ETHICS AND AUTHENTICITY IN THE AGE OF VIRTUAL INFLUENCERS: A CROSS-CULTURAL REVIEW OF CONSUMER TRUST AND ENGAGEMENT

Albar Bujayromi Abbastian[1]

[1] Univeristas Islam Nahdlatul Ulama Jepara, Indonesia

Corresponding author:
Albar Bujayromi Abbastian
e-mail: albarabbasy@gmail.com

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ABSTRACT

Objective: This study analyzes the key factors influencing consumer trust and engagement with virtual influencers (VIs) through a systematic literature review.

Research Design & Methods: This study uses the Systematic Literature Review (SLR) method by examining reputable international journal articles published between 2019 and 2025, focusing on authenticity, transparency, anthropomorphism, and cultural and generational context.

Findings: The results show that consistent digital authenticity, balanced disclosure, appropriate human likeness, and cultural tailoring are the main determinants of VI effectiveness. A coherent and transparent digital identity strategy can minimize risks such as the uncanny valley and consumer skepticism.

Implications & Recommendations: To build sustainable engagement, brands must balance aesthetics and transparency, tailor VI design to demographic and cultural preferences, and ensure narrative coherence.

Contribution & Value Added: This study provides a comprehensive conceptual framework on the role of authenticity, disclosure, anthropomorphism, and cross-cultural factors in shaping consumer trust, and offers practical insights for brands in optimizing VI-based marketing strategies.

Keywords: Virtual Influencer (VI), Disclosure, Human-likeness.

INTRODUCTION

Digital technology and social media development has given rise to a new phenomenon in the marketing landscape, namely the emergence of virtual influencers (VIs). This phenomenon shows a growing global trend, with more than 200 virtual influencers active on various social platforms and an increasing number of major brands utilizing them in their marketing strategies. This shows that the role of virtual influencers is becoming increasingly important and relevant in modern marketing practices. They are computer-based or artificial intelligence-based digital personas brands use to interact with consumers on social platforms (Cho, 2025; Koles et al., 2024). offer significant power to brands. They can display characters with attractive visuals and consistent narratives and operate around the clock without the risk of personal scandals as often occurs with human influencers (Gómez et al., 2025). Full control over the identity and behavior of Virtual Influencers (VIs) also allows companies to minimize uncertainty, strengthen brand consistency, and create more uniform communication across global markets (Audrezet, 2025). These advantages

make Virtual Influencers a relevant strategic instrument in the digital marketing era, which demands high flexibility and personalization in reaching audiences across countries (Jhawar et al., 2023; Malik & Singh, 2025).

This strength is overshadowed by a fundamental weakness related to low perceived authenticity. Authenticity in the context of traditional influencers is typically built through personal experience, honesty, and emotional closeness with the audience. In contrast, Virtual Influencers (VIs) are digital constructs without real experiences, often considered less authentic (Ju et al., 2024; Koles et al., 2024). Studies show that low perceptions of authenticity can reduce consumer trust and weaken the effectiveness of Virtual Influencer (VI)-based campaigns. Even when Virtual Influencers (VIs) trigger initial engagement due to novelty or digital aesthetics, this engagement often does not last long once consumers realize their artificial nature (Barari et al., 2025). Ethically, using Virtual Influencers (VIs) presents new challenges. One of the main issues is the lack of clarity regarding who is responsible for the actions, messages, or opinions communicated by virtual personas. This situation can potentially open the door to consumer manipulation without clear oversight mechanisms (Cho, 2025). In addition, disclosure practices remain a subject of debate. Many campaigns use Virtual Influencers (VIs) without explicitly explaining that the characters are not real humans, thus creating the potential for misrepresentation and violating ethical principles in marketing communications (Volles et al., 2024). Some regulators have even highlighted this practice and demanded new standards to ensure consumer protection (Mertens & Goetghebuer, 2024). Transparency then emerges as a key element in building consumer trust. Research shows that clear disclosure about the non-human nature of Virtual Influencers (VIs) can moderate consumer perceptions of credibility, reduce feelings of deception, and strengthen long-term engagement (Ju et al., 2024; Kim & Park, 2023). Adequate disclosure allows consumers to accept engagement with Virtual Influencers (VIs) without diminishing perceptions of brand integrity. However, the effectiveness of this strategy is not uniform across cultural contexts, presenting both opportunities and challenges for global marketers.

Cross-cultural differences have been shown to play an important role in consumer perceptions of Virtual Influencers (VIs). Diverse social norms, collective values, and levels of institutional trust cause consumers in different countries to respond differently to authenticity, ethics, and transparency (Gómez et al., 2025). For example, collectivist societies tend to be more critical of interactions with artificial personas because they emphasize the value of togetherness and authenticity in social relationships. At the same time, individualistic cultures are more open to digital innovation and experimentation (Barari et al., 2025). In addition, uncertainty avoidance also influences consumer acceptance; in countries with high levels, Virtual Influencers (VIs) are more likely to encounter resistance if they are not accompanied by adequate disclosure (Malik & Singh, 2025). Amidst these dynamics, there are great opportunities to utilize Virtual Influencers (VIs) as part of a global marketing strategy. The rising popularity of AI-based technology paves the way for broader acceptance of digital personas. Additionally, using Virtual Influencers (VIs) can drive the development of new standards regarding ethics and transparency in digital marketing, which in turn contributes to more sustainable industry governance (Mertens & Goetghebuer, 2024). However, this opportunity is also accompanied by serious threats, including increasingly strict regulations regarding disclosure and the risk of strategic failure due to a homogeneous approach that does not consider cultural variations (Gómez e t al., 2025). Companies that fail to adapt their Virtual Influencer (VI) strategies to the local cultural context risk losing consumer trust and facing long-term reputational damage.

This situation highlights a significant research gap. Academic studies on Virtual Influencers (VIs) remain fragmented, limited to conceptual studies, surveys, or small-scale experiments. Little research has systematically integrated the perspectives of authenticity, ethics, and transparency in a cross-cultural context to understand their impact on consumer trust and engagement (Barari et al., 2025; Koles et al., 2024). In fact, such a synthesis is crucial for developing a more comprehensive theoretical framework and providing practical recommendations for companies in designing more ethical and effective marketing strategies in the digital age. Based on this background, research using a systematic literature review approach is relevant.

The purpose of this study is to examine how authenticity, ethics, and transparency are defined and operationalized in the literature related to Virtual Influencers (VIs), how these factors influence consumer trust and engagement, and how cross-cultural differences shape diverse patterns of acceptance (Audrezet et al., 2025; Cho, 2025; Gómez et al., 2025). Theoretically, this study contributes to expanding the understanding of the concepts of authenticity and ethics in the context of artificial intelligence-based communication, particularly in virtual figures that act as influencers. This research also enriches the literature on human-machine interaction and the dynamics of trust in cross-cultural digital marketing. Practically, the findings of this study have implications for brands and policymakers to design more transparent and ethical communication strategies in the use of virtual influencers. In addition, the results of this study can be used as a reference in developing regulatory guidelines that protect consumers from potential manipulation and ensure responsible digital marketing practices.

LITERATURE REVIEW

Virtual Influencers: Definition and Scope

Virtual influencers (VIs) have emerged as an increasingly popular social media and digital marketing phenomenon, marking a paradigm shift from human influencers to digital personas controlled or managed using computer technology, CGI (computer-generated imagery), and sometimes artificial intelligence (AI). Early definitions describe Virtual Influencers (VIs) as digital entities with a presence on social media platforms, designed to have attractive and interactive identities and personalities, despite not having a physical human existence in the real world (Gerlich, 2023). A structured study focusing on marketing found that Virtual Influencers (VIs) form a sub-category of traditional influencers; they are distinguished not only by visual aspects, but also based on who controls their digital narrative–creator agencies, companies, or human teams that regulate their behavior and interactions–as well as the extent to which AI or computers take on an automated role in content creation or interactions (Laszkiewicz & Kula, 2023). This control includes elements such as posting schedules. One important characteristic that emerges in the definition of Virtual Influencers (VIs) is anthropomorphism, which is attributing human characteristics to non-human entities in appearance and behavior. This anthropomorphism can include visual realism, emotional expression, speech patterns, narratives that feel 'authentic', and social interactions that simulate human presence (Davlembayeva et al., 2025). The degree of anthropomorphism influences how audiences process Virtual Influencers (VIs): the more human-like their appearance and behavior, the higher the chance that audiences will feel comfortable and engaged, although there is also a risk of uncanny valley reactions if the resemblance is too close but not perfect (Luo & Kim, 2024).

The scope of virtual influencers includes variables such as creative control (content and interaction control), visual representation and aesthetics, personality narrative (persona building), audience interaction, and underlying technological aspects such as AI, graphics processing, and algorithms that enable automation or semi-automation in content production and distribution (Davlembayeva et al., 2025). Some Virtual Influencers (VIs) are static avatars whose poses or photos are set. In contrast, others have interactive components (e.g., responding to comments or live streaming) and even AI-powered dialogue (Gerlich, 2023). In the study "The Power of Virtual Influencers: Impact on Consumer Behavior and Attitudes in the Age of AI". Gerlich (2023) defines virtual influencers as "computer-generated virtual personalities created to gather followers on social media." This definition acknowledges that although they are often considered to be fully controlled by AI, there is actually an element of human supervision or partial control over the content or strategies used (Gerlich, 2023).

In addition to the formal definition, the scope of VI also includes various practical uses in brand campaigns, endorsements, brand storytelling, digital campaign activations, and as a marketing tool that enables high scale and consistency without the personal dynamics risks commonly associated with human influencers, such as scandals, burnout, or behavioral inconsistencies (Gerlich, 2023; Laszkiewicz & Kula, 2023). However, the literature shows that not all virtual influencers have the same level of AI and automation. Some are created and controlled by

humans (creator agents or marketing teams). In contrast, others use AI elements in their interactions (e.g., responding to comments with automated scripts, using chatbots, or even machine learning). These differences influence audience perceptions of these entities' credibility, authenticity, and ability to interact like humans (Davlembayeva et al., 2025). The scope also touches on geographical and cultural aspects; research shows that visual characteristics, communication styles, aesthetic norms, and expectations of digital interactions differ across cultures, which means that virtual influencer designs often need to be tailored to resonate in local markets. For example, the Ling case study in China shows how national identity and local culture are utilized in VI personas to increase relevance and acceptance among local audiences (Luo & Kim, 2024).

Overall, the definition of Virtual Influencers in academic literature contains the following key elements: (1) a digital entity or virtual persona without physical human existence but present on digital platforms, (2) creative control over content and identity by humans or institutions, with variations in the level of automation, (3) the use of visual and behavioral anthropomorphism to increase appeal and interaction, (4) social or public interaction through social media (posts, comments, endorsements), and (5) heterogeneity in the purpose of use (marketing, entertainment, brand advocacy) as well as cultural and geographical context adaptation. Understanding this definition and scope is important so that further research can accurately distinguish types of VI, consider control variables, and serve as a basis for measuring the effects of authenticity, ethics, transparency, trust, and engagement.

Authenticity in the Context of Digital Personas

Authenticity in influencer marketing is generally associated with honesty, openness, and consistency between the persona presented and the values the audience believes. However, when the actor is not a real human being but a digital persona or virtual influencer (VI), authenticity undergoes transformation and reinterpretation. Several studies show that "authenticity" in VIs is perceived more as an attribute built through performativity–namely, consistency in persona narratives, alignment of themes and visual styles with brand values, and how the creation and control processes are communicated to the public–rather than real experiences or authentic physical existence (Koles et al., 2024). The Entity-Referent Correspondence (ERC) framework distinguishes three forms of authenticity: true-to-ideal, which reflects conformity to expected values and aesthetic standards; true-to-fact, which indicates a connection to provable facts, and true-to-self, which describes consistency between personal identity and communicated values (Koles et al., 2024). They found that Virtual Influencers (VIs) inherently experience limitations in true-to-fact authenticity, as they are not entities with physical existence or real history, so this type of authenticity is often interpreted as openness to the fact that the influencer is virtual (disclosure) or how realistic their visual appearance and story background are (Koles et al., 2024). Furthermore, quantitative research in this field indicates that seemingly "imperfect" aesthetic aspects can sometimes reinforce perceptions of authenticity. For example, in "The Negative Effect of Virtual Endorsers on Brand Authenticity and Potential Remedies," content that displays visual imperfections or aesthetic flaws in VIs (e.g., less smooth skin texture, design elements that appear less polished) can reduce the impression that the persona is merely a "perfect digital product" without flaws, thereby increasing trust (Song et al., 2024). The study also found that when VIs are associated with multiple brand endorsements, the negative effect on perceptions of authenticity can be mitigated or even reversed if those endorsements are managed consistently and relevantly (Song et al., 2024).

Other studies, such as "Fake human but real influencer: The interplay of authenticity and humanlikeness in Virtual Influencer communication?" emphasize that perceptions of authenticity are influenced by humanlikeness (similarity to humans in appearance and behavior), the use of emotional expressions, the disclosure of conflicts or personal narratives (even if fabricated), and responsive interaction with audience comments (Ju et al., 2024). In this study, characters such as Lil Miquela, who often talk about personal or emotional issues, show that such expressions help reduce the psychological distance between VIs and followers, strengthening the perception of authenticity and increasing engagement (Ju et al., 2024). However, there are also limitations and conditions under which the authenticity of VIs is questioned or even criticized by consumers. The uncanny

valley theory has emerged in the literature as a mechanism explaining that the closer a VI is to human resemblance but still exhibits oddities (e.g., lifeless gaze or unnatural gestures), consumers may respond with unease or rejection of the perceived authenticity (Koles et al., 2024). In addition, when the narrative value of donations or control over the identity and actions of VI is considered overly controlled by the brand without room for error or improvisation, consumers may feel that the authenticity is fake or contrived (Song et al., 2024).

Studies on measuring the authenticity of VI also indicate the need for specific scales and measurement items. The study "Virtual Influencers as Brand Endorsers: Developing and Validating a Multidimensional Evaluation Scale" introduces several dimensions such as effective communication (including empathy and trust), strong narrative strategies, visual appearance, and natural or human-like movement as part of the construct of VI authenticity and attractiveness evaluation (Cho, 2025). Using such scales allows research to compare perceptions of authenticity among different VIs (e.g., based on levels of anthropomorphism, type of operator, and level of brand control) with consumers from different cultures. Authenticity in digital personas is not an automatically inherent ontological state, but rather a set of attributes communicated, perceived by the audience, and influenced by visual, narrative, and interactive elements (Maares et al., 2021). Controlling factors such as humanlikeness, disclosure (disclosure of virtual nature), aesthetics (including imperfection), and personal narrative are crucial in distinguishing authentic VI from non-authentic VI. A deep understanding of these aspects is necessary so that further studies can measure the effects of authenticity on consumer trust and engagement more accurately and take cultural context into account.

Ethical Issues and Stakeholder Responsibility

In the practice of marketing through virtual influencers (VIs), various ethical issues arise that demand clarification of the roles and responsibilities of stakeholders–from creators, brands that use VIs, social media platforms, to regulators. One of the main issues relates to the attribution of responsibility when VIs disseminate problematic claims or content. For example, a study by Liu & Lee (2024) shows that consumers tend to position brands as the party most responsible for the messages conveyed by influencers–both human and virtual–especially when these claims raise doubts or controversy. However, when the influencer is virtual, this attribution of responsibility becomes more complex due to non-human elements and hidden aspects of control (Liu & Lee, 2024). There are concerns about emotional manipulation through virtual persona design. These personas can be designed with a high degree of anthropomorphism, with visuals and behaviors that closely resemble humans, even inviting strong emotional attachment from the audience–interactions that sometimes appear natural but are actually coded to trigger specific psychological responses (Kim & Wang, 2023). When this kind of manipulation is not accompanied by transparency–that is, disclosure that the influencer is virtual–consumers risk feeling deceived, and trust in the brand can be damaged if the public realizes that the persona's reality is constructe (Kim & Wang, 2023).

Another ethical issue relates to representations that conceal commercial facts. Hidden advertising or sponsorship that is not clearly disclosed becomes problematic, especially when influencer posts do not include labels such as "sponsored" or "advertisement" that indicate brand control behind the content. This condition causes confusion among audiences who often perceive paid content as personal opinion or authentic expression (Evans et al., 2017). In the context of virtual influencers (VIs), this risk is even greater because digital personas are often perceived as fictional characters or entertainment, blurring the lines between entertainment, personal opinion, and commercial promotion and making them easy to misinterpret (Lou & Yuan, 2019; Mertens & Goetghebuer, 2024). In response, the literature emphasizes the importance of transparency in digital communication. Clear disclosures easily understood by the audience have increased perceptions of honesty and strengthened the parasocial relationship between VI and its followers (Cao & Belo, 2024; Looi et al., 2025). Conversely, vague, inconsistent, or late disclosures can cause skepticism and reduce the credibility of influencers (Belanche et al., 2021; Song et al., 2024). From a policy perspective, various recent studies have called for a stricter regulatory framework and ethical guidelines to regulate disclosure practices in digital marketing. Some regions, such as the European Union, have expanded rules on misleading market practices and require explicit

disclosure of brand control and virtual influencer status (Kim & Wang, 2023). In addition, social media platforms are also expected to play an active role in ensuring compliance with ethical and transparency standards, for example through automatic labels for sponsored content (Tyler et al., 2021). Integrating regulations, brand responsibility, and audience digital literacy becomes an important foundation for creating an ethical and sustainable VI-based marketing environment.

In addition to formal regulations, there is a call for self-regulation or industry guidelines. In "Creation of a Code of Ethics for Influencer Marketing," academic methods and industry practices are combined to formulate guidelines that cover sponsorship transparency, controlling parties' accountability, and auditing promotional content to ensure it is not misleading (Ortová et al., 2023). This approach is important because formal regulations are often slow to be adopted or lack specificity in dealing with AI virtual entities, so guidelines developed by marketing associations or industry bodies can serve as a practical bridge until regulations follow. Ethical issues in using VIs cover three main domains: responsibility for messages and claims, commercial control transparency and disclosure, and consumer protection against manipulation through authentic-looking virtual personas. Key stakeholders–creators, brands, social media platforms, and regulators–are all involved and have different roles in ensuring that using Virtual Influencers (VIs) remains ethical. Future studies must examine how regulations and industry guidelines are effective, how perceptions of ethics differ across cultures, and how internal and external accountability can be designed to comply with local norms and applicable laws.

Transparency and Disclosure Practices

Transparency in the context of virtual influencers serves as an important tool for reducing perceptions of manipulation and increasing the legitimacy of marketing communications. One aspect of transparency is disclosing that the influencer is not real and that the content posted may be part of a commercial collaboration, advertisement, or paid endorsement. A recent systematic study shows that disclosures such as "disclaimers" or "#advertisement" increase perceptions of influencer honesty and credibility, thereby strengthening consumer trust in brands (Kim & Wang, 2023). Experiments manipulating the variables of visibility and clarity of disclosure found that very clear disclosure placed at the beginning of the content (early disclosure) tends to reduce the likelihood of consumers feeling deceived and reinforces the positive effects on purchase intent and engagement (Cicco et al., 2021). Prominent disclosures (e.g., large sponsorship labels or clear text) can indeed reduce the effectiveness of advertisements by reducing the element of "surprise" or "novelty." Still, they can increase perceptions of transparency and long-term trust (Cicco et al., 2021).

The disclosure effect is not always positive or linear. A study by Jayasingh et al., (2025) observed that VIs with a "medium-realistic" image (between cartoon and human-like) are more sensitive to the form of disclosure. Suppose the disclosure is too conspicuous or placed too early without an aesthetic context. In that case, this can reduce visual appeal and disrupt the fantasy elements that are part of Virtual Influencers (VIs) appeal, thereby decreasing purchase intent. This study links this effect to the uncanny valley theory, in which near-human but imperfect resemblance can trigger aesthetic discomfort if individuals are forced to realize that the VI is artificial (Jayasingh et al., 2025). Additionally, there is evidence that vague or delayed disclosure (e.g., in the comments or description after a few seconds) can hurt credibility, as consumers may feel that such transparency is merely a formality or a marketing ploy (Kim & Wang, 2023). The placement of disclosure, whether textual or visual, the timing, and the visual appearance of the disclosure label all influence consumers' perceptions of honesty, authenticity, and purchase intent or continued engagement (Cicco et al., 2021; Kim & Wang, 2023).

In a cross-cultural context, studies show that tolerance for overly explicit disclosure varies across cultures. Consumers in cultures with high privacy norms or sensitivity to advertising may appreciate clear disclosure, while in more liberal or expressive cultures, a slight element of mystery or aesthetics may be considered part of the appeal of digital content and virtual influencers (Jayasingh et al., 2025). Thus, the effectiveness of disclosure greatly depends on how this practice is aligned with cultural expectations, communication platforms, and the type of content presented.

Overall, transparency and disclosure practices in using VI have a dual role: as protection against negative perceptions and as an element of legitimacy that can strengthen trust relationships with audiences. However, to maximize its benefits, disclosure must be carefully designed–paying attention to clarity, timing, visibility, aesthetic appropriateness, and cultural sensitivity–to not interfere with the virtual persona's aesthetic appeal and positive communication effects.

METHODS

This study uses a Systematic Literature Review (SLR) approach to examine the authenticity, transparency, ethics, and cultural dynamics associated with Virtual Influencers (VIs) and their influence on consumer trust and engagement. The review process was conducted in several structured stages to ensure accuracy and audit trail. An initial literature search of six international databases (Scopus, Web of Science, ScienceDirect, SpringerLink, Wiley, Taylor & Francis) yielded 1,284 articles. After removing 312 duplicate articles, 972 articles remained for title and abstract screening. At this stage, articles were evaluated based on their relevance to the research focus on authenticity, consumer engagement, human likeness, communication ethics, and transparency in Virtual Influencers. A total of 653 articles were eliminated because they were not relevant to the study topic.

The next stage was a full-text assessment, in which 319 articles were analyzed in greater depth. At this stage, the following inclusion criteria were applied: (1) published between 2010 and 2025, (2) from reputable journals and peer-reviewed, (3) in English, and (4) focusing on consumer behavior in the context of VI, rather than on technical aspects of CGI or system engineering. Quality criteria were also used to ensure the eligibility of articles, including: clarity of research objectives, accuracy of method design, transparency of analysis procedures, relevance of findings to research variables, and consistency. From this quality selection process, 47 articles met all criteria and were designated as the final sample for thematic analysis. These articles were then categorized into four core themes according to the research focus: (1) Authenticity of Virtual Influencers (true-to-ideal, true-to-self, true-to-fact), (2) Transparency and Disclosure in marketing communications, (3) Human-likeness and parasocial engagement mechanisms, and (4) Variations in consumer responses based on cultural context and generation (Moher et al., 2010).
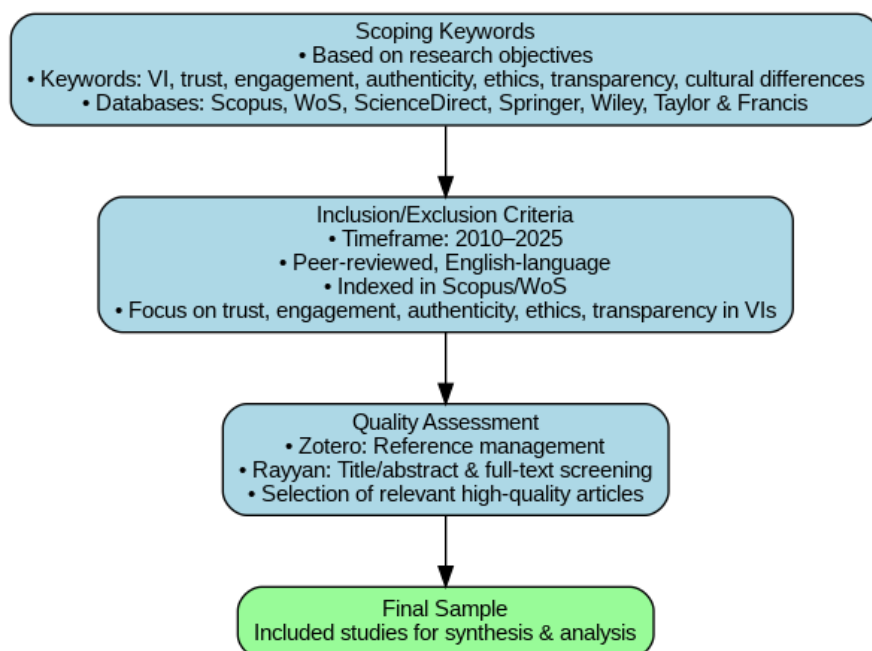

Figure 1 study slection overview

Figure 1 shows the four main stages in the study selection process. First, the scoping keywords stage, which is based on the research objectives with keywords such as virtual influencer,

consumer trust, engagement, authenticity, ethics, transparency, and cultural differences. This process is applied in reputable international databases, including Scopus, Web of Science, ScienceDirect, SpringerLink, Wiley Online Library, and Taylor & Francis. Second, the inclusion/exclusion criteria stage, which sets limits on the publication period (2010–2025), language (English), peer-reviewed status, and relevance to the research focus on the issues of authenticity, ethics, transparency, and consumer engagement in the context of Virtual Influencers (VIs). Third, the quality assessment stage uses reference management tools (Zotero) and article screening through Rayyan, at the title, abstract, and full text levels, to ensure that only high-quality articles are included. Fourth, the final sample stage displays the final number of articles selected for synthesis and thematic analysis.

The use of such a selection framework allows research to not only maintain academic credibility, but also to rigorously filter the literature so that the synthesis results truly focus on relevant issues. Thus, the final report can provide a comprehensive knowledge map regarding authenticity, ethics, and transparency in marketing using VIs, while highlighting research gaps that are still open for follow-up (Snyder, 2019; Tranfield et al., 2003).

RESULT

A systematic review of international literature on virtual influencers (VIs) reveals that issues of authenticity, ethics, transparency, and consumer engagement are the main focus of recent research. Findings from various studies show complex dynamics: on the one hand, virtual influencers (VIs) are able to generate high engagement through human-likeness, storytelling, and interactivity; but on the other hand, limitations in terms of authenticity and clarity of disclosure often raise doubts about their credibility (Koles et al., 2024; Song et al., 2024). Comparisons between VIs and human influencers reveal significant differences in how consumers build trust, largely influenced by cultural context and level of technology acceptance (Rizzo et al., 2025). Generational aspects also play an important role, with Gen Y placing more emphasis on informational value, while Gen Z is more interested in the entertainment value conveyed by VIs (Lin et al., 2024).

The study also highlights the importance of disclosure and transparency. Explicit disclosure communicated directly by influencers has been shown to increase trust and engagement, compared to vague disclosure or disclosure by third parties (Cao & Belo, 2024). This is reinforced by ethical studies that emphasize the responsibility of brands in managing VI messages so that they do not appear manipulative (Kim & Wang, 2023). To provide a more structured overview of the research findings, the following table summarizes 20 relevant major studies. This summary contains information on research methods, study focus, and key findings related to authenticity, ethics, transparency, and consumer engagement in the context of cross-cultural use of Virtual Influencers (VIs).

The results of the literature review show that virtual influencers (VIs) have created a new paradigm in digital marketing that triggers complex dynamics between authenticity, disclosure/transparency, anthropomorphism, and cultural context, all of which affect consumer trust and engagement. First, the discourse of authenticity in the context of VIs appears to have a different nuance compared to human influencers because VIs are digital entities that do not have a real physical existence.

Table 1 Summary of Prior Research on Virtual Influencers

Author's	Methode	Research Focus	Main Findings
Koles et al., (2024)	Qualitative study (interviews & content analysis)	VI Authenticity in the Metaverse	Three manifestations of authenticity: true-to-ideal, true-to-self, and true-to-fact. Consumers assess authenticity through narrative and aesthetics.
Song et al. (2024)	Quantitative experiment	VI vs. Human Influencers	Influencer influencers decrease perceptions of brand authenticity. Good

			disclosure can partially mitigate the negative effects.
Ju et al. (2024)	Experimental design	Interaction of authenticity and human-likeness in VI communication	Higher perceived human-likeness increases authenticity and trust, enhancing persuasive impact and consumer engagement.
Shen (2025)	Experiment (VI interactivity)	VI Interactive Effectiveness	Intentional engagement interactions increase engagement more than incidental interactions.
Cao & Belo (2024)	Experimental and empirical study (field & lab data)	Effects of explicit sponsorship disclosure on user engagement	Explicit sponsorship disclosure increases user trust and engagement when perceived as honest and non-intrusive, though excessive disclosure may reduce emotional connection.
Gerlich (2023)	Conceptual study (literature-based)	VI & Consumer Behavior	Transparency about the nature of influencer influencers reduces skepticism and increases consumer trust.
Kim & Wang (2023)	Regulatory analysis & experiment	VI Disclosure & Ethical Responsibility	Clear disclosure reduces the impression of manipulation. Brands need to be accountable for their influencer messages.
Rizzo et al. (2025)	Empirical cross-cultural study	Cultural influences on consumer perception and trust toward Virtual Influencers (VI)	Cultural orientation influences VI authenticity perception–collectivist users value social connection, while individualists emphasize creativity and self-expression
Lin et al. (2024)	Quantitative survey	Impact of VI on Gen Z engagement	Social and parasocial presence enhance engagement and purchase intention; human-likeness boosts authenticity and trust.
Lou & Yuan (2019)	Quantitative survey	Trust in Branded Content Influencers	The credibility and value of influencer messages increase consumer trust in branded content.
Marwick (2013)	Concept analysis & digital ethnography	Celebrity & Branding in Social Media	The concept of authenticity on social media is often a performative construct, not a personal reality.
Appel et al. (2020)	Literature review	The Future of Social Media Marketing	Social media will increasingly be dominated by AI-driven branding, including virtual influencers.
Belanche et al. (2021)	Survey experiment	Follower Reactions to Influencers	Disclosure and engagement influence brand attitude and consumer trust in influencers.
Ki et al. (2020)	Quantitative survey	Influencers as Human Brands	Influencers fulfill followers' social needs, generating engagement and positive marketing outcomes.
Alvino et al. (2020)	Systematic Literature Review (SLR)	Intellectual Capital & SDGs	Provides a methodological framework for relevant SLR in VI marketing research.
Veirman et al. (2017)	Quantitative experiment	Followers & Brand Attitude	The number of followers and product suitability influence consumer attitudes toward brands.
Reinikainen et al. (2020)	Quantitative survey	Parasocial Relationships & Trust	Audience comments strengthen the effect of parasocial relationships on influencer trust.

Sokolova & Kefi (2020)	Quantitative survey	Credibility & Parasocial Interaction	The credibility and parasocial interactions of influencers increase consumer purchase intention.

According to highly authoritative research, the adaptation of the Entity-Referent Correspondence (ERC) theory allows for an understanding of three important types of authenticity: true-to-ideal (consistency with ideal public values and aesthetics), true-to-fact (accuracy of background and verifiable facts), and true-to-self (consistent expression of internal motivations and values) (Koles et al., 2023). In-depth qualitative studies found that many consumers and practitioners view authenticity primarily from visual narratives and character design–for example, persona background, visual style, how the VI identity is described or presented as a "virtual influencer" in social media profiles and posts–as key indicators of true-to-ideal and true-to-self authenticity. At the same time, true-to-fact is often difficult to achieve because virtual personas lack a childhood history, real human experiences, or independent physical existence (Koles et al., 2024).

Other studies reinforce that the effect of humanlikeness–that is, how similar the appearance or behavior of a VI is to that of a human–has a positive correlation with perceptions of authenticity and engagement, especially when storytelling is consistent. Interactions are intentional, not just incidental (e.g., simply posting without actively responding to comments) (Stein et al., 2024). However, a study conducted by Song et al. (2024) in the article "The negative effect of virtual endorsers on brand authenticity and potential remedies" warns that using VIs as endorsers can lead to lower perceptions of authenticity compared to human influencers. This is especially true when the virtual identity is not clearly communicated, or when the persona is too perfect or artificial without any visual or narrative "imperfections" that give a human touch (Song et al., 2024).

The literature consistently shows that transparency or disclosure is mediating between VI attributes such as authenticity and anthropomorphism and consumer trust. Explicit disclosure explaining that the influencer is virtual or that the content is sponsored/advertising reduces feelings of deception and increases trust (Kim & Wang, 2023). Research by Gerlich (2023) also found that transparency is a critical element in building VI credibility and reducing consumer skepticism towards commercial messages (Gerlich, 2023; Kim & Wang, 2023). Many studies confirm that the effect of disclosure is not absolute–it greatly depends on how and when the disclosure is made. In an experimental study by (Cao & Belo, 2024), for example, disclosure of sponsorship by the influencer (VI or human) was more effective in increasing engagement and perceptions of authenticity than vague disclosures or disclosures by third-party platforms. If disclosure is placed too early or is overly explicit, some consumers report that the entertainment and aesthetic elements of the content are diminished, which can reduce the appeal of VIs for those who enjoy the illusion and creativity of visual or narrative content (Shen, 2025). Anthropomorphism and visual creativity emerge as trust and engagement enhancers. The study "Fake human but real influencer: the interplay of authenticity and humanlikeness in Virtual Influencer communication?" found that VIs with a high degree of human resemblance in visual appearance and humanlike communication style (including emotional expressions, use of pronouns, and text elements in posts) had higher average engagement; however, the study also highlights that less human-like VIs sometimes express positive emotions more strongly as a compensatory effort (visually unrealistic VIs use expressive language or more emotional communication styles to remain attention-grabbing) (Ju et al., 2024).

Recent quantitative research by Jayasingh et al. (2025) clarifies that source credibility and humanlikeness of VIs influence engagement, and that engagement itself mediates the relationship between VI attributes (such as informativeness and entertainment value) and consumer purchase intention. In other words, consumers may feel interested and interact (engagement) first, then consider purchasing, depending on how authentic and credible the VI is perceived to be (Jayasingh et al., 2025). Cultural context has also been shown to be significant as a moderator in many of these relationships. The study "Virtual vs. human influencer: Effects on users' perceptions and brand outcomes" states that in a sample of a society with high technology adoption, consumers did not show a significant negative reaction to influencers known to be virtual, as long as the VI had a high degree of human likeness and an effective communicative style (Rizzo et al., 2025). Meanwhile, in China, there are differences in the behavior of Generation Y and Generation Z: Gen Y is more

influenced by the informative aspects of content, while Gen Z responds more to the entertainment and social experience dimensions of VI content, especially when the interaction is immersive or interactive (Lin et al., 2024). Study participants also cited the uncanny valley effect as a significant obstacle: the more a VI attempts to mimic human appearance completely, the greater the risk that minor imperfections (skin tone, facial expressions, gestures) will cause discomfort for consumers; this condition can reduce trust and engagement if the expected human differences are not met (Koles et al., 2024). This relationship is exacerbated if disclosure is not sufficiently clear that the persona is virtual, so consumers may feel that there is deception or hidden manipulation (Song et al., 2024).

From an ethical standpoint, the literature continues to emphasize that manipulative representations–such as hidden endorsements or undisclosed sponsored content–lead to higher skepticism and can damage brand credibility. Exploratory studies show that brands must take moral and practical responsibility to transparently explain the identity of VIs, comply with local and global regulations, and avoid practices that could be considered deceptive to consumers (Kim & Wang, 2023). Model konseptual baru dari studi-tinjauan literatur (SLR) yang dirangkum dalam artikel "Authenticity, Ethics, and Transparency in Virtual Influencer Marketing: A Cross-Cultural Analysis of Consumer Trust and Engagement" menampilkan Virtual Influencer Trust and Engagement Model (VITEM). A new conceptual model from a literature review (SLR) summarized in the article "Authenticity, Ethics, and Transparency in Virtual Influencer Marketing: A Cross-Cultural Analysis of Consumer Trust and Engagement" presents the Virtual Influencer Trust and Engagement Model (VITEM). This model positions consumer trust as a mediator between VI attributes (particularly authenticity and transparency/disclosure) and consumer engagement as the main outcome, moderated by the cultural context that influences sensitivity to disclosure, aesthetics, and virtual persona expression. Although many studies show positive results regarding the ability of VI to increase engagement and potential trust, it was found that most studies are still cross-sectional, meaning that they only capture a snapshot of consumer perceptions at a single point in time, without taking into account how trust and engagement may change over time or adapt to increased exposure to VI (Khalfallah & Keller, 2025). The lack of longitudinal research and cross-cultural experimental studies examining combinations of attributes such as authenticity, disclosure, anthropomorphism, and aesthetics is also an important gap (Ju et al., 2024; Khalfallah & Keller, 2025).

The standardization of measurement instruments is still weak: definitions of authenticity, disclosure, trust, and engagement may differ across studies, and measurement methods–whether scales, question content, or cultural samples–are not yet harmonized, making direct comparisons and future meta-analyses difficult (Ju et al., 2024; Koles et al., 2024). The aesthetic and visual aspects of disclosure (e.g., how visual imperfections are presented, how aesthetic effects influence perception, or how visual disclosure compares to verbal disclosure) are also relatively under-explored, especially in non-Western contexts such as Southeast Asia, Africa, and Latin America (Ju et al., 2024; Khalfallah & Keller, 2025). The findings from these studies conclude that the factors of authenticity, transparency/disclosure, anthropomorphism, and visual aesthetics, together with cultural context, shape consumers' perceptions of trust and engagement with VIs. However, these effects are not universal, and there is a trade-off between the need to maintain the illusion of aesthetics and storytelling (which makes VIs appealing) and the need for clear ethics and transparency. In the context of regulation and marketing practices, this means that brands, creators, and platforms must collaborate to formulate more concrete, culturally inclusive guidelines that take into account the aesthetics and uniqueness of local audiences, so that the use of VIs can be effective and remain trusted by consumers.

DISCUSSION

Authenticity of Virtual Influencers

Authenticity is one of the most crucial dimensions in determining the level of consumer trust in virtual influencers (VIs) (Khalfallah & Keller, 2025; Lou & Yuan, 2019). The main findings of this study indicate that the authenticity of VIs cannot be understood solely by traditional

parameters that apply to human influencers, but rather has a unique form of manifestation. Based on the Entity-Referent Correspondence (ERC) theory, authenticity can be divided into three categories: true-to-ideal, true-to-self, and true-to-fact (Koles et al., 2024). Of these three categories, VIs tend to excel in the true-to-ideal and true-to-self dimensions, but face challenges in the true-to-fact dimension because they are not inherently real entities. The tendency of consumers to assess authenticity through aspects of narrative, visual aesthetics, and consistency of the VI persona shows that authenticity in the digital context is more a result of symbolic construction than a representation of factual reality. This is in line with the argument that authenticity on social media is performative–built through consistency in communication and digital appearance, rather than based on actual biographical facts (Marwick, 2013). In other words, consumers do not demand the real truth of VI identity, but rather the integrity and connection between the values, narratives, and aesthetics presented. This finding has important implications for brand strategy. If authenticity can be perceived through narrative and aesthetic consistency, then companies can design their VI in such a way that it aligns with the values promoted by the brand without having to prove the factual authenticity of the persona (Hamby et al., 2019). This provides ample room for creativity, but also poses a risk if the narrative constructed is inconsistent. Inconsistencies in the presentation of digital identity can damage consumer trust, as the public is increasingly sensitive to inconsistencies in digital representation (Lou & Yuan, 2019). Therefore, maintaining the coherence of digital identity is key to preserving authenticity.

Recent research in China confirms that strong storytelling and human-like visual features increase perceptions of authenticity and audience engagement (Stein et al., 2024). Narratives that are integrated with character design not only give a realistic impression but also build emotional closeness between the VI and the audience. This phenomenon shows that digital authenticity is not about "reality" in the material sense, but rather about plausibility–whether the VI persona can be accepted by the public as a consistent and relatable figure. Other studies remind us of the negative consequences if authenticity is not managed properly (Edwards, 2010). Experimental research has found that the use of VIs as endorsers can actually reduce perceptions of brand authenticity compared to human influencers, especially when consumers feel that the virtual identity is presented artificially or is not transparent (Song et al., 2024). This reveals a paradox: even though consumers do not demand factual reality, they remain sensitive to the impression of manipulation. In other words, perceived authenticity is not the same as "reality," but is rooted in transparency, coherence, and consistency. Discussions about VI authenticity cannot be separated from the psychological context of the audience. Studies show that perceptions of authenticity are formed when consumers experience intentional interactions with VIs, for example through replies to comments or narratives that seem personal (Shen, 2025). This type of interaction reinforces the impression that VI has a consistent personality, thereby increasing trust and emotional engagement. This means that authenticity does not only depend on static narratives, but also on the dynamics of interactions that affirm the existence of VI's "character" in the digital space.

From a branding perspective, this confirms that VI authenticity is relational, not just an inherent attribute. Consumers construct authenticity through their own experiences interacting with digital personas. Therefore, brands must ensure that VI narratives, aesthetics, and interactions are integrated into a consistent communication strategy. If one of these elements fails to be maintained, consumer trust can be disrupted (Bozic, 2017). This finding also opens up a discussion about the relevance of factual authenticity in the digital age. If authenticity is no longer measured by biographical truth, but rather by narrative coherence, then the presence of VIs actually challenges the conventional understanding of authenticity in marketing communications. Recent studies even state that VIs can be considered authentic as long as they meet audience expectations regarding consistency in values and communication style, even if they are entirely fictional (Jayasingh et al., 2025). Thus, the concept of authenticity in the context of VI undergoes an epistemological shift: from fact-based to perception- and consumer experience-based. In conclusion, VI authenticity is a digital construct built through three main dimensions–true-to-ideal, true-to-self, and true-to-fact (Vo et al., 2024). Weaknesses in the factual dimension do not prevent VI from being perceived as authentic, as long as the consistency of the narrative, aesthetics, and interaction is maintained. However, challenges arise when consumer perceptions shift from "relatable" to "manipulative,"

which can reduce trust in brands that use VI. Therefore, VI-based communication strategies must focus on creating a coherent, transparent, and consistent digital identity (Kim & Kim, 2025). This approach not only maintains authenticity but also strengthens consumer engagement in a sustainable manner.

Transparansi and Disclosure

The findings of this study confirm that transparency and disclosure are determining factors in consumer trust in virtual influencers (VIs). In this context, transparency refers to the extent to which brands or creators clearly disclose the non-human identity of VIs to their audience. Effective disclosure plays an important role in reducing consumer skepticism while maintaining emotional engagement (Hollebeek & Macky, 2019). However, the results of the study show that the dynamics are not simple: excessive openness and overly vague openness both cause problems in audience perception. Disclosure that is too vague creates a manipulative impression, as the audience feels deceived when they later discover that the figure they are following is not a real human being (Kim & Wang, 2023). This undermines trust and has the potential to damage the credibility of both the VI and the brand behind it. Conversely, overly explicit disclosure can damage the audience's immersion in the VI's creative narrative. When consumers are reminded too often that the VI is just a digital construct, the emotional appeal and closeness that has been established can diminish (Cao & Belo, 2024). In other words, effective transparency requires balance: clear enough to prevent the impression of manipulation, but subtle enough not to undermine emotional engagement. This finding is consistent with the understanding that authenticity in social media is performative, not a representation of biographical facts (Marwick, 2013). In the case of VI, transparency is not about revealing all the technical details about the "unreality" of the figure, but rather about how the brand maintains a consistent and trustworthy digital identity. By maintaining this consistency, consumers are more likely to accept the disclosure of information without losing their sense of connection to the VI persona.

An important implication for brands is the need to integrate disclosure strategies into their creative communication frameworks. Disclosure should not be a standalone disclaimer, but rather part of a narrative that reinforces VI's identity. For example, the disclosure of digital identity can be packaged through natural storytelling, so that the audience feels connected to the persona without feeling deceived. This approach is in line with Gerlich (2023) findings, which show that creatively managed transparency can increase trust while maintaining engagement. In practical terms, brands face a strategic dilemma: the more transparent they are, the lower the risk of accusations of manipulation, but the greater the risk of losing emotional closeness. Conversely, the less disclosure there is, the higher the short-term engagement, but the greater the risk of backlash when the facts about VI's identity are revealed. Therefore, disclosure strategies must be sensitive to the context of the audience and the objectives of the campaign. In more critical markets, a relatively high level of openness is necessary to maintain trust; whereas in contexts that are more open to digital experimentation, subtle disclosure can be more effective in maintaining narrative appeal.

From a scientific perspective, these findings expand our understanding of the relationship between transparency and authenticity. If authenticity is understood as the coherence of digital identity (Koles et al., 2024), then transparency is the mechanism that ensures that coherence remains acceptable to the audience. Transparency is not merely "acknowledging facts," but a strategic tool to maintain the performativity of authenticity so that it is not disrupted by manipulative perceptions. Thus, transparency and disclosure should be viewed not only as an ethical obligation but also as an essential branding strategy. Overall, this discussion emphasizes that transparency in VI is not about how many facts are disclosed, but about how disclosure is communicated consistently with the narrative, aesthetics, and positioning of the brand.

Antropomorfisme and Human-Likeness

The aspect of anthropomorphism or human-likeness emerges as one of the main determinants in shaping consumer engagement with virtual influencers (VIs). The findings of this study indicate that the more VIs display human characteristics–whether in terms of visuals, behavior, or interaction–the easier it is for audiences to build parasocial interaction, which in turn

strengthens trust and engagement (Stein et al., 2024). Anthropomorphism allows VIs to be perceived as more relatable, so that consumers treat them like real social figures, not just digital entities (Stein et al., 2024). Further research confirms that human-likeness plays a dual role: first, it increases the perception of authenticity because consumers perceive VIs as entities with consistent identities and narratives; second, it strengthens engagement through emotional closeness that resembles parasocial relationships with human influencers (Jayasingh et al., 2025). Strong storytelling also reinforces the anthropomorphism effect, as audiences not only see physical similarities but also perceive a digital personality that is coherent with the VI's positioning (Stein et al., 2024). Anthropomorphism is not without risk. The uncanny valley phenomenon becomes a challenge when VIs look too human-like but are not yet fully perfect in their expressions, movements, or interactions. This condition actually causes discomfort, reduces trust, and even decreases the effectiveness of brand communication (Song et al., 2024). This means that the creation of VIs needs to balance realism and fantasy: realistic enough to trigger closeness, but still maintaining artistic elements so as not to cause the uncanny effect (Kätsyri et al., 2015).

These findings are consistent with the Entity-Referent Correspondence (ERC) framework, which asserts that authenticity in social media is more performative than factual representation (Koles et al., 2024). Thus, the success of anthropomorphism is not determined by how realistically VIs resemble humans, but rather by how consistently they maintain the coherence of their digital identities. Authenticity in social media is the result of performative construction (Marwick, 2013). In the context of VIs, anthropomorphism becomes the medium of this performativity, as long as the narrative and aesthetics are maintained consistently. The practical implication of these findings is that brands need to adopt design strategies that prioritize functional human-likeness, not total realism. Human-likeness that is too extreme actually increases the risk of the uncanny valley, while designs that are too artificial can reduce consumer trust (Chae & Kim, 2026). Therefore, the creation of VI must maintain a balance between realistic and creative fantasy dimensions to maintain audience engagement. This strategy is also in line with global trends where consumers, especially the younger generation, value cohesive and creative digital identities more than mere representations of humans (Lin et al., 2024). These results expand the discussion on the relationship between anthropomorphism, authenticity, and trust. If authenticity in VI is understood as digital identity coherence (Koles et al., 2024), then anthropomorphism is an instrument that strengthens this coherence through human-like traits that consumers can perceive. However, if anthropomorphism exceeds the optimal point and creates an uncanny valley, then that coherence is disrupted, and consumer trust may decline (Song et al., 2024). This discussion emphasizes that human-likeness is not merely a technical aesthetic issue, but a strategic issue that determines whether a VI is perceived as an authentic entity or as a digital construction that fails to maintain identity cohesion. For brands, the balance of anthropomorphism is key: sufficient to build emotional connections, but not to the point of sacrificing audience comfort.

Socio-Cultural and Generational Context in the Perception of Virtual Influencer

The effectiveness of virtual influencers (VIs) cannot be separated from the socio-cultural and generational context of the audience. The findings of this study indicate that acceptance of VIs is influenced by the level of technological readiness, value preferences, and cultural frameworks in which consumers exist. Cross-country studies confirm that societies with high levels of technology adoption are more receptive to VIs, while consumers from cultures that still emphasize human-based interpersonal interactions tend to be skeptical (Rizzo et al., 2025). This underscores that the construction of digital authenticity is not universal, but is always negotiated within a specific cultural framework (Marwick, 2013). PGenerational differences also play an important role. Recent research shows that consumers from Generation Y (Millennials) value the informative aspects offered by VI, such as content relevance and message reliability, while Generation Z emphasizes entertainment, interactivity, and creativity in VI narratives (Lin et al., 2024). The implication of these findings is that authenticity in VI must not only be narratively consistent (true-to-ideal and true-to-self), but also tailored to the preferences of different generations. In other words, digital identity consistency needs to be contextualized in order to meet the expectations of cross-segment audiences. Cultural context influences how consumers interpret the anthropomorphism and human-likeness of VIs. Consumers in collectivist cultures, such as East Asia, are more open to VIs

that represent shared social norms and emphasize harmony, while consumers in individualistic cultures, such as Western Europe and North America, value VIs more based on unique personality appeal and identity differentiation (Rizzo et al., 2025). These differences have implications for branding strategies: brands need to perform cultural tailoring in building VI personas to maintain digital identity coherence while remaining relevant to the target cultural context.

Generationally, Gen Z's tendency to emphasize entertainment and interactive engagement shows that digital authenticity for this group is closer to true-to-ideal and true-to-self, namely narrative coherence that matches their aspirations and relatable lifestyle representations (Yin et al., 2025). In contrast, Gen Y places greater emphasis on truthfulness, where consistency of information and credibility of messages are the main benchmarks for assessing trust in VI (Munsch, 2021). This difference in orientation shows that digital authenticity cannot be understood as a single category, but rather as a layered construct according to audience demographics. This finding also expands the theoretical framework of authenticity performativity from (Marwick, 2013). If authenticity is a negotiated performance in the digital space, then cultural and generational contexts function as an "audience frame" that determines the extent to which VI performance is perceived as authentic. VI that is consistent in terms of digital identity may be perceived as authentic in one cultural context but considered artificial in another. Similarly, performances that Gen Z finds engaging may be considered less informative by Gen Y. Therefore, digital identity coherence must be understood as an adaptive strategy that is responsive to the socio-cultural and generational diversity of the audience (Jayasingh et al., 2025).

The practical implication of this finding is the need for a segmentation approach in VI strategy. Brands cannot rely on a single narrative or aesthetic for all markets. Instead, sensitive adjustments to cultural values, generational expectations, and audience technology preferences are required. Cultural tailoring is not only a communication strategy, but also a prerequisite for maintaining long-term trust and engagement. Thus, brands need to design flexible yet consistent VI, maintaining the coherence of digital identity at the global level while allowing for local variations that are relevant to the audience (Shen, 2025). Academically, these findings expand the understanding of digital authenticity as a context-bound phenomenon. Authenticity is not a fixed quality of VI, but the result of interactions between digital narratives and the interpretive frameworks of cross-cultural and cross-generational audiences. This means that strategies for building digital authenticity must take into account the heterogeneity of global audiences, placing identity coherence as the foundation and adaptive flexibility as the implementation mechanism.

CONCLUSION

This study concludes that the effectiveness of virtual influencers (VIs) in digital marketing strategies is largely determined by four key dimensions, namely authenticity, transparency, anthropomorphism, and socio-cultural and generational context. First, authenticity has been proven to be a major factor influencing consumer trust, where the coherence of digital identity through narrative consistency, aesthetics, and positioning is more important than the biographical authenticity of the figure; this finding confirms that digital authenticity is performative and constructed in online social spaces. Second, transparency and disclosure are crucial elements in reducing skepticism and maintaining VI credibility, although brands must find a balance between openness and emotional immersion so as not to reduce audience engagement. Third, anthropomorphism and human-likeness play a significant role in building parasocial interaction, enhancing perceptions of authenticity, and strengthening engagement, although the uncanny valley risk demands a balance between realism and fantasy. Fourth, cultural and generational differences have been shown to influence the effectiveness of VI, with consumers from cultures with high technology adoption being more receptive to VI than traditional cultures, while Generation Y tends to emphasize the informative value and credibility of messages, and Generation Z emphasizes entertainment, interactivity, and creativity. Overall, this study confirms that the success of VI cannot be separated from adaptive strategies that place digital identity coherence as the foundation, transparency as a trust enhancer, anthropomorphism as an engagement driver, and cultural tailoring as the key to cross-context relevance. Thus, the practical implication for brands is the need to integrate these four dimensions in the design of VI-based marketing strategies to build

sustainable engagement, enhance brand credibility, and strengthen consumer purchase intent in an increasingly competitive digital landscape.

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