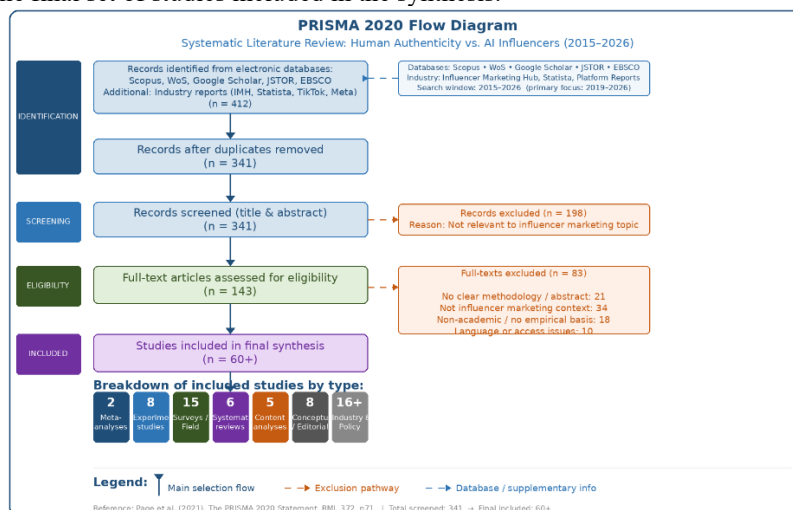


Figure 1. PRISMA 2020 Flow Diagram for Systematic Literature Review

## IV. RESULTS

### A) *Conceptualization and Dimensions of Influencer Authenticity*

Authenticity is considered a contextualized multi-dimensional construct of influencers in influencer marketing that has undergone considerable conceptual development. Gilmore & Pine (2007) define authenticity as what is felt to be real, adapted to digital text, respectively by Audrezet et al. (2020). Audrezet et al. (2020) point to two facets of influencer authenticity: passion-driven content (content that is in line with the influencer's genuine interests) and transparency (openness about commercial relationships). These two elements build on each other: influencers who express excitement for an opportunity and are transparent when they are being paid to promote a product tend to be viewed as more credible.

Nunes et al. (2021), patch as in Zhou et al. (2026) utilized a multidimensional framework to identify four dimensions of authenticity: (1) persona authenticity how genuine the identity of an influencer is; (2) message authenticity how consistent promotional content is with the character of the influencer; (3) product authenticity the extent to which an endorsed product matches the values of the influencer, and (4) value authenticity how consistent messages are with professed values held by influencers. This is useful to disentangle the notion of virtual influencer authenticity as a VI can be high on persona, yet also inauthentic because there are no real experiences behind the endorsement content (Zhou et al., 2026).

Moulard et al. In (2015), the authors distinguish between sincerity-based authenticity and consistency-based authenticity. So while HIs have potentially both, VIs are constitutionally set up to be more consistent (since they're running on consistent algorithms), but they fall short on sincerity since there is no "consciousness" or "feeling" that undergirds their behavior. The authenticity capacity of HIs is therefore inherently limited compared to that of VIs, which creates a basic asymmetry that requires consideration by researchers and practitioners alike.

Recent research suggests that commercial intensity the number of paid promotions and how overtly they promote them, also influences influencer authenticity. Research by Stubb et al. (2019) and Wellman et al. (2020) shows that a high frequency of sponsored content significantly decreases the perceived authenticity of even highly authentic HIs. This discovery is significant because it suggests that both HIs and VIs must (Read: how to be a successful content marketer) focus on organic vs. sponsored balance to ensure long-term authenticity.

### B) *Consumer Trust, Engagement, and Purchase Intention*

The Role of Consumers in the Effectiveness of Influencer Campaigns, Across Ad Types Consumer trust is a key mediator. Many studies show a positive correlation of influencer authenticity and audience trust (Audrezet et al., 2020; Khalfallah & Keller, 2025). Consumers react more favorably to product mentions by influencers they perceive to be authentic and forthright, thus more difficult to dissuade them through skepticism. The meta-analysis of Pan et al. According to a meta-analysis (2025) of 89 independent studies, influencer characteristics especially expertise and trustworthiness are largely the strongest predictors of purchase intention and consumer engagement, achieving effect sizes greater than platform type or content format.

Consumer engagement is assessed through a multitude of behavioral variables (likes, shares, comments, and clicks) and psychological dimensions (parasocial closeness and influencer identification). Authentic influencers have effective relationships with followers, allowing them to engage more deeply and be less susceptible to negative media messages regarding the influencer (Du & You, 2026; Lee & Watkins, 2016). Spörl-Wang et al., in an extensive meta-analysis of 108 studies, found the following eleven engagement predictors to be significant: expertise of influencers, content quality, posting consistency or frequency, influencer interactivity with their followers and followers and brands as well as attractiveness or looks (namely in fashion marketing), trustworthiness, value congruence between a brand and its influencer stimuli, platform size, and larger symbols) that attract larger WIFs small symbols), audience demographics and different types of products [9].

The dependent variable often tested in influencer marketing literature is purchase intention. Studies conducted in this domain indicate that HIs have a higher purchase intention than VIs under normal conditions. A study by Du & You (2026) involving 120 East Asian students conducted an eye-tracking experiment and confirmed that although VIs drew greater visual attention than HIs, ads featuring HIs produced more favourable ad attitudes and stronger purchase intentions than ads featuring VIs. A study by Djafarova & Davies (2025) focusing on the fashion and beauty domains on TikTok also reported that HIs were more effective compared to CIs in influencing purchase intention and helping consumers feel confident in their purchase, especially for products for which personal endorsement is perceived as credible.

That said, the evidence is nails and with not one-sided. A recent study of US samples by Shi (2023) shows that greater exposure to VIs was associated with a greater purchase propensity in general, and more than 58% of the sample followed at least one VI. While in other product categories, especially technology or gaming or futuristic products, VIs can overtake HIs when the persona-audience relevance is strong. The moderating role of consumer characteristics is revealed in the work by Siyaband & Thordardottir (2023), who found that technology-driven consumers did not differ from a purchase intention perspective when given an HI vs a VI.

### **C) Ethical Issues: Deception, Disclosure, and Algorithmic Bias**

As virtual influencers are a new thing, they have created situations that cover other ethical aspects which remain unanswered in both a regulatory and industry perspective. A major concern is deception created by VI content when not clearly identified as AI-generated, which could lead consumers, particularly those new to the technology, to think they were conversing with an actual human being. (Khalfallah & Keller, 2025). Concluding paragraph, although consumers evaluated the contents as favourable, we find strong trust violation for consumers who later learn that they (the influencer they followed) is an AI.

Disclosure is the principal ethics mechanism for this issue. On the regulatory front, major progress has been made: in August 2023, the Feds updated their endorsement guidelines to include AI content for regulatory consideration, and in December 2024, the European Union's AI Act took effect requiring labeling of generative content. For posts that rely heavily on AI tech (TikTok, 2026), TikTok has issued an "AI-generated" label. Summarizing a few of the initial, most surprisingly, one study by one in particular, Boerman et al. (2020) argue that the effects of disclosure might be counter-intuitive: since disclosure triggers persuasion, knowledge and hence reduces message effectiveness, naturally integrated disclosures are beneficial in terms of long-term authenticity and trust.

Algorithmic bias might seem arguably the most obvious, but it's remotely overlooked, potentially yielding widespread ethical consequences. The AI systems that generate and control virtual influencers generally reinforce and enhance various prejudices in their training data. Digital Blackface Dark-skinned able avatars run by light-skinned developers—has to be one of the hottest topics blowing up through platforms (AICerts, 2024). Moreover, VI content is subject to algorithms that can further embed gender, ethnicity and class stereotypes even as inclusivity becomes more important for modern brands. Audrezet et al. (2025) warn that intersectional approaches must be taken in design for VI systems to make sure categories of people are not disadvantaged.

Another layer of ethical consideration is consumer well-being. Indeed, studies by Moufahim & Lichrou (2019) and others have shown that ongoing exposure to perfect albeit created physical representations, which are easily achieved in VIs, can harm consumers' body image, especially among adolescents. While human influencers also often propagate unattainable beauty ideals, they at least have natural constraints that VIs do not; This explains why there is an urgent need for adequate regulation of standards pertaining to a physical representation in VIs.

### **D) Measurement Methods and Metrics**

Influencer marketing research employs a diverse array of complementary methodological approaches. The following is a synthesis of the most commonly used methods:

- Experiments (Online/Lab): Increasingly the dominant method, as they permit rigorous causal inference. Du & You (2026) used an eye-tracking experiment to compare consumer responses to HIs versus VIs in health supplement advertising. Zhou et al. (2026) designed a 2×3 factorial experiment to test the effects of influencer type (human vs. virtual) and VI realism level on authenticity and purchase intention. This approach offers high internal validity, though generalizability requires caution given the often-limited samples and laboratory settings that may not reflect real-world conditions.
- Surveys and Questionnaires: The most widely used method, typically employing 5- or 7-point Likert scales to measure constructs such as authenticity (adapted from Audrezet et al., 2020; Moulard et al., 2015), trust (adapted from McKnight et al., 2002), and purchase intention (adapted from Dodds et al., 1991). Shi (2023) used an online survey with a Gen Z consumer sample to measure the impact of VI exposure on purchase intention. The primary limitation is the potential for common method bias and reliance on consumer self-reports.
- Meta-Analyses: Pan et al. (2025) and Spörl-Wang et al. (2025) employed meta-analysis to synthesize findings from dozens to hundreds of studies, yielding more robust and generalizable effect estimates. Pan et al. (2025) analyzed 89 studies, while Spörl-Wang et al. (2025) analyzed 108. This approach is particularly powerful for identifying consistent patterns across contexts, though it is constrained by the quality and availability of primary studies.
- Content Analysis and Qualitative Approaches: Shen (2024) conducted content analysis of 33 VI Instagram accounts to compare engagement patterns between brand-owned and independent VIs. Khalfallah & Keller (2025) applied a systematic review approach with thematic synthesis to identify major themes in the VI literature. Qualitative methods, such as in-depth interviews, are also used to probe the meanings and psychological processes that quantitative methods cannot readily capture.
- Neuromarketing and Biometrics: An increasingly relevant cutting-edge approach. Eye-tracking (Du & You, 2026), galvanic skin response measurement, and facial expression analysis are beginning to be used to measure consumers' responses to influencers implicitly and non-verbally. These methods overcome the limitations of self-report and can capture emotional responses of which consumers are unaware.

**Table 1: Comparative Overview of Key Studies: Human vs. Virtual Influencers**

Researcher (Year)	Method & Sample	Theoretical Framework	Key Findings	Relevance
Khalfallah & Keller (2025)	SLR of 51 articles; multi-context, cross-cultural	VITEM, trust theory, cross-cultural framework	VIs can enhance engagement but create authenticity and transparency dilemmas. Trust is the primary mediator.	VITEM framework; trust & ethics issues across cultures
Zhou et al. (2026)	2x3 factorial experiment (HI vs. high/low-realism VI); N ≈ 400	Cognitive dissonance, source credibility, authenticity theory	Credibility can 'repair' VI authenticity deficits. Highly realistic VIs are seen as credible but less authentic in messaging.	Cognitive dissonance; multidimensional authenticity dimensions
Du & You (2026)	Lab experiment, N=120, East Asian students; eye-tracking	Uncanny valley, anthropomorphism, persuasion	HIs generate more positive ad attitudes and stronger purchase intentions. VIs attract more visual attention but are less persuasive.	Visual attention vs. persuasion; uncanny valley effect
Pan et al. (2025)	Meta-analysis, 89 studies, >25,000 respondents	Source credibility, elaboration likelihood model	Influencer expertise and trustworthiness are the strongest predictors of purchase intention and engagement. Effects robust across platforms.	Comprehensive meta-evidence of influencer effectiveness factors
Spörl-Wang et al. (2025)	Meta-analysis, 108 studies	Multi-framework (credibility, parasocial, persuasion)	11 engagement predictors, 7 purchase intention predictors identified. Content quality and influencer expertise most consistent.	Comprehensive map of influencer marketing effectiveness predictors
Djafarova & Davies (2025)	Survey & content analysis; TikTok fashion/beauty	Source credibility, trust theory	HIs more effective at influencing purchase intention and trust in fashion. VIs have potential but face initial barriers.	Fashion industry context; HI superiority for hedonic products
Shi (2023)	Online survey, N=300+, US Gen Z	Social influence theory, technology acceptance	VIs increase purchase intention, especially among Gen Z; 58% of sample followed at least one VI. Relevant for digital product marketing.	Gen Z segment; VI potential in technology product categories
Shen (2024)	Content analysis, 33 VI Instagram accounts	Parasocial relationship, engagement theory	Independent VIs have higher engagement than brand-owned VIs. External VI collaborations are more effective.	Strategy: leveraging independent VIs vs. building proprietary VIs
Cokki et al. (2025)	Field experiment, Indonesia (Jakarta & Yogyakarta)	Brand awareness, advertising exposure theory	'Allysa Gladys' significantly increased Nike/Gucci brand recall & salience (p<0.01).	Indonesian case: VI effectiveness for brand awareness
Audrezet et al. (2025)	Editorial/conceptual, JBR Special Issue	Virtual influencer theory, ethics, and AI in marketing	Defines VIs, identifies 3 key research themes, and predicts autonomous and inclusive VIs.	Future research agenda: VI definitions and typologies

**E) Empirical Comparison: Humans vs. AI**

Based on the synthesis of the literature, several consistent patterns emerge from empirical comparisons of HIs versus VIs:

- Pattern 1: HI Superiority in Credibility and Trust. The majority of studies (Du & You, 2026; Djafarova & Davies, 2025; Zhou et al., 2026) find that HIs are perceived as more trustworthy and authentic, and generate higher purchase intention

under standard conditions. This advantage is especially pronounced for products that require personal validation (health, beauty, lifestyle), where consumers value real-world experience behind a recommendation.

- Pattern 2: VI Superiority in Visual Dimensions and Consistency. VIs consistently demonstrate superior performance in capturing visual attention (Du & You, 2026) and delivering consistent messaging without the risk of personal scandals. Shen (2024) found that popular independent VIs achieve engagement rates that are competitive with HIs in certain content categories.
- Pattern 3: Demographic Moderation Effects. Younger consumers (Gen Z) tend to be more open to VIs and exhibit smaller purchase intention gaps between HIs and VIs compared with older consumers (Shi, 2023; Djafarova & Davies, 2025). This is consistent with Gen Z's high familiarity with digital content and virtual avatars.
- Pattern 4: Product Category Moderation Effects. Hedonic and symbolic products (fashion, luxury, lifestyle) are more effectively marketed by HIs who possess genuine emotional resonance. Conversely, utilitarian or technology-centric products can be effectively marketed by VIs, particularly when the VI's persona is consistent with the product's positioning (Zhou et al., 2026; Lou et al., 2023).
- Pattern 5: Credibility as a Compensating Effect. Zhou et al. (2026) demonstrate that high credibility—even if artificially constructed can partly compensate for VI authenticity deficits. This opens a strategic opportunity: brands can systematically build VI credibility through message consistency, collaboration with reputable brands, and compelling narrative.

## V. DISCUSSION

### A) *Synthesis of Key Findings*

Based on the thematic synthesis presented above, several key findings emerging from the literature can be summarized as follows. First, authenticity remains the most critical factor in influencer marketing effectiveness, yet this construct is multidimensional and contextual. Influencers perceived as authentic whether human or virtual consistently generate superior marketing outcomes. Second, while HIs on average outperform VIs in building trust and driving purchase intention, this difference is significantly moderated by consumer demographics, product category, and cultural context. Third, virtuality does not inherently diminish effectiveness, provided that credibility is built systematically and transparency is maintained. Fourth, ethical issues particularly transparency and algorithmic bias are not merely moral concerns but also strategic ones, as trust violations carry significant negative repercussions for long-term brand perception.

### B) *Theoretical Implications*

This review contributes several theoretical insights. First, it reaffirms that source credibility theory remains germane to a new context of digital influencer marketing while showing that the credibility construct must be expanded into its authenticity dimensions not included in Ohanian's (1990) original model. Second, it provides evidence that the uncanny valley hypothesis is relevant to digital marketing an application which has seen little attention in the marketing literature. Third, bridging parasocial interaction theory and influencer marketing literature denotes a new research line considering qualitative differences in parasocial relationships with artificial entities compared to humans. Fourth, the VITEM model (Khalfallah & Keller, 2025) offers a compelling integrative framework for future studies but needs additional empirical support across multiple cultural contexts.

### C) *Managerial and Practical Implications*

This review has various practical implications for brand managers and marketing agencies. Most pressing is the need for transparency enforcement: all AI-powered content fully virtual influencer or AI-modified real-life content must be marked accordingly to comply with local legislation. This is not just an ethical task but rather a strategic choice that could increase trust (Khalfallah & Keller, 2025) in the longer term.

Selection strategies for influencers are based on a decision matrix around (a) product type hedonic versus utilitarian, (b) the demographics in your target market for example Gen Z is more receptive towards VIs than other generations; (c) campaign goal building awareness vs. engagement and conversion, (d) budget is there any huge-scale content production need then half Vi will prove to be quite cost-efficient or (e) Cultural context and market effectiveness how responsive is the local country to digital persona. We believe that a combined strategy of HIs to create emotional connections and VIs to ensure consistency/scalability route could be the best approach for many brands (Zhou et al., 2026; Audrezet et al., 2025).

Marketers, on the other hand, should track performance across an integrated metrics dashboard covering: (a) behavioral engagement metrics (i.e., engagement rate, CTR, conversions); (b) perception metrics (i.e., brand familiarity, brand attitude or trust scores via surveys); and finally, (c) parasocial metrics (e.g., comment sentiment and PSR score). Especially for VIs, repeated assessment of algorithmic bias (for example, using services like AICerts (2024)) is highly recommended to ensure unbiased representation.

## VI. CONCLUSION

This systematic review confirms that the future of influencer marketing hinges on the industry's ability to maintain a balance between human authenticity and technology powered by Artificial Intelligence. The following major conclusions can be made:

Humans still have an edge over trust and emotion for long-term engagement-driven purchase intention, especially with chainmail prods (hedonic products) or along product categories that need personal validation. However, virtual influencers bring unique production efficiency, messaging consistency, and scalability to be a great fit for specific marketing circumstances — particularly those that target the Gen Z consumer cohort in conjunction with product categories complimentary to digital identity.

Once again, authenticity is easier to achieve by human influencers however it can also be applied to virtual influencers but not at an extend as human ones. While VIs have undeniable authenticity deficits, careful design, consistent narrative and well-constructed credibility serve as partial antidotes. The key is transparency: consumers who are informed about an influencer's AI nature and who feel they have not been deceived display higher acceptance of VIs.

From an ethical standpoint, industry and regulators must move more swiftly to ensure that the adoption of AI in influencer marketing proceeds responsibly: transparency about AI identity, inclusivity in persona design, and protection of consumers from new forms of deception enabled by generative technology.

The final recommendation to researchers is to prioritize longitudinal studies, research in Southeast Asian contexts, and the development of valid measurement instruments for authenticity constructs in the AI era. To practitioners, a hybrid approach integrating the strengths of HIs and VIs in line with campaign objectives while maintaining the highest ethical standards is the most promising strategy for influencer marketing that is effective, accurate, and responsible.

## VII. REFERENCES

- [1] Audrezet, A., de Kerviler, G., and Moulard, J. G., Authenticity under threat: When social media influencers need to go beyond self-presentation, *Journal of Business Research*. 117 (2020) 557–569.
- [2] Audrezet, A., Koles, B., Guidry Moulard, J., Ameen, N., and McKenna, B., Virtual influencers: Definition and future research directions, *Journal of Business Research*. 200 (2025) 115647.
- [3] Boerman, S. C., Willemsen, L. M., and Van Der Aa, E. P., This Post Is Sponsored: Effects of sponsorship disclosure on persuasion knowledge and electronic word of mouth in the context of Facebook, *Journal of Interactive Marketing*. 38 (2017) 82–92.
- [4] Campbell, C., and Grimm, P. E., The challenges native advertising poses: Exploring potential federal trade commission responses and identifying research needs, *Journal of Public Policy & Marketing*. 38(1) (2019) 110–123.
- [5] Colliander, J., and Dahlén, M., Following the fashionable friend: The power of social media, *Journal of Advertising Research*. 51(1) (2011) 313–320.
- [6] Cokki, A., Soelaiman, L., and Tjokrosaputro, M., The impact of virtual influencer product placement on brand awareness in Indonesia, *Innovative Marketing*. 21(2) (2025) 119–133.
- [7] Dibble, J. L., Hartmann, T., and Rosaen, S. F., Parasocial interaction and parasocial relationship: Conceptual clarification and a critical assessment of measures, *Human Communication Research*. 42(1) (2016) 21–44.
- [8] Djafarova, E., and Davies, J., Exploring the impact of virtual vs human influencers on purchase intentions in fashion/beauty industry, *Journal of Digital Economy*. (2025).
- [9] Djafarova, E., and Rushworth, C., Exploring the credibility of online celebrities' Instagram profiles in influencing the purchase decisions of young female users, *Computers in Human Behavior*. 68 (2017) 1–7.
- [10] Dodds, W. B., Monroe, K. B., and Grewal, D., Effects of price, brand, and store information on buyers' product evaluations, *Journal of Marketing Research*. 28(3) (1991) 307–319.
- [11] Du, M. D., and You (Ryu), K. H., Persuasive differences between human and virtual influencers in health supplement advertising: Evidence from eye-tracking, *Frontiers in Psychology*. 16 (2026).
- [12] Eisend, M., and Hermann, E., Consumer responses to homosexual imagery in advertising: A meta-analysis, *Journal of Advertising*. 49(3) (2020) 294–312.
- [13] Federal Trade Commission, Endorsement Guides: Disclosures for Reviews and Testimonials, Federal Trade Commission. (2023).
- [14] Festinger, L., *A Theory of Cognitive Dissonance*, Stanford University Press. (1957).
- [15] Friestad, M., and Wright, P., The Persuasion Knowledge Model: How people cope with persuasion attempts, *Journal of Consumer Research*. 21(1) (1994) 1–31.
- [16] Gilmore, J. H., and Pine, B. J., *Authenticity: What Consumers Really Want*, Harvard Business School Press. (2007).
- [17] Hootsuite, *Digital 2024: Indonesia*, DataReportal. (2024).
- [18] Horton, D., and Wohl, R. R., Mass communication and para-social interaction, *Psychiatry*. 19(3) (1956) 215–229.
- [19] Hovland, C. I., Janis, I. L., and Kelley, H. H., *Communication and Persuasion: Psychological Studies of Opinion Change*, Yale University Press. (1953).
- [20] Hwang, K., and Zhang, Q., Influence of parasocial relationship between digital celebrities and their followers on purchase and e-WOM intentions, *Computers in Human Behavior*. 87 (2018) 155–173.
- [21] Influencer Marketing Hub, *The State of Influencer Marketing 2024: Benchmark Report*. (2024).
- [22] Khalfallah, D., and Keller, V., Authenticity, ethics, and transparency in virtual influencer marketing: A cross-cultural analysis of consumer trust and engagement, *Acta Psychologica*. 260 (2025) 105573.
- [23] Kim, D. Y., and Kim, H. Y., Trust me, trust me not: A nuanced view of influencer marketing on social media, *Journal of Business Research*. 134 (2021) 223–232.
- [24] Lee, J. E., and Watkins, B., YouTube vloggers' influence on consumer luxury brand perceptions and intentions, *Journal of Business Research*. 69(12) (2016) 5753–5760.
- [25] Lou, C., Kiew, S. T. J., Chen, T., Lee, T. Y. M., Ong, J. E. C., and Phua, Z., Authentically fake? How consumers respond to virtual influencers, *Journal of Advertising*. 52(4) (2023) 540–557.
- [26] MacDorman, K. F., and Ishiguro, H., The uncanny advantage of using androids in social and cognitive science research, *Interaction Studies*. 7(3) (2006)

- 297–337.
- [27] McKnight, D. H., Choudhury, V., and Kacmar, C., Developing and validating trust measures for e-commerce, *Information Systems Research*. 13(3) (2002) 334–359.
- [28] Moher, D., Liberati, A., Tetzlaff, J., Altman, D. G., and The PRISMA Group, Preferred reporting items for systematic reviews and meta-analyses, *PLOS Medicine*. 6(7) (2009) e1000097.
- [29] Mori, M., Bukimi no tani [The uncanny valley], *Energy*. 7(4) (1970) 33–35.
- [30] Moulard, J. G., Raggio, R. D., and Folse, J. A. G., Brand authenticity: Antecedents and outcomes, *Psychology & Marketing*. 32(4) (2015) 421–439.
- [31] Moufahim, M., and Lichrou, M., Pilgrimage, tourism and the politics of religious identity, *Tourism Management*. 70 (2019) 286–296.
- [32] Nunes, R. H., Ferreira, J. B., Freitas, A. S., and Ramos, F. L., Effects of social media opinion leaders on purchase intention, *Revista Brasileira de Gestao de Negocios*. 23(1) (2021) 71–88.
- [33] Ohanian, R., Construction and validation of a scale to measure celebrity endorsers, *Journal of Advertising*. 19(3) (1990) 39–52.
- [34] Page, M. J., McKenzie, J. E., Bossuyt, P. M., et al., The PRISMA 2020 statement, *BMJ*. 372 (2021) n71.
- [35] Pan, M., Blut, M., Ghiassaleh, A., and Lee, Z. W. Y., Influencer marketing effectiveness: A meta-analysis, *Journal of the Academy of Marketing Science*. 53 (2025) 52–78.
- [36] Schouten, A. P., Janssen, L., and Verspaget, M., Celebrity vs influencer endorsements, *International Journal of Advertising*. 39(2) (2020) 258–281.
- [37] Seele, P., Dierksmeier, C., Hofstetter, R., and Schultz, M. D., Mapping the ethicality of algorithmic pricing, *Journal of Business Ethics*. 170(4) (2021) 697–719.
- [38] Shen, Z., Shall brands create their own virtual influencers?, *Humanities and Social Sciences Communications*. 11 (2024) 177.
- [39] Shi, W., Virtual human influencer and its impact on consumer purchase intention, *Advances in Economics, Management and Political Science*. 47(1) (2023) 80–87.
- [40] Siyabend, G., and Thordardottir, B., Virtual influencers and their impact on consumer behavior, *Journal of Digital Media & Policy*. 14(2) (2023) 185–208.
- [41] Spörl-Wang, K., Krause, F., and Henkel, S., Predictors of social media influencer marketing effectiveness, *Journal of Business Research*. 186 (2025) 114991.
- [42] Statista, Influencer advertising market: Worldwide revenue forecast 2019–2028. (2024).
- [43] Stubb, C., Nyén, A. M., and Colliander, J., Influencer marketing and sponsorship disclosure, *Journal of Communication Management*. 23(2) (2019) 109–122.
- [44] TikTok, TikTok Shop Content Policy: AI-Generated Content Restrictions and Requirements. (2026).
- [45] Wellman, M. L., Stoldt, R., Tully, M., and Ekdale, B., Ethics of authenticity in influencer marketing, *Journal of Media Ethics*. 35(2) (2020) 68–82.
- [46] Zhou, A., Liu, Y., and Dai, Y., Artificial yet credible: Virtual influencers and authenticity, *Journal of Business Research*. 206 (2026) 115940.