



Influencer Marketing in The Age of Artificial Intelligence: Exploring The Impact Of Ai-Generated Influencers on Brand Credibility and Purchase Intention

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ABSTRACT- Brands are increasingly partnering with AI-generated influencers — computer-generated personas that post, endorse, and interact on social media. Whether such endorsers can build the credibility on which purchase decisions depend remains unclear. This study examines the effect of five attributes of AI-generated influencers — Perceived Realism, Perceived Authenticity, Perceived Expertise, Parasocial Interaction, and Perceived Transparency (AI disclosure) — on Brand Credibility, and tests the role of Brand Credibility in shaping Purchase Intention. A descriptive and analytical research design was adopted, and primary data were collected from 400 social media users in Tamil Nadu who had encountered branded content from AI-generated influencers, using a structured five-point Likert-scale questionnaire and stratified random sampling by age group. Data were analysed using descriptive statistics, Pearson correlation, multiple regression, and bootstrapped mediation analysis (PROCESS Model 4). All five attributes significantly predicted Brand Credibility, with Perceived Authenticity ($\beta = 0.268$) and Perceived Expertise ($\beta = 0.206$) strongest; the model explained 59.0% of its variance. Brand Credibility strongly predicted Purchase Intention ($\beta = 0.424$), and the full model explained 64.2% of the variance in intention. Brand Credibility significantly mediated all five relationships, fully for Perceived Realism and Perceived Transparency and partially for the others. The findings offer implications for brands, agencies, and regulators on the use and disclosure of AI-generated influencers.

Keywords: AI-Generated Influencers, Virtual Influencers, Influencer Marketing, Brand Credibility, Purchase Intention, Parasocial Interaction, Tamil Nadu

I. INTRODUCTION

1. Background and Problem Statement

Influencer marketing has become a central tool for reaching young digital consumers, because followers treat influencers as relatable, trusted voices. Advances in generative ai and computer graphics have now produced a new kind of endorser: the ai-generated or virtual influencer, a persona that is designed, scripted, and often operated by a brand or agency [1], [3]. These personas offer brands control, consistency, and freedom from the reputational risks of human endorsers, but they raise a basic question about trust. Credibility has traditionally rested on a human source's expertise and trustworthiness [6], [7], and it is not obvious that a synthetic persona can earn the same belief [17],[18]

. Consumers may find such personas novel and engaging, or may find them artificial and manipulative, particularly where the ai nature of the persona is not clearly disclosed. This study examines which attributes of ai-generated influencers build brand credibility and, through it, purchase intention.

2. Research Gap and Objectives

Existing work on influencer credibility has focused largely on human influencers [4], [5], while early studies of virtual influencers have examined parasocial response and human-likeness [2], [3]. Few studies test, in one model, how several influencer attributes translate into brand-level credibility and purchase intention, and fewer do so in an indian consumer setting. This study addresses the gap through the following objectives.

- To examine the effect of perceived realism of ai-generated influencers on brand credibility.
- To examine the effect of perceived authenticity on brand credibility.
- To examine the effect of perceived expertise on brand credibility.
- To examine the effect of parasocial interaction on brand credibility.
- To examine the effect of perceived transparency (ai disclosure) on brand credibility.
- To examine the effect of brand credibility on purchase intention.



- To test the mediating role of brand credibility between ai influencer attributes and purchase intention.

II. LITERATURE REVIEW

1. AI-Generated Influencer Attributes and Brand Credibility

Source credibility theory holds that the persuasiveness of a message depends on the audience's perception of the source's expertise and trustworthiness [6], [7]. Brand credibility, the believability of the product information a brand conveys, is built from consistent signals of expertise and trustworthiness [8]. For ai-generated influencers, five attributes are expected to shape these signals. Perceived realism is the degree to which the persona looks and behaves like a real person. Greater human-likeness can raise engagement [2], although the uncanny valley hypothesis warns that near-human figures can provoke discomfort [10], so the realism effect is expected to be positive but modest. Perceived authenticity is the sense that the persona's content is genuine rather than purely commercial, and has been identified as central to trust in branded content [4], [5]. Perceived expertise is the belief that the persona is knowledgeable about the product category [6]. Parasocial interaction, the one-sided but felt relationship followers develop with media personas [9], has been observed with virtual influencers [2] and is expected to lend credibility to the brands they present. Perceived transparency, the clarity with which the persona's ai nature and sponsorship are disclosed, is expected to reduce suspicion of deception [4].

H1: Perceived realism has a significant positive effect on brand credibility.

H2: Perceived authenticity has a significant positive effect on brand credibility.

H3: Perceived expertise has a significant positive effect on brand credibility.

H4: Parasocial interaction has a significant positive effect on brand credibility.

H5: Perceived transparency has a significant positive effect on brand credibility.

2. Brand Credibility and Purchase Intention

Credible brands lower the information costs and perceived risk of a purchase, making consumers more likely to consider and choose them [8]. Research on social media endorsement links source credibility and desire to emulate the influencer to purchase decisions [4], [5], [11]. Brand credibility is therefore expected to be the proximal determinant of purchase intention.

H6: Brand credibility has a significant positive effect on purchase intention.

3. The Mediating Role of Brand Credibility

If influencer attributes affect purchase intention largely through the credibility they confer on the brand, brand credibility should transmit part or all of their effect. Attributes that work mainly through the quality of the endorsement signal, such as realism and disclosure, are expected to operate indirectly, while attributes tied to the relationship with the persona, such as authenticity and parasocial bonding, may also exert a direct effect on intention.

H7: Brand credibility significantly mediates the relationship between each ai influencer attribute (h7a–h7e) and purchase intention.

4. Theoretical Foundation

The study draws on source credibility theory [6], [7], which explains how perceived expertise and trustworthiness shape persuasion; parasocial interaction theory [9], which explains the felt relationship between audiences and media personas; and the uncanny valley hypothesis [10], which qualifies the expected benefit of human-likeness.

III. CONCEPTUAL FRAMEWORK

Figure 1 presents the conceptual framework linking the five ai influencer attributes to brand credibility and purchase intention, with brand credibility as the mediator.

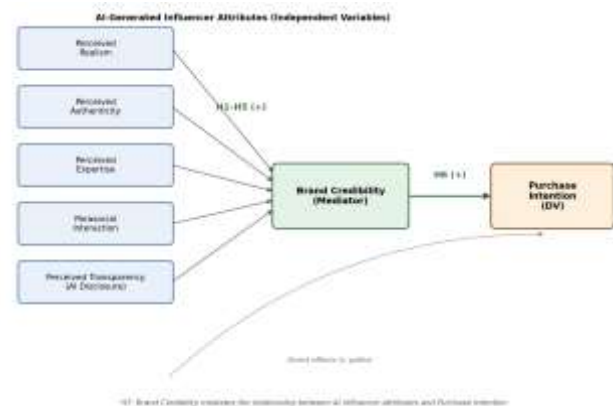


Figure 1: conceptual research framework (based on source credibility theory, parasocial interaction theory, and the uncanny valley hypothesis)

IV. RESEARCH METHODOLOGY

1. Research Design, Population and Sample

The study uses a descriptive and analytical design within a quantitative approach. The population comprises social media users in tamil nadu aged 18–44 who had seen branded content from at least one ai-generated influencer. Using cochrane's formula for a large population [15] (95%



confidence, 5% margin of error), the minimum sample is 384; a sample of 400 was adopted to allow for unusable responses.

2. Sampling and Data Collection

Stratified random sampling was used, with age group (18–24, 25–34, and 35–44 years) as the stratum and proportionate allocation. Respondents were screened for exposure to ai-generated influencer content and selected at random within each stratum from online panels and college and community networks. The questionnaire showed a short description of ai-generated influencers before the items and was administered online and in person. Of 450 questionnaires distributed, 424 were returned (94.2%); After screening, 400 valid responses were retained. Secondary data came from journals, industry reports, and advertising guidelines.

3. Measurement, Reliability, and Analysis

All constructs were measured on five-point likert scales (5 = strongly agree to 1 = strongly disagree), with five items per construct adapted from established credibility, parasocial interaction, and purchase intention scales [6], [8], [9]. Cronbach's alpha ranged from 0.80 To 0.91, Above the 0.70 Threshold. Data were analysed in ibm spss statistics using descriptive statistics, pearson correlation, and multiple regression [16]. Mediation was tested with hayes' process macro (model 4) using 5,000 bootstrap resamples and bias-corrected 95% confidence intervals [12]–[14], at the 5% significance level.

V. DATA ANALYSIS AND RESULTS

1. Respondent Profile

Category	Group	Frequency	%
Gender	Male	204	51.0
	Female	196	49.0
Age	18–24 years	148	37.0
	25–34 years	160	40.0
	35–44 years	92	23.0
Daily Social Media Use	Less than 1 hour	60	15.0
	1–3 hours	188	47.0
	More than 3 hours	152	38.0
Exposure to AI Influencers	Seen content occasionally	228	57.0
	Follow at least one	172	43.0

Source: primary data computed

2. Descriptive Statistics and Correlation Analysis

Table 2 presents descriptive statistics and pearson correlations for all variables (n = 400).

Variable	Mean	Std. D	r with Brand Credibility	r with Purchase Intention
Perceived Realism	3.71	0.98	0.521	0.448
Perceived Authenticity	3.28	1.09	0.664	0.612
Perceived Expertise	3.45	1.03	0.632	0.571
Parasocial Interaction	3.19	1.12	0.543	0.531
Perceived Transparency	3.52	1.06	0.598	0.507
Brand Credibility (Mediator)	3.38	0.91	—	0.702
Purchase Intention (DV)	3.24	0.95	0.702	—

Source: primary data computed; all correlations significant at 1% level (p = All correlations are positive and significant. Perceived authenticity(r=0.664) And perceived expertise (r =0.632) Correlate most strongly with brand credibility, while perceived realism correlates least (r = 0.521), Although it receives the highest mean rating (3.71). Respondents therefore see the personas as lifelike, but lifelikeness is not what makes brands credible. Brand credibility correlates strongly with purchase intention (r = 0.702).

3. Regression Analysis: Effects on Brand Credibility (a-paths)

Model summary: R = 0.768, R² = 0.590, Adjusted r² = 0.585, F = 113.40, P = 0.001*

Predictors	B	Std. Error	Beta	t-value	p-value
(Constant)	0.712	0.139	—	5.122	0.001*
Perceived Realism	0.071	0.033	0.076	2.152	0.032*
Perceived Authenticity	0.224	0.041	0.268	5.463	0.001*
Perceived Expertise	0.182	0.040	0.206	4.550	0.001*
Parasocial Interaction	0.098	0.035	0.121	2.800	0.005*
Perceived Transparency	0.146	0.038	0.170	3.842	0.001*

Source: primary data computed; * significant at 5% level; dependent variable: brand credibility

The five attributes jointly explain 59.0% Of the variance in brand credibility, and all are significant, supporting h1 through h5. Authenticity ($\beta = 0.268$) And expertise ($\beta = 0.206$) Are the strongest predictors, followed by transparency



($\beta = 0.170$). Realism has the smallest effect ($\beta = 0.076$), Consistent with the cautionary view that human-likeness alone does not earn trust [10].

4. Regression Analysis: Effects on Purchase Intention (b-path and c'-paths)

Model summary: $R = 0.801$, $R^2 = 0.642$, Adjusted $r^2 = 0.636$, $F = 117.50$, $P = 0.001^*$

Predictors	B	Std. Error	Beta	t-value	p-value
(Constant)	0.384	0.141	—	2.723	0.007*
Perceived Realism	0.042	0.031	0.044	1.355	0.176
Perceived Authenticity	0.109	0.039	0.125	2.795	0.005*
Perceived Expertise	0.081	0.037	0.088	2.189	0.029*
Parasocial Interaction	0.093	0.033	0.110	2.818	0.005*
Perceived Transparency	0.052	0.035	0.058	1.486	0.138
Brand Credibility	0.443	0.045	0.424	9.844	0.001*

Source: primary data computed; * significant at 5% level; dependent variable: purchase intention

With brand credibility included, the model explains 64.2% Of the variance in purchase intention. Brand credibility is the strongest predictor ($\beta = 0.424$), Supporting h6. The direct effects of perceived realism and perceived transparency are not significant, whereas authenticity, expertise, and parasocial interaction retain smaller significant direct effects.

5. Mediation Analysis

All five indirect effects are significant, with confidence intervals excluding zero, supporting h7.

Because the direct effects of realism and transparency are not significant, brand credibility fully mediates their influence: they affect intention only by making the brand more believable. For authenticity, expertise, and parasocial interaction, mediation is partial, since each also retains a direct effect on intention. Authenticity has the largest indirect effect (0.0992).

Hypothesis	Indirect Path	Indirect Effect (a×b)	Boot SE	95% Boot CI	Mediation
H7a	PR→BC→PI	0.0315	0.015	[0.003, 0.063]	Full
H7b	PA→BC→PI	0.0992	0.021	[0.060, 0.142]	Partial
H7c	PE→BC→PI	0.0806	0.019	[0.045, 0.119]	Partial
H7d	PSI→BC→PI	0.0434	0.016	[0.013, 0.076]	Partial
H7e	PT→BC→PI	0.0647	0.018	[0.031, 0.101]	Full

Source: primary data computed (process model 4, 5,000 bootstrap resamples). Pr = perceived realism; pa = perceived authenticity; pe = perceived expertise; psi = parasocial interaction; pt = perceived transparency; bc = brand credibility; pi = purchase intention.

VI. FINDINGS AND RECOMMENDATIONS

The study finds that authenticity and expertise are the main sources of brand credibility for ai-generated influencers, that brand credibility is the strongest driver of purchase intention, and that realism and disclosure influence purchase intention only through credibility. Respondents rate realism highest but its effect on credibility is the weakest, and parasocial interaction and authenticity are rated lowest.

Brands should invest in making ai personas credible rather than merely lifelike: scripts should reflect genuine product knowledge, consistent values, and a recognisable personality instead of purely promotional content.

Because transparency raises credibility, brands and agencies should disclose clearly and prominently that the persona is ai-generated and that content is sponsored, in line with advertising disclosure norms. Pairing ai personas with verifiable product demonstrations, reviews, or expert input may strengthen perceived expertise. Brands should track brand credibility as a leading indicator of conversion when evaluating ai influencer campaigns, and regulators may consider guidelines requiring disclosure of ai-generated endorsers.



VII. CONCLUSION

This study shows that ai-generated influencers can build brand credibility and purchase intention, but mainly through authenticity, expertise, and transparent disclosure rather than through lifelike appearance. Brand credibility is the channel through which these attributes influence purchase intention, and it fully carries the effects of realism and disclosure. The findings give marketers and regulators a practical basis for designing and governing ai influencer campaigns. Future research could compare ai-generated and human influencers directly, use experimental designs to establish causality, and examine product category, disclosure format, and consumer attitudes toward ai as moderators.

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