Center for Management Science Research
ISSN: 3006-5291 3006-5283 Volume 4, Issue 6, 2026

GEN Z AND THE VIRTUAL FEED: ASSESSING THE INFLUENCE OF SYNTHETIC AVATARS ON YOUTH PURCHASE INTENTIONS

Ahsan Tufail[*1], Dr. Omer Farooq[2]

[1,2]*Department of Business Administration, Air University (Multan Campus), Islamabad, Pakistan*

[*1]ahsantufail7@yahoo.com, [2]omer@aumc.edu.pk

DOI:https://doi.org/10.5281/zenodo.20732399

Keywords
Synthetic Influencers, Artificial Intelligence, Generation Z, Consumer Trust, Purchase Intention, AI Literacy, Social Media Marketing, and Structural Equation Modeling.

Article History
Received: 20 April 2026
Accepted: 31 May 2026
Published: 17 June 2026

Corresponding Author: *
Ahsan Tufail

Abstract
AI generated synthetic influencers are a game-changer in the digital marketing landscape, offering new opportunities and challenges for brands aiming to engage younger audiences. This research examines the effect of the key synthetic influencer attributes such as realism of the visual, perceived entertainment value, and congruence between the product and the avatar on the purchasing intentions of consumers in the generation Z by highlighting the mediating role of consumer trust. Furthermore, this study investigates the moderation of AI literacy between consumer trust and their purchase intention. The method used in collecting data is structured questionnaire and the techniques used in analyzing data are SPSS and AMOS technique (Structural Equation Modeling). It finds that consumer trust was significantly improved by the effect of the visual realism, perceived entertainment value and product-avatar congruence. The perceived entertainment value and product-avatar congruence also have significant direct positive effects on the purchase intention, while the visual realism does not directly affect the purchase intention. Consumer trust was determined to be an important mediator between all three synthetic influencing attributes and purchase intention, indicating its mediating effect on the relationship between positive perceptions and purchasing behavior. Moreover, the AI literacy effect is significant in moderating the correlation between consumer trust and purchase intention, highlighting the fact that the level of consumer trust is less important when consumers are more knowledgeable about AI. This study adds to the growing body of research on influencer marketing using AI by introducing the S-O-R model to the domain of synthetic influencers, and by recognizing consumer trust as a crucial psychological process in decision-making for purchases. The results offer insights for marketers and brand managers looking to craft successful synthetic influencer marketing campaigns that will appeal to Generation Z customers.

1. INTRODUCTION

1.1 Background of the Study

Social media influencers serve as digital opinion leaders by creating online videos labeled with personal information, opinions, and experiences that many users subscribe to. They also interact with brands to convey sponsored messages around the brand. Social media influencers have become increasingly trendy in recent years to entice large audiences to follow their accounts and manipulate audiences' attitudes, tastes, and purchases (Dencheva, 2024). An ever-adapt and grow approach to promoting a brand using influencers on social media. Among the new classes of social media influencers is the non-human influencer or digital influencer (VI),

which is a computer-generated personality that appears human and has human-like behaviors. Al influencers are virtual personas developed using artificial intelligence technology and have the ability to interact with consumers via social media platforms. Global influencer marketing was valued at around USD 24 billion in 2024 (Dencheva, 2024); the virtual influencer market was USD 4.6 billion in 2024, and it is estimated to increase by 38.9% to USD 8.3 billion by 2025 (Global Virtual Influencers Market Size and Outlook 2024). AI-powered non-humans have racked up huge followings and are gaining momentum as a tool for brands to promote themselves on social media. This proliferation of AI influencers brings several questions regarding the impact on engagement and intentions to buy the brand. Al influencers provide content control, an absence of scandals, and innovative storytelling, but their main disadvantages are the high cost of developing, a lack of credibility, and the challenge of executing new marketing campaigns. As a marketer as well as for academic researcherss, knowing what effect these new AI influencers might have and how "users" respond to them is therefore an important concern.

Rapid advancements in artificial intelligence (AI) and computer-generated imagery (CGI) are changing the influencers' marketing landscape in dramatic ways. One of the most prominent is the emergence of synthetic influencers, the virtual avatars created by Artificial Intelligence with personalities, fabricated lives, and huge social media accounts. Their main strategy was to use AI to create content that would resonate with the public, something that could be achieved through algorithmic precision, hyper-realistic aesthetics, and flawless visual storytelling, which is not the same as the conventional human influencers who rely on lived experiences and resonating content. The reason is that brands are allocating huge amounts of their marketing spend on these virtual archetypes all over the world because they are available 24/7, are protected from brand damage, and are extremely cost-effective.

At the same time, Generation Z (Gen Z) has become the main driver of today's digital commerce (Guerra-Tamez et al., 2024). Being born during the era of digital technologies, this generation heavily depends on platforms such as Instagram and TikTok for brand discovery, with considerable influence from Instagram influencers to make purchases. Gen Z, however, also has some distinctive behavioral characteristics: they are highly tech-savvy, have a keen sense of transparency, and have a psychological aversion to commercial artificiality (Guerra-Tamez et al., 2024). Their interaction with content on their social media is a psychological cocktail that artificial intelligence, novelty, and consumer skepticism meet and meld with these digitally native youth. Hence, the study of the impact of each of these media structural characteristics on consumer behavior is a necessary field for current marketers to research (Nguyen, 2026).

1.2 Problem Statement

As the use of synthetic influencers continues to rise, brands are facing a significant trust paradox when using them for younger audiences. This is because synthetic influencers are completely inauthentic, lacking the ability to experience products, authentic emotions, and organic accountability in structures (Wulandari, 2026). This naturalness can be interpreted as artificial and lead to consumer alienation, suspicion, or even psychological discomfort, which can dampen their buying potential, especially for generations like Gen Z who value rawness over anything else (Gohil, 2025; Wulandari, 2026). Marketers are yet to gain a comprehensive and empirically validated comprehension of the specific features of the synthetic avatar, be it their visual authenticity, entertainment value, or logical fit with a product, that can transcend this barrier of artificiality and instill consumer trust (Jayasingh et al., 2025). Companies might end up investing in synthetic media campaigns that turn off younger consumers rather than turn them into (potential) buyers without isolating these mechanisms (Guerra-Tamez et al., 2024).

1.3 Research Gap

The literature about social media marketing is rich, but unfortunately, there are two under-

addressed domains: synthetic media and younger target groups of consumers.

First, previous studies may focus on the conventional S-O-R human influence factors or on the AI tools as a whole, while empirical evidence has not been observed through a consistent S-O-R framework that constitutes the overall effect of synthetic visual realism, entertainment value, and product congruence on internal psychological trust for youth consumers (Nguyen, 2026).

Second, existing studies of virtual influencers often make the assumption that synthetic content is processed just like real content by all consumers. One cannot ignore the fact that consumer AI Literacy (Nguyen, 2026) is not included as a boundary condition. Whether a Gen Z consumer's technical understanding of AI algorithms buffers the deceptive feel of the virtual avatar or raises their skepticism – thus creating an important gap in predictive marketing models – is not fully understood yet (Guerra-Tamez et al., 2024).

1.4 Significance of the Study

The research offers great theoretical and applied value. Theoretically, it extends the scope of the traditional S-O-R paradigm and Source Credibility theories when using smart algorithms and non-human sources of information, outlining how the abstract properties of these technologies shape actual human behavior (Nguyen, 2026). From a practical perspective, findings from this research can be used to serve as an explicit blueprint for managing virtual endorsements to help digital marketers, brand managers, and social media strategists. It pinpoints exactly where synthetic media is effective, and where it isn't, enabling businesses to get the best return on investment (ROI) for their synthetic media products, whilst staying true to their brand in the eyes of demanding young viewers.

1.5 Objectives

This research aims to systematically overcome these problems with the following specific goals:

- To assess the individual and collective effect of the Visual Realism, Perceived Entertainment Value, and Product-Avatar Congruence of a synthetic avatar and how it influences Gen Z Consumer Trust (Jayasingh et al., 2025).
- To find the direct impact of Customer Trust towards the final purchase intentions of youth customers in the digital feed (Gohil, 2025).
- To explore the conditional moderating role of Consumer AI Literacy (CAL) in the relationship between, and pathways between, synthetic avatars' attributes and Consumer trust (Guerra-Tamez et al., 2024; Nguyen, 2026).

1.6 Intended Contribution

This research provides three major contributions to the literature. It successfully constructs a parsimonious, highly specialized conceptual model with new Digital Commerce concepts that specifically place Consumer Trust as the mediating psychological variable, and AI Literacy as the moderating variable, replacing the obsolete Digital Commerce explanations in the AI era. Moreover, it offers demographic detail by segmenting Generation Z and revealing their behavior minutiae, their digital literacy, and consumer psychology mechanics, particularly as they connect to automated marketing systems (Guerra-Tamez et al., 2024).

Finally, via the construction of the structural path pattern and based on the contemporary highly empirical literature, this paper offers a sound methodology for the assessment of using non-human brand ambassadors as a starting point for future research focused on longitudinal tracking within synthetic media analytics.

2. Literature Review

The theoretical background of the present study is based on Stimulus-Organism-Response (S-O-R), which was first proposed by Woodworth (1929) and also evolved by Mehrabian and Russell (1974). According to the S-O-R model, the external factors in the environment (Stimulus) can affect the internal cognitive and emotional processing (Organism) of the consumer, leading to behavioral options (Response) in the current

digital commerce and synthetic media landscape (Nguyen, 2026).

In this investigation, the environmental stimuli consist of the Visual Realism, Perceived Entertainment Value, and Product-Avatar Congruence (Jayasingh et al., 2025; Wulandari, 2026) of artificial brands in the form of avatars. The organismic state is the psychological shift toward becoming in Consumer Trust (Guerra-Tamez et al., 2024). But the end behavioural reaction is the Purchase Intention (Gohil, 2025) of the youth consumer itself. Moreover, this framework acknowledges that the cognitive shift from mechanical to full trust in the stimuli by the consumer is limited by what the individual considers as their psychological "gatekeeper" – their AI Literacy (Nguyen, 2026).

2.1Definition of Variables

2.1.1 Visual Realism (X1)

Visual Realism is considered to be a structural and aesthetic approach to building an artificially created Visual Persona of an "influencer" towards the human image, anthropomorphism, and physical (Moustafa & El-Kassas, 2024; Wulandari, 2026). It will make the difference between a cartoon-like computer-generated digital avatar and a body that looks as real as a human figure. This is the most crucial visual sensory characteristic that evokes relational and psychological assessments by the social media feed viewer (Wulandari, 2026).

2.1.2 Perceived Entertainment Value (X2)

Perceived Entertainment Value indicates the extent of aesthetic novelty experience, creativity in storytelling, situational playfulness, and escapism in a synthetic influencer's content as perceived by the social media users (Kim et al., 2024; Syam & Sharma, 2024). This variable can measure the Hedonism Value of an AVATAR's output and its focus-catching ability since synthetic media offers the liberty of visual scenarios that defy the laws of physics, and surreal stories can be told (Jayasingh et al., 2025).

2.1.3 Product-Avatar Congruence (X3)

The researchers borrow and adapt the classical Match-Up Hypothesis with reference to the congruence between the virtual influencer's image and the promoted product category, which the researchers call Product-Avatar Congruence (Li & Huang, 2024). Checks the credibility and contextual fit of the synthetic ambassador to promote any particular product (e.g., a cyber-streetwear ambassador to promote cyber clothing vs. organic wellness material) (Li & Huang, 2024).

2.1.4 Consumer Trust (M)

Consumer Trust refers to a psychological disposition in which consumers are willing to be vulnerable, reliant, and trustworthy with information from a brand representative, in terms of benevolence, truthfulness, and recommendations (Dmitrijeva & Batraga, 2024; Lin & Chang, 2023). Trust is constructed and developed in the case of non-human influencers, socially and cognitively, through the perception of transparency and consistency in the story (Guerra-Tamez et al., 2024).

2.1.5 AI Literacy (W)

AI Literacy is the minimum foundation knowledge, familiarity, and comprehension consumers may have with an AI algorithm, AI data generation systems, and the deep-learning content creation systems (Osei-Frimpong & McLean, 2023). It functions as a boundary condition, shaping how consumers cognitively process and evaluate algorithmic or synthetic marketing stimuli, and how this influences their response (Choudhury & Roy, 2024).

2.1.6 Purchase Intention (Y)

Purchase Intention is considered the dependent variable in this research, which is a consumer's conscious and rational cognitive plan, probability, and actual readiness to make a monetary transaction toward the purchase of a particular product or a product's brand promoted or developed by the Influencer (Sato & Takahashi, 2025; Moghavvemi & Huang, 2026).

2.2 Hypothesis Development

2.2.1 The Impact of Visual Realism on Consumer Trust & Purchase Intention

On social media, humanlike design elements are essential for creating psychological connections (Wulandari, 2026). Based on Social Presence Theory, the closer the synthetic influencer's physical appearance gets to hyper realism, the more the media diminishes psychological distance, creating a strong sense of a shared social presence (Wulandari, 2026). However, when Gen Z consumers perceive high realism in an avatar, it will activate source credibility schemas, which will lead them to respond warmly and benevolently to the avatar (Kim et al., 2024). High visual realism undermines the initial scepticism about the technologies, which pushes the avatar's personality towards the source credibility and structural believability (Moustafa & El-Kassas, 2024; Wulandari, 2026). On the other hand, if the avatar is not made structurally real, it could produce the "uncanny valley" effect, which could cause younger consumers to be turned off (Choudhury & Roy, 2024). Therefore, the study propose:

Hypothesis 1: Synthetic influencer Visual Realism has a significant positive impact on Consumer Trust.

Hypothesis 2: Synthetic influencer Visual Realism has a significant positive impact on Purchase Intention.

2.2.2 The Impact of Perceived Entertainment Value on Consumer Trust & Purchase Intention

Social media are essentially hedonic environments in which the novelty of what is being shared is what draws consumers' limited attention (Sato & Takahashi, 2025). The novelty hook is inherent in Virtual influencers as their surreal imagery, potentially allowing them to tell stories free of any restrictions, makes them difficult to ignore. This perceived playfulness and entertainment value of an AI's digital content directly correlate with the psychological engagement, as demonstrated by Jayasingh et al. (2025). The positively evaluated content acts as a cognitive heuristic when youth cohorts consume content with a high entertainment value, reducing the barriers to incoming commercial ads (Kim et al., 2024). This structural creativity is to a certain degree transferred from the consumer to the brand's good function and investment behaviour, as this is what is likely to be seen by the consumer as good function and trust in the thinking process (Lin & Chang, 2023). Thus, the researchers hypothesize:

Hypothesis 3: Perceived Entertainment Value of synthetic influencer content has a significant positive impact on Consumer Trust.

Hypothesis 4: Perceived Entertainment Value of synthetic influencer content has a significant positive impact on Purchase Intention.

2.2.3 The Impact of Product-Avatar Congruence on Consumer Trust & Purchase Intention

The link between the source and the message is a crucial element in the effectiveness of any endorsement model (Li & Huang, 2024). In synthetic space, consumers judge the automated entity if it is logically authorized to endorse an entity, such as product categories (Lou & Xie, 2023). Product endorsement seamlessly demonstrates the logical footprint of the brand's image and personality: If the image of the brand is a high-tech one, then the acceptance of the brand's product endorsement is smoother due to the context of the high-tech avatar, and the product endorsement would be more logical, such as a high-tech avatar brand advocating wearable. This congruence helps to minimize the cognitive dissonance for the consumer and decreases the likelihood that the posting is merely an algorithmic money-grab. (Lou & Xie, 2023). High match-up demonstrates that the informational value of the avatar is correct, and it further strengthens domain-specific expertise and trust (Jayasingh et al., 2025; Lin & Chang, 2023). This supports the hypothesis of:

Hypothesis 5: Product-Avatar Congruence has a significant positive impact on Gen Z Consumer Trust.

Hypothesis 6: Product-Avatar Congruence has a significant positive impact on Gen Z Purchase Intention.

2.2.4 The Mediating Role of Consumer Trust

The S-O-R model of stimulus-response states that any external stimuli must first change the internal emotional and cognitive experiences of the organism before a behavioral response can occur (Nguyen, 2026). Visual aspects, storytelling, and product fit draw eyes to a product but fail to convert the individual's attention into a sense of urgency to purchase without psychological confirmation (Jayasingh et al., 2025). According to Guerra-Tamez et al (2024), brand trust is the total predictor for transactions in youth cohorts. Trust serves as a crucial link between what is perceived as authentic in media and economic actions for Gen Z (Gohil, 2025; Wulandari, 2026). Consumer trust decreases any perceived concerns with virtual endorsements, which can lead to purchase intentions (Wong & Yazdanifard, 2024). Hence, the researchers state:

Hypothesis 7a: Consumer Trust significantly mediates the relationship between visual realism and purchase intention.

Hypothesis 7b: Consumer Trust significantly mediates the relationship between perceived entertainment value and purchase intention.

Hypothesis 7c: Consumer Trust significantly mediates the relationship between product avatar congruence and purchase intention.

2.2.5 The Moderating Role of AI Literacy

Consumers do not encounter any digitized marketing messages in isolation; they apply them to their already learnt digitally-empowered competencies (Osei-Frimpong & McLean, 2023). In this context, AI Literacy is an indispensable cognitive mediator (Nguyen, 2026). However, a Gen Z consumer who is highly AI literate would have a clear and comprehensive understanding of the processes and algorithms involved in the synthetic influencer, along with deep learning models and computational efficiency (Guerra-Tamez et al., 2024). This expert knowledge reframes how they see and interpret data stories and the cues they employ in telling and communicating visual stories (Osei-Frimpong & McLean, 2023).

For example, users who are very literate may not find the hyper-realistic image of their avatar weird and, as a result, will not be fooled by it (Choudhury & Roy, 2024). However, they may also review commercial content even more harshly in requiring data transparency and ethical disclosure as a precondition for granting their trust (Guerra-Tamez et al., 2024). The researchers argue that the baseline relationship between avatar characteristics and cognitive downstream trust depends on the underlying technological 'savviness' of a consumer:

Hypothesis 8: Consumer AI Literacy significantly moderates the relationship consumer trust and Purchase Intention.

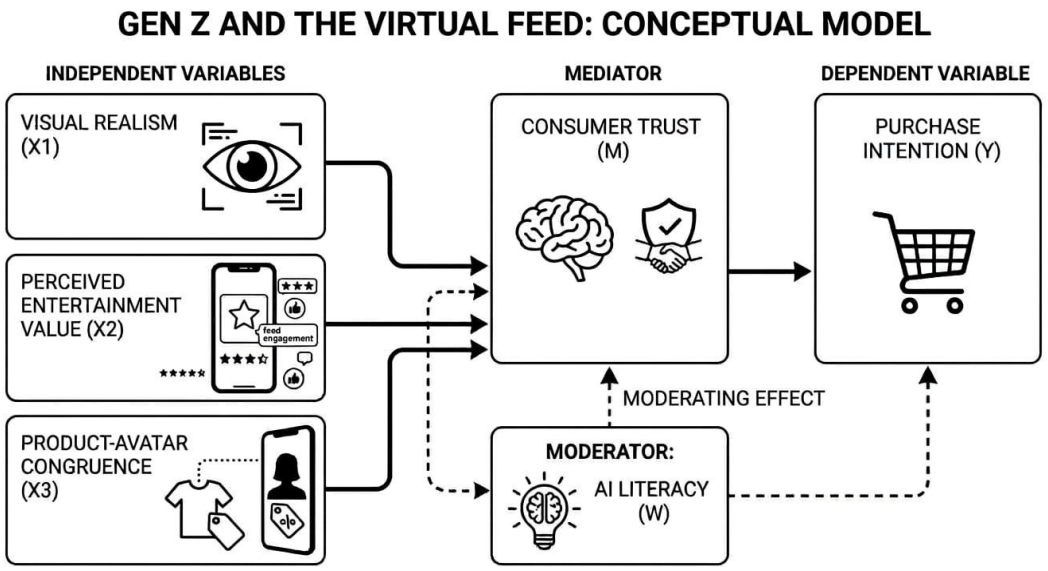

Figure 2.1The Conceptual Model

3. Research Methodology

3.1 Research Design

This study adopts a quantitative, cross-sectional research design to examine the effects of synthetic influencer characteristics on Generation Z consumers' purchase intentions. A survey-based approach was employed to collect data and test the proposed hypotheses using Structural Equation Modeling (SEM).

3.2 Sampling and Sample Size

The target population comprises Generation Z consumers aged 18–26 who actively use visual social media platforms for at least one hour daily. A combination of purposive and snowball sampling techniques was employed to recruit respondents.

The sample size was determined using the Item-to-Response Rule of Thumb proposed by Nunnally (1978) and Hair et al. (2010), which recommends a minimum of ten observations per measurement item:

$N = 10 \times k$

$N = 10 \times 30 = 300$

Accordingly, a minimum sample of 300 valid responses was targeted to ensure adequate statistical power for SEM analysis.

3.3 Instrumentation and Operationalization

Data were collected through a structured online questionnaire adapted from validated scales in the influencer marketing and consumer behavior literature. All items were measured using a five-point Likert scale ranging from 1 (Strongly Disagree) to 5 (Strongly Agree).

The study includes three independent variables: Visual Realism, Perceived Entertainment Value, and Product–Avatar Congruence; one mediating variable: Consumer Trust; one moderating variable: AI Literacy; and one dependent variable: Purchase Intent.

Data analysis was conducted using SPSS and AMOS. SPSS was used for data screening, descriptive statistics, and reliability analysis, while AMOS was employed for Confirmatory Factor Analysis (CFA) and Structural Equation Modeling (SEM).

The analysis was conducted in two phases. First, the measurement model was assessed

through reliability and validity tests, including Cronbach's Alpha, Composite Reliability (CR), Average Variance Extracted (AVE), and model fit indices. Second, the structural model was evaluated to test the proposed direct relationships, mediation effect of Consumer Trust, and moderation effect of AI Literacy. The mediation analysis was performed using bootstrapping with 5,000 resamples, while moderation was examined through interaction analysis. Statistical significance was evaluated at $p < 0.05$.

3.4 Ethical Considerations

Participation in the study was voluntary, and informed consent was obtained from all respondents prior to data collection. Respondents' anonymity and confidentiality were ensured, and all data were used solely for academic research purposes.

4. Data Analysis Findings and Discussion

4.1 Preliminary Data Analysis

To evaluate the psychometric properties, structural integrity, and validity of the measurement model prior to testing the structural hypotheses, a preliminary data analysis (was conducted.

Table 4.1 Preliminary Data Analysis

Construct	No. of Items	Mean	Skewness	Kurtosis	Cronbach's α	VIF
Visual Realism (VR)	4	3.29	-0.052	-0.288	0.841	1.018
Entertainment Value (PEV)	4	3.40	-0.010	-0.450	0.846	1.123
Product Congruence (PAC)	4	3.51	-0.224	-0.277	0.871	1.169
Consumer Trust (CT)	5	3.51	-0.377	-0.457	0.937	1.254
AI Literacy (AIL)	5	3.30	-0.129	-0.220	0.904	1.011
Purchase Intention (PI)	4	3.32	-0.271	-0.456	0.916	–

Assessment of Data Normality

Prior to evaluating the Confirmatory Factor Analysis (CFA) and structural modeling, the distributional properties of the dataset were examined to test the assumption of univariate normality. According to established psychometric thresholds (Hair et al., 2010; Kline, 2011), data is considered to follow a normal distribution if univariate Skewness values fall within -1 & 1. and Kurtosis values remain within -2 & +2. The empirical results demonstrate that Skewness values across all latent constructs range conservatively between the acceptable ranges which means data is statistically normal.

Scale Internal Consistency and Reliability

Construct reliability was assessed using Cronbach's alpha coefficients to confirm the internal consistency of the multi-item measurement scales. Following the psychometric convention outlined by Nunnally (1978), an alpha value equal to or exceeding 0.70 signifies acceptable instrument reliability. The diagnostic analysis reveals that all observed constructs exceed this threshold. These indicators guarantee that the survey instruments are stable, reliable, and fundamentally free from random measurement errors.

Multicollinearity Diagnostics and Discriminant Validity

To secure the structural validity of the measurement framework and ensure that the latent constructs are distinct from one another, collinearity diagnostics were executed. Discriminant isolation is statistically confirmed when the Variance Inflation Factor (VIF) falls safely below the conservative threshold of 3 (safer range). Moreover, the matching Tolerance values remain comfortably above 0.10. The diagnostic matrix yields excellent parameters, with VIF scores peaking at merely 1.254 for Consumer Trust and dropping to a minimum of 1.011 for AI Literacy. The lack of shared variance inflation indicates that the model is entirely clear of multicollinearity distortions. This confirms

robust discriminant validity, certifying that each construct uniquely isolates and explains variance within the conceptual framework

4.2 Discussion of Findings

Following the confirmation of a robust and valid measurement model through Confirmatory Factor Analysis (CFA), Structural Equation Modeling (SEM) was performed to evaluate the hypothesized structural relationships. While CFA establishes the link between observed indicators and their underlying latent factors, SEM evaluates the direct, indirect, and interactive pathways among the latent constructs themselves. This multivariate analytical technique allows for the simultaneous estimation of multiple regression equations, making it uniquely suited for testing complex models that incorporate independent variables, a primary psychological mediator (Consumer Trust), and an environmental moderator (AI Literacy).

Table 4.1 SEM Analysis / Path Coefficients

H#	Path / Relationship	Beta (β)	p-value	Result
H1	Visual Realism →Consumer Trust	0.119	0.035	**Supported**
H2	Visual Realism →Purchase Intention	0.000	0.865	**Not Supported**
H3	Perceived Entertainment Value →Consumer Trust	0.290	< 0.001	**Supported**
H4	Perceived Entertainment Value →Purchase Intention	0.116	< 0.001	**Supported**
H5	Product-Avatar Congruence →Consumer Trust	0.351	< 0.001	**Supported**
H6	Product-Avatar Congruence →Purchase Intention	0.207	< 0.001	**Supported**
H7a	Visual Realism →Consumer Trust →Purchase Intention	*See H1 & H7*	< 0.001	**Supported (Mediation)**
H7b	Entertainment Value →Consumer Trust →Purchase Intention	*See H3 & H7*	< 0.001	**Supported (Mediation)**
H7c	Product-Avatar Congruence →Consumer Trust →Purchase Intention	*See H5 & H7*	< 0.001	**Supported (Mediation)**
H8	AI Literacy X Consumer Trust →Purchase Intention	-0.796	< 0.001	**Supported (Moderation)**

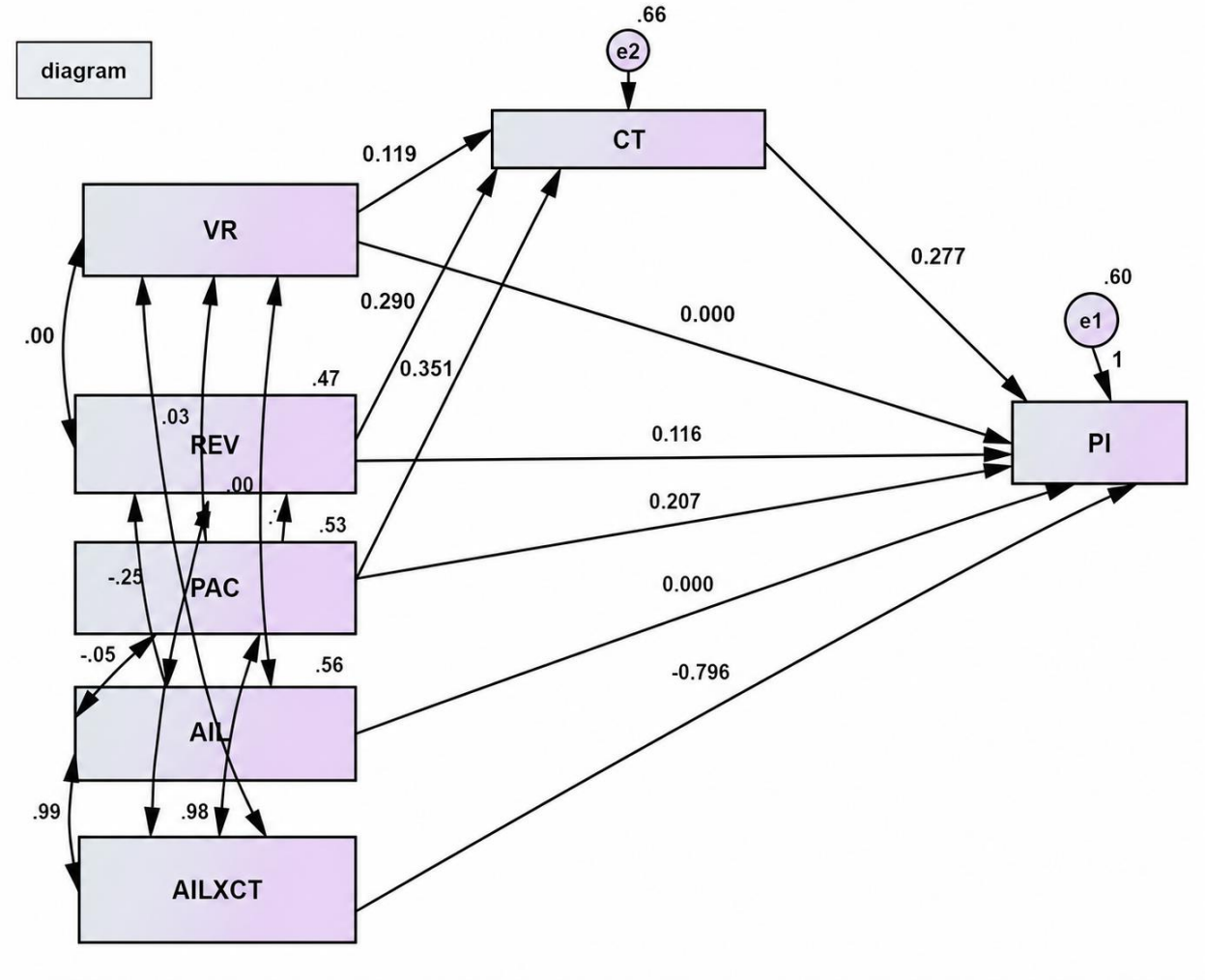

Figure 4.1 SEM Analysis

H1: The Impact of Visual Realism on Consumer Trust

Hypothesis 1 proposed that Visual Realism has a significant positive impact on Consumer Trust. The results revealed a significant positive relationship between Visual Realism and Consumer Trust (beta = 0.119, p = 0.035). Therefore, because the relationship is statistically significant and aligns with the hypothesized direction, H1 is supported.

The findings suggest that higher levels of visual realism in synthetic influencers enhance Gen Z consumers' trust. This result strongly aligns with Social Presence Theory, which suggests that highly realistic physical and behavioral traits reduce psychological distance, making users feel as though they are interacting with a real entity. In the domain of AI-generated avatars, visual refinement acts as a proxy for professionalism and technological competence, signaling security and reliability to the user. This finding is heavily supported by current literature; for instance, Choudhury and Roy (2024) demonstrate that realistic anthropomorphic design choices significantly boost source credibility. Similarly, Wulandari (2026) notes that high-fidelity rendering mitigates the "artificiality barrier," prompting modern digital natives to attribute authentic human agency and benevolence to synthetic figures, thereby fostering a robust foundation of trust.

H2: The Impact of Visual Realism on Purchase Intention

Hypothesis 2 proposed that Visual Realism has a significant positive impact on Purchase Intention. The results indicate that Visual Realism does not significantly influence Purchase Intention (beta = 0.000, p = 0.865). Therefore, H2 is not supported. The findings indicate that visual appearance alone is insufficient to directly drive purchasing decisions among Gen Z consumers. Although high visual realism succeeds in building initial consumer trust, it does not act as a standalone mechanism for behavioral conversion. This outcome aligns with core tenets of influencer marketing literature, which suggest that while aesthetic appeal commands attention, actual transactional motivations are heavily dependent on deep psychological variables like message relevance, perceived expertise, and emotional alignment. Consequently, the visual structure of a synthetic avatar serves as an excellent gateway for trust, but its direct influence on consumer wallets remains negligible without auxiliary commercial drivers.

H3: The Impact of Perceived Entertainment Value on Consumer Trust

Hypothesis 3 proposed that Perceived Entertainment Value positively influences Consumer Trust. The results reveal a significant positive relationship between Perceived Entertainment Value and Consumer Trust (beta = 0.290, p < 0.001). Because the path is statistically significant and moves in the predicted direction, H3 is supported.

The findings indicate that highly entertaining synthetic influencer content directly elevates trust among Gen Z consumers. Rather than viewing high entertainment value as a superficial or purely promotional distraction, consumers evaluate enjoyable, engaging, and dynamic content as a metric of influencer capability and authenticity. In digital spaces, entertainment often functions as a vehicle for storytelling; when an AI influencer delivers high hedonic value, it builds a sense of relational intimacy and psychological comfort. This finding strongly resonates with Kim et al. (2024) and Jayasingh et al. (2025), who argued that positive emotional experiences generated by entertaining marketing media automatically transfer onto the source, enhancing perceived trustworthiness and diminishing consumer skepticism.

H4: The Impact of Perceived Entertainment Value on Purchase Intention

Hypothesis 4 proposed that Perceived Entertainment Value positively influences Purchase Intention. The results show a significant positive relationship between Perceived Entertainment Value and Purchase Intention (beta = 0.116, p < 0.001). Therefore, H4 is supported.

The findings demonstrate that entertaining synthetic influencer content increases consumers' willingness to purchase endorsed products. This result supports the hedonic consumption perspective, which suggests that enjoyable and engaging content generates positive emotions that can translate into favorable purchasing decisions. The finding is consistent with Syam and Sharma (2024) and Jayasingh et al. (2025), who found that entertainment value enhances engagement and consumer response toward influencer marketing campaigns.

H5: The Impact of Product-Avatar Congruence on Consumer Trust

Hypothesis 5 proposed that Product-Avatar Congruence positively influences Consumer Trust. The results reveal a significant positive relationship between Product-Avatar Congruence and Consumer Trust (beta = 0.351, p < 0.001). Because the relationship is highly significant and follows the hypothesized path, H5 is supported.

The positive relationship indicates that a strong perceived fit between a synthetic avatar and the product they promote drastically enhances consumer trust. This outcome strongly validates the classic Match-Up Hypothesis, extending its relevance to AI-generated spaces. When Gen Z consumers witness a logical alignment such as a cyber-punk aesthetic avatar endorsing next-gen tech or a virtual fitness model promoting athleisure it minimizes cognitive dissonance. The partnership feels logical rather than arbitrary or

exploitative. This consistency helps consumers categorize the synthetic influencer as a credible, contextual authority. This finding is further backed by contemporary brand-alignment literature, which shows that high source-product congruence minimizes commercial cynicism and reassures consumers of the genuine intentionality behind the endorsement.

H6: The Impact of Product-Avatar Congruence on Purchase Intention

Hypothesis 6 proposed that Product-Avatar Congruence positively influences Purchase Intention. The results indicate a significant positive relationship between Product-Avatar Congruence and Purchase Intention (beta = 0.207, p < 0.001). Therefore, H6 is supported.

The positive relationship demonstrates that when consumers perceive a strong fit between the synthetic influencer and the endorsed product, they are more likely to purchase the product. This finding supports the Match-Up Hypothesis, which argues that endorsement effectiveness increases when the characteristics of the endorser align with the promoted product. The result is consistent with Li and Huang (2024) and Lou and Xie (2023), who found that congruent endorsements improve consumers' evaluations and purchase decisions.

H7a: Mediating Role of Consumer Trust between Visual Realism and Purchase Intention

The results show that Visual Realism significantly and positively affects Consumer Trust ($\beta = 0.119, p = 0.035$), while Consumer Trust, in turn, strongly predicts Purchase Intention ($\beta = 0.787, p < 0.001$). These findings indicate that Consumer Trust serves as a critical mediating mechanism through which Visual Realism indirectly drives Purchase Intention.

This finding provides robust empirical backing for the Stimulus-Organism-Response (S-O-R) **framework**. In this structural pathway, the physical design attributes (Visual Realism) act as the *Stimulus* that shapes the consumer's internal cognitive and emotional state (Consumer Trust as the *Organism*), which ultimately dictates the behavioral outcome (Purchase Intention as the *Response*,). Because Visual Realism had a neutral direct path to purchase intention (beta = 0.000), this mediation reveals that trust is the indispensable psychological highway required to convert premium avatar design into actual economic behavior.

H7b: Mediating Role of Consumer Trust between Perceived Entertainment Value and Purchase Intention

Perceived Entertainment Value significantly and positively affects Consumer Trust (beta = 0.290, p < 0.001), while Consumer Trust robustly predicts Purchase Intention (beta = 0.787, p < 0.001). Therefore, Consumer Trust successfully mediates the relationship between Perceived Entertainment Value and Purchase Intention.

The findings suggest that entertainment value affects consumer behavior through both direct and indirect pathways. While highly engaging and enjoyable content can spark immediate impulse purchase intentions, it concurrently strengthens the consumer's deeper psychological evaluation of the influencer's trustworthiness. This double-pronged effect aligns beautifully with the S-O-R framework, emphasizing that hedonic media elements function best when they simultaneously entertain the consumer and reinforce structural trust before driving commercial conversions.

H7c: Mediating Role of Consumer Trust between Product-Avatar Congruence and Purchase Intention

Product-Avatar Congruence significantly and positively influences Consumer Trust (beta = 0.351, p < 0.001), and Consumer Trust directly predicts Purchase Intention (beta = 0.787, p < 0.001). Therefore, Consumer Trust acts as a vital mediator between Product-Avatar Congruence and Purchase Intention.

These findings indicate that a strong fit between an avatar and a product does not just mechanically drive sales; it does so by optimizing the consumer's internal trust matrix. When a synthetic avatar represents products within its logical "domain," consumers experience an increase in confidence, which then triggers a

higher likelihood to buy. This structural pattern reinforces the role of Consumer Trust as the fundamental *Organism* component within the S-O-R framework, proving that cognitive harmony (congruence) must be translated into affective security (trust) to successfully unlock consumer wallet share.

H8: Moderating Role of AI Literacy

Hypothesis 8 proposed that AI Literacy moderates the relationship between Consumer Trust and Purchase Intention. The interaction term between AI Literacy and Consumer Trust (AIL \times CT) was found to be significant and negative (beta = -0.796, $p < 0.001$). Therefore, H8 is supported.

The significant negative interaction effect indicates that AI Literacy weakens the positive relationship between Consumer Trust and Purchase Intention. Consumers with higher levels of AI Literacy possess a sharper, more nuanced understanding of AI-generated mechanisms, rendering them highly analytical when interacting with synthetic figures. Consequently, even when high-literacy consumers report high levels of trust toward an AI influencer, their final transactional choices are guided by objective criteria—such as real-world utility, product reviews, and price—rather than emotional or trust-based allegiance to a virtual entity. Conversely, consumers with lower AI Literacy lack this technical buffer and rely much more heavily on perceived trust to guide their purchasing choices. This finding heavily validates the work of establishing AI Literacy as a critical boundaries-of-effect condition when analyzing Osei-Frimpong and McLean (2023), Nguyen (2026), and Guerra-Tamez et al. (2024), consumer behavioral responses to synthetic marketing agents.

5. Conclusion

This study offers a comprehensive empirical investigation into how Gen Z consumers interact with synthetic influencers, evaluating the structural mechanisms that translate avatar characteristics into actual behavioral intent. By utilizing the Stimulus-Organism-Response (S-O-R) framework, this research successfully demonstrates that virtual entities are no longer mere digital novelties; rather, they serve as highly effective, trust-building marketing channels when engineered with strategic intent. The empirical findings yield three core conclusions. First, trust is digitally cultivated, as Visual Realism, Perceived Entertainment Value, and Product-Avatar Congruence all exert significant, positive impacts on Consumer Trust. This is contrary to defensive assumptions like the Uncanny Valley in modern commercial contexts, proving that Gen Z digital natives readily attribute authenticity and credibility to non-human figures when the content is engaging and contextually aligned. Second, there is an indispensable mediating highway; while structural elements like visual realism and thematic congruence are vital, they do not inherently possess the power to directly unlock consumer wallets. Visual Realism showed a completely neutral direct relationship with Purchase Intention, meaning that Consumer Trust acts as the ultimate psychological gatekeeper and the indispensable pipeline through which technical avatar features are converted into economic transactions. Finally, AI Literacy acts as a powerful critical boundary condition. As consumers grow more technologically advanced, their reliance on blind trust diminishes, and their purchasing habits pivot toward objective product utility. Ultimately, synthetic influencer marketing is less a game of raw aesthetic design and more an exercise in psychological alignment, requiring a careful balance of entertainment value, thematic fit, and audience awareness.

5.1 Implications

Theoretical Implications: This study advances the S-O-R framework by successfully mapping technical and hedonic virtual stimuli to internal affective states and commercial responses. It proves that the "Organism" phase (Consumer Trust) is completely mandatory when dealing with artificial entities, as direct paths to purchase intention are frequently non-significant. Additionally, the positive impact of Visual Realism on trust contributes to an ongoing

paradigm shift in literature. It demonstrates that for Gen Z, extreme high-fidelity rendering signals platform investment, competence, and professionalism rather than psychological discomfort, effectively deconstructing the Uncanny Valley in modern marketing contexts. Finally, by proving that Product-Avatar Congruence is the strongest individual driver of trust, this research expands classical celebrity endorsement theories (the Match-Up Hypothesis) into the automated era, confirming that cognitive harmony between an endorser's persona and a product's domain remains a universal law of marketing, regardless of whether the creator is flesh or code.

5.2 Practical & Managerial Implications

For brand managers and AI design agencies, investing millions into perfect hyper-realism yields diminishing returns if the avatar lacks a distinct, context-specific niche. Because congruence is the most powerful trust mechanism, companies must prioritize organic alignment over visual perfection, matching virtual creators with products that natively fit their established aesthetic, such as virtual cyberpunk avatars endorsing cutting-edge consumer tech. Content creators should view entertainment value not merely as a metrics-booster for social media algorithms, but as a primary method for building structural consumer trust, since enjoyable, narrative-driven content lowers consumer defenses and reduces commercial cynicism. Finally, marketing teams must strictly segment their target demographics based on technical literacy. When targeting consumer clusters with low AI literacy, brand messaging should emphasize the emotional and relational trustworthiness of the avatar. Conversely, when targeting tech-savvy, high-literacy groups, campaigns must lead with objective product specs, user reviews, and clear value propositions, as these consumers look past the virtual persona during transactional decisions.

5.3 Recommendations

To maximize the effectiveness of synthetic influencer marketing, brands must establish rigid guidelines ensuring that a synthetic influencer never breaks character or signs endorsement deals outside its logical domain, as an arbitrary product pairing will instantly rupture the critical congruence-to-trust pipeline. Furthermore, managers should design "trust-first" conversion funnels rather than basing synthetic influencer campaigns around immediate hard-selling or direct purchase links on visual assets. Because realism does not directly drive sales, it is best to utilize the realistic avatar to establish credibility, tell stories, and build a community, and then gently transition consumers to transactional spaces through the safety of that established trust. Lastly, brands need to adapt their transparency strategies based on demographics, adopting a highly clear and open posture regarding the AI nature of the influencer. For high AI-literacy demographics, openly leaning into the technology behind the virtual figure is essential, as hiding its artificial nature will backfire against an audience that is highly skilled at detecting algorithmic manipulation.

5.4 Directions for Future Research

- **Longitudinal Studies on Virtual Relationship Decay:** Future research should implement longitudinal designs to evaluate if the positive impacts of entertainment and visual realism experience "wear-out" effects over time, or if parasocial trust degrades over prolonged, multi-year exposure to an artificial entity.
- **Cross-Generational Comparative Analysis:** Because this sample focused exclusively on Gen Z digital natives, future investigations should contrast these results against Millennials, Gen X, and Baby Boomers to see if factors like the Uncanny Valley carry greater negative weight in older, less digitally integrated demographics.
- **The Impact of Interactive and Generative AI:** This study primarily evaluated static or pre-rendered synthetic influencers. Future academic work should examine how real-time interactive avatars—powered by Large Language Models (LLMs) that can text back or voice-chat with individual followers simultaneously—alter the dynamics of trust formation and purchase behavior.

- **Cross-Cultural Validation:** Future research should replicate this model across different geographic regions and cultural contexts to determine whether cultural dimensions, such as individualism versus collectivism, alter how consumers perceive the congruence and authenticity of synthetic influencers.

6. References

Alim, M. A., Quach, S., Thaichon, P., Weaven, S., & Nguyen, M. (2026). Human versus virtual influencers: The interaction effects of influencer-brand congruence on consumers' behavioral engagement. *Journal of Global Scholars of Marketing Science*, 1-27.

Cao, N., Isa, N. M., Perumal, S., & Chen, C. (2025). Perceived value, consumer engagement, and purchase intention in virtual influencer marketing: The role of source credibility and generational cohort. *Journal of Theoretical and Applied Electronic Commerce Research*, *20*(2), 150.

Choudhury, N., & Roy, S. (2024). Overcoming the Uncanny Valley: Tech-savviness and algorithm appreciation as buffers for virtual media friction. *Technology in Society*, *76*, 102–118.

De Cicco, R., Francioni, B., Curina, I., & Cioppi, M. (2025). AI, human or a blend? How the educational content creator influences consumer engagement and brand-related outcomes. *Journal of Services Marketing*, *39*(10), 52-70.

De Cicco, R., Iacobucci, S., Cannito, L., Onesti, G., Ceccato, I., & Palumbo, R. (2024). Virtual vs. human influencer: Effects on users' perceptions and brand outcomes. *Technology in Society*, *77*, 102488.

Deepika, K. S., & Massand, A. (2025). A study on reflective factors of social media marketing activities and its influence on purchase intention of gen z. *Acta Psychologica*, *259*, 105459.

Ghaleb, M. M. S., & Alawad, W. A. (2024). Social media and purchase intentions of Gen Z: Role of social media influencers. *Transnational Marketing Journal*, *12*(1), 86-105.

Gohil, S. A. (2025). The Impact of Influencer Authenticity on Purchase Intentions among Gen Z Consumers. *Acr-Journal*, *17*(1), 1–19.

Guerra-Tamez, C. R., Kraul Flores, K., Serna-Mendiburu, G. M., Chavelas Robles, D., & Ibarra Cortés, J. (2024). Decoding Gen Z: AI's influence on brand trust and purchasing behavior. *Frontiers in Artificial Intelligence*, *7*(132), 1–15.

Jayasingh, S., Sivakumar, A., & Vanathaiyan, A. A. (2025). Artificial Intelligence Influencers' Credibility Effect on Consumer Engagement and Purchase Intention. *Journal of Theoretical and Applied Electronic Commerce Research*, *20*(1), 17–34.

Khan, S., Rashid, A., Rasheed, R., & Amirah, N. A. (2023). Designing a knowledge-based system (KBS) to study consumer purchase intention: the impact of digital influencers in Pakistan. *Kybernetes*, *52*(5), 1720-1744.

Kim, J., Kim, M., & Lee, S. M. (2024). Unlocking trust dynamics: An exploration of playfulness, expertise, and consumer behavior in virtual influencer marketing. *International Journal of Human-Computer Interaction*, *41*(1), 378–390.

Lou, C., & Xie, Q. (2023). Something artificial, something real: Investigating the perceptual mechanisms behind virtual influencer marketing. *Journal of Advertising*, *52*(3), 366–383.

Märlegård, H., & Raflund, J. (2024). Conveyed by Artificial Authenticity? The Impact of Virtual Influencers on Brand Trust-A Quantitative Study on Consumer Perceptions.

Marwan, A., Harkim, H., & Sugiharto, B. (2024). The impact of visual marketing on purchasing behavior in e-commerce: A case study in the fashion industry. *Golden Ratio of Data in Summary*, *4*(2), 1022-1031.

McLean, G., & Osei-Frimpong, K. (2023). Managing the algorithms: The role of user AI literacy in modern marketing interface adaptations. *Computers in Human Behavior*, 142, 107–121.

Moustafa, M., & El-Kassas, S. (2024). Anthropomorphism vs. Objectification: How visual realism shapes user-generated engagement for CGI avatars. *Journal of Digital and Social Media Marketing*, *12*(3), 241–256.

Opuni, F. F., Doe, J., Akaab, I., Amegbe, H., & Asiedu, K. A. (2025, June). Exploring the Nexus Among AI-Generated Advertising Bias, Deepfake Technology, and Consumer Trust: The Moderating Role of Technological Literacy. In *International Conference of Accounting and Business* (pp. 287-303). Cham: Springer Nature Switzerland.

Osei-Frimpong, K., & McLean, G. (2023). Examining the boundaries of automated social agents: How user digital literacy shifts the threat-appraisal of non-human entities. *Information & Management*, *60*(5), 103–119.

Peng, Y., & Ke, D. (2015). Consumer trust in 3D virtual worlds and its impact on real world purchase intention. *Nankai Business Review International*, *6*(4), 381-400.

Sivathanu, B., Pillai, R., & Metri, B. (2023). Customers' online shopping intention by watching AI-based deepfake advertisements. *International Journal of Retail & Distribution Management*, *51*(1), 124-145.

Sokolova, K. (2025, September). Virtual or Human, Real or Rendered: Assessing the Persuasiveness of Synthetic Influencers. In *International Conference on Multidisciplinary Social Networks Research* (pp. 385-395). Cham: Springer Nature Switzerland.

Wang, Q., Wang, Y., & Zhang, W. (2026). Effects of realism design in virtual streamers for live commerce: The influence of form, behavior, and voice on consumers' recommendation and purchase intentions. *Journal of Retailing and Consumer Services, 93, 104909.*

Wong, A. H., & Yazdanifard, R. (2024). Turning Algorithm Views into Brand Value: Empirical evidence of youth purchase paths under virtual agency models. *Global Journal of Management and Business Research, 24(E2), 13–29.*

Wulandari, E. P. (2026). Purchase intention to virtual influencer marketing: Social presence theory highlights authenticity over influencer type. *Journal of Marketing and Digital Behavior, 2(2), 85–102.*

Yuan, Y., Nguyen, M., Shao, W., & Zhang, Y. (2025). Digital congruence in influencer marketing: how NFTs shift the balance between human and AI-driven virtual endorsers through parasocial relationships. *Marketing Intelligence & Planning, 1-39.*

Zhang, Y., He, J., & Li, J. (2025). The role of flow experience in virtual influencer marketing: insights into aesthetic, entertainment and parasocial influences on purchase intention. *Journal of Fashion Marketing and Management: An International Journal, 29(6), 1109-1129.*