Impact of AI-Generated Influencers on Consumer Trust and Purchase Intent

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Abstract: This study uses a quantitative survey-based approach to investigate consumer awareness, perception, trust and purchase intent towards AI-generated influencers. A structured online questionnaire circulated online collected 101 responses, covering demographic details, familiarity with virtual influencers and attitudes measured through categorical and Likert-scale items. The findings suggest that most respondents are aware of AI-generated influencers having encountered their content but still perceive these virtual personalities as less authentic and trustworthy compared to human influencers. AI-generated influencers appear moderately appealing visually but lack trust and reliability resulting in low purchase intent for products recommended by AI-generated influencers. Human influencers continue to have stronger persuasive power, with higher credibility and emotional relatability. Overall, the study highlights that AI-generated influencers contribute to product discovery and digital engagement but their impact on consumer behaviour is limited. These insights provide a base for understanding the evolving role of AI-driven creators in the field of influencer marketing.

Keywords: AI-generated influencers, consumer perception, trust and credibility, purchase intent, influencer marketing

I. INTRODUCTION

With the emergence and rapid adoption of AI-generated influencers, digital marketing has seen a significant evolution. These influencers, through visually appealing and algorithmically enhanced virtual personalities, provide brands with new and highly adaptable ways of attracting an audience, delivering targeted messages and creating continuous engagement. These AI-generated influencers raise important questions about how consumers perceive these figures and decide whom to trust in this digital era where the line between real and artificial is becoming progressively blurred as these synthetic figures are increasingly appearing alongside human influencers across various social media platforms such as Instagram, TikTok and YouTube.

Before the invention of AI-generated influencers, brands heavily relied on social media creators, traditional celebrities and content-driven digital campaigns to influence consumer behaviour. Data analytics, targeted advertising algorithms, influencer-brand collaboration and social media management tools that relied on human creativity, availability and perceived authenticity were the limited marketing technology available at that time. Factors such as limited scalability, high endorsement costs, inconsistent messaging etc. were constraints on influencer marketing strategies. However, companies are now increasingly adopting AI-generated influencers as a strategic alternative which is possible due to advancements in Artificial Intelligence, Machine Learning and Social Media Automation. These influencers provide brands with the ability to maintain full creative control over messaging, appearance and behaviour, ensuring close alignment with core brand values and campaign objectives. In addition to this, AI influencers offer 24/7 service, adaptability across various languages, cost efficiency and ability to integrate ideas across various digital platforms smoothly. With increasing competition in the digital space, brands look up to AI-generated influencers as innovative tools capable of delivering personalised and data-driven engagement while limiting uncertainties and operational limitations observed in human influencers.

Even though lots of brands are getting attracted by virtual influencers as they offer full creative control, consistency in closely aligning with brand's core idea and freedom from human limitations, a deeper concern arises with respect to their actual effectiveness in shaping consumer psychology, especially whether they can influence purchase intentions of the consumers in a meaningful way or drive real-world buying decisions in comparison to human influencers. This makes it of utmost importance for marketers and researchers to evaluate how audiences emotionally respond to AI-generated personalities, how they evaluate the transparency and reliability of their endorsements and whether the newness of virtual influencers transforms into sustained influence or disappears over time. Gaining insight into consumers' attitudes and

behavioural responses becomes crucial for determining the long-term viability and strategic value of AI-driven influencers in this new era of digitalisation, as companies continue to experiment with this evolving form of market communication.

Objectives:
1. To compare perceptions of consumers with respect to AI-generated influencers and human influencers.
2. To analyse how the purchase intent of consumers is affected by AI-generated influencers.

II.   LITERATURE REVIEW

(Thomas & Fowler, 2021) studied the possibility of whether AI influencers can serve as credible and trustworthy brand endorsements, comparing consumer responses to AI influencers in opposition to human influencers. Experiments and surveys are used to present participants with advertisements featuring AI influencers, and the participants were asked to rate the trustworthiness, credibility and endorsement effectiveness. The study shows that AI influencers provide a new experience and grab more attention, but lack in the area of authenticity and trust than human influencers. A notable factor identified is the 'uncanny valley' effect: the AI characters that appear partially human create discomfort. However, if the AI influencers are paired with products that match their digital persona, they can be very effective endorsers. The study is limited due to its early conduct, as AI integration in brand promotion and marketing has gained momentum after 2020. Its rigid extent may also not fully reflect the real social media environment, and it also lacks a long-term measure of behavioural aspects.

(Belanche et al., 2021) show a conceptual and narrative review of how virtual and AI influencers build consumer trust and their effect on the purchase intentions of consumers. The authors highlight key elements that contribute to trust, authenticity, credibility and quality storytelling by synthesising existing marketing and communication research. They highlight the important role of the relationship between consumers and influencers, which is one-sided, even though the influencers are virtual and artificial. However, the consumers may view the AI influencers as less authentic or emotionally genuine due to their lack of real-life experience, creating a credibility gap. The study is limited as it does not provide empirical data and relies solely on secondary research. It discusses the term 'influences' in general and must be interpreted carefully in the context of AI influencers.

(Alboqami, 2023) comparison of virtual AI influencers and human influencers is done to assess how each type affects perceived authenticity, trust and consumer responses. Participants evaluated content from both AI and human influencers by making use of controlled experimental designs and interview-based validation. The findings showed that participants are driven towards human influencers as they generally appear more authentic, relatable and trustworthy owing to their possession of real emotions, personalities and experiences. Virtual influencers can still create an impact, but mainly in cases where their design aligns closely with the product or brand and avoid overly artificial appearance. When virtual influencers look too unrealistic or artificial or look distant from human norms, the trust in them decreases. The study has seen limitations in its small sample size. Experimental conditions which may not accurately represent actual, authentic social media behaviour, and a limited amount of study on sustained or long-term trust formation.

(Feng et al., 2024) examined how different aspects of AI influencers affect consumer trust and acceptance. They have combined qualitative content analysis, ML categorisation of pre-existing AI influencer posts and consumer surveys to develop the AI Influencer Attributes Scale (AIAS). Through this approach, they identified seven key attributes: anthropomorphism, artificiality, attractiveness, luminary features, quality, trendiness and robophobia. The studies show that, excluding artificiality, the other six attributes positively impact how trustworthy and acceptable consumers perceive AI influencers to be. It shows that consumers respond positively when AI influencers appear professionally designed and more human. Limitations appear in the form of self-reported data, which does not reflect real consumer behaviour and its sample demographics, which may not be culturally or diverse enough in age to generalise broadly and also lack long-term tracking of trust or behavioral outcomes of consumers.

(Jayasingh et al., 2025) analyse how consumer engagement and purchase intentions are affected by the credibility of AI influencers. Quantitative surveys combined with structural equation modelling are used in this study to assess relationships between perceived credibility, engagement and purchase intentions. Findings show that credibility, human-likeness and informative content enhance consumer engagement and engagement further acts as a bridge between credibility and purchase intentions. This tells us that only when the AI influencers successfully engage the audience can the trust in AI influencers be translated into real consumer motivation. The author puts up the argument that AI influencers that are more human-like in appearance and offer valuable information are considered more trustworthy. Use of self-

reported data rather than real consumer behaviour, a sample consisting mainly of younger participants and the absence of behaviour monitoring in the long-term.

(Shukla et al., 2025) examines how AI influencers are emerging as an effective medium of endorsement in the Indian market, with the core focus on whether consumers trust these virtual figures and whether this trust influences their purchase intentions. The authors applied confirmatory factor analysis and structural equation modelling using a Likert-scale survey of 384 respondents from three private institutions to examine how different aspects of endorser credibility, which are trustworthiness, expertise and attractiveness, build consumer response. The findings of the study show that credibility has a significant positive effect on purchase intention, while attractiveness has a lesser impact than trustworthiness and expertise comparatively. The study suggests that AI influencers can act as convincing and persuasive brand endorsers when consumers trust them and perceive them as knowledgeable, with the study emphasising that credibility-building elements like relativity, authenticity, and alignment with the core idea are of utmost importance for effectiveness. However, the study finds its limitations in the form of its student-dominated sample, which does not generalise to the level of the broader population and due to its dependence on stated intentions rather than actual purchasing behaviour. Moreover, it does not account for long-term effects or multicultural variations in consumer trust towards AI influencers due to being a conference paper based on a single cultural context.

(Dhiman & Bhati, 2025) examines how the various features of AI-powered Instagram influencers affect consumer trust, brand awareness and purchase intentions. The authors integrate the Social Media Influencer Value (SMIV) model and the Stimulus-Organism-Response (SOR) model and use Partial Least Squares-Structural Equation Modelling (PLS-SEM) to test the relationships between influencer attributes, consumer psychological responses and behavioural intentions using a sample of 391 respondents, collected via purposive and snowball sampling. The findings reveal that the most significant influencer attributes are interaction and perceived trustworthiness in driving brand awareness and trust in branded posts, which in turn strongly affect purchase intentions. This suggests that AI influencers have the power to shape consumer behaviour when they are interactive and perceived as trustworthy, making them viable for brands looking to leverage virtual influencer marketing. However, the study relies on self-reported survey data and a non-random sampling method, which limits the generalizability of the results. Also, the study does not track actual purchasing behaviour in the long run, which means the findings only depict intent rather than confirmed behaviour.
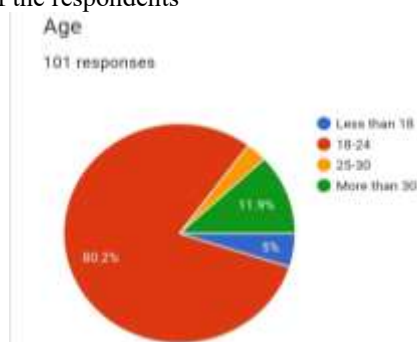
III. RESEARCH METHODOLOGY

This study uses a quantitative survey-based approach to evaluate the perception of consumers with respect to AI-generated influencers. A structured questionnaire was distributed online, collecting 101 valid responses. The sample was collected from a varied group of respondents which includes working professionals, students, general social media users from 3 regions in Maharashtra including Mumbai, Navi Mumbai and Thane through an online Google Form questionnaire circulated via WhatsApp and Instagram. The survey consisted of both categorical and Likert-scale items (1 = Strongly Disagree, 5 = Strongly Agree) for measuring awareness, trust, engagement, purchase intent and for comparison of these virtual influencers with human influencers. Descriptive analysis was performed on the responses gathered to identify patterns, levels of agreement and overall opinion towards AI-generated influencers. This methodology ensures a focused and data-driven understanding of how AI-driven creators shape consumer attitudes and potential buying behaviour.

IV. DATA ANALYSIS AND INTERPRETATION
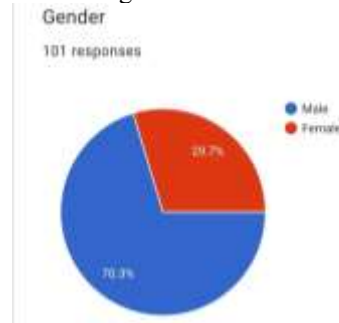
Section 1: Demographic Information

Figure 1 shows the age distribution of the respondents

Source: Field Survey

Interpretation: The age distribution shows that most respondents are between 18-24, followed by smaller groups under 18, 25-30 and above 30. This demographic shows how exposure and familiarity with digital content influence attitudes towards AI-generated influencers.
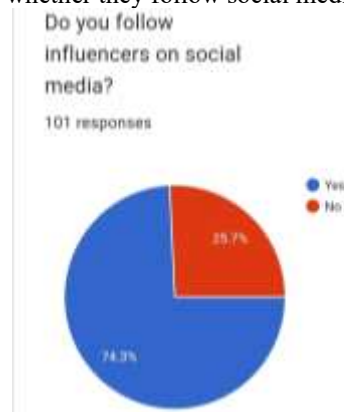
Figure 2 shows the gender distribution of the respondents

Source: Field Survey

Interpretation: The gender data indicates that the majority of the respondents are male with fewer female participants, 71 and 30, respectively. The distribution shows the trust levels and purchase intent varying across genders when interacting with AI-generated influencers.

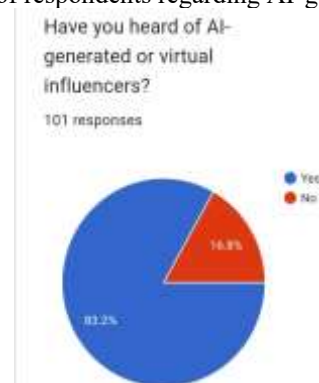Figure 3 whether they follow social media influencers or not

Source: Field Survey

Interpretation: The above figure shows that most respondents follow influencers on social media, while a smaller portion does not. This difference shows how familiarity with influencer content may influence purchase intent and trust with the involvement of AI-generated influencers.
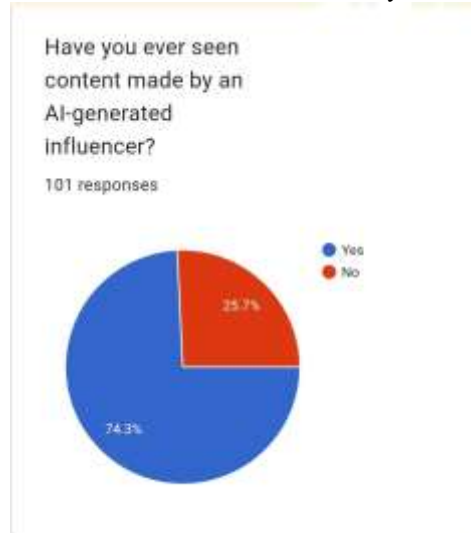
Section 2: Awareness of AI-generated influencers

Figure 4 shows the awareness of respondents regarding AI-generated influencers or virtual influencers

Source: Field Survey

Interpretation: This figure shows that the majority of respondents (84) are aware of AI-generated influencers. This number shows that these virtual figures, this concept, is familiar to the respondents. This representation of awareness levels helps to assess exposure of the AI-generated influencers to the consumers and how it could influence their buying behaviour.

Figure 5 shows whether respondents have viewed content made by or featuring AI-generated influencers
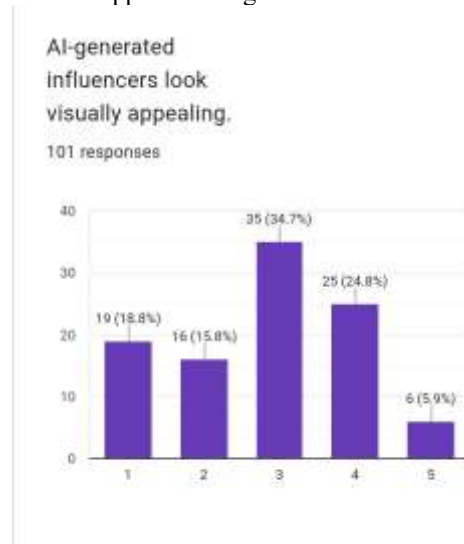

Source: Field Survey

Interpretation: This figure shows that the majority of respondents (75) have seen content featuring AI-generated influencers, while (26) have not. This helps in bifurcation of consumers between the ones with direct experience of AI influencer content and those who have not witnessed it or those who are only aware of the concept.
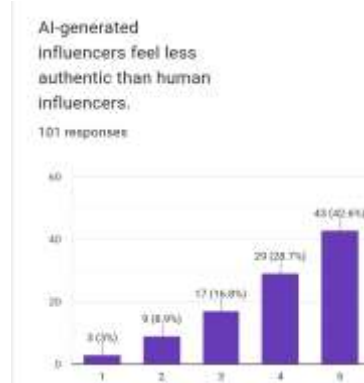
Section 3: Perception and Trust

Figure 6 shows visual appeal of AI-generated influencers to respondents

Source: Field Survey

Interpretation: This figure shows how appealing the AI-generated influencers are to the respondents visually. The responses received display mixed opinion. Most answers fall between 3 and 4 suggesting that many respondents find these virtual influencers moderately appealing. A small number strongly agrees, while a noticeable number strongly disagrees.
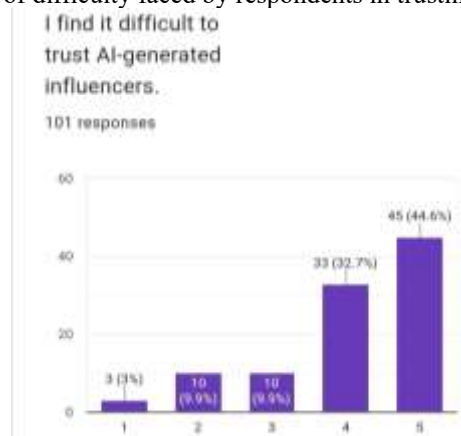
Figure 7 shows the authenticity of AI-generated influencers generated influencers in comparison to human influencers

Source: Field Survey

Interpretation: This figure shows the authenticity of AI-generated influencers in comparison to human influencers felt by the respondents. The majority of respondents selected 4 and 5 suggesting that the former looks less authentic to them than the latter. This majority of agreement suggests that perceived authenticity is an important factor of influencing evaluation of AI influencer content.
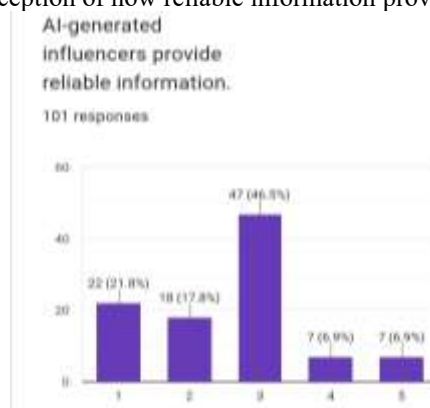
Figure 8 shows the level of difficulty faced by respondents in trusting AI-generated influencers

Source: Field Survey

Interpretation: This figure shows how difficult respondents feel to trust AI-generated influencers. The majority of respondents selected 4 and 5 expressing it to be very challenging to trust these virtual influencers. Trust is a major issue here with a minority choosing disagreement. This distribution suggests that consumers tend to be cautious about relying on AI-driven personalities for recommendation influencing credibility and purchase intent of consumers.
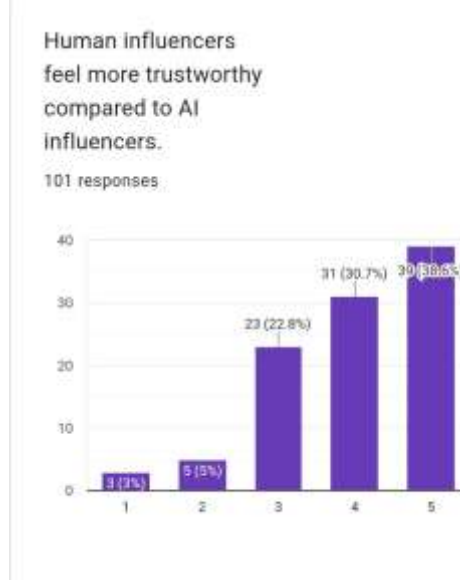
Figure 9 shows Respondents perception of how reliable information provided by AI-generated influencers is

Source: Field Survey

Interpretation: This figure shows the reliability of information provided by AI-generated influencers perceived by respondents. The responses are gathered in the middle range with many selecting 3. Another significant number leaning towards disagreement. While people agree or strongly agree. Overall, mixed response is seen in the reliability of information by these virtual influencers.

Figure 10 shows the trustworthiness of human influencers in comparison to AI-generated influencers

Source: Field Survey

Interpretation: This figure shows how trustworthy respondents feel human influencers are in comparison to AI-generated influencers. Most respondents display high trust in human influencers by selecting 4 and 5. This pattern suggests that human qualities such as emotions and personal experiences are considered of higher value.
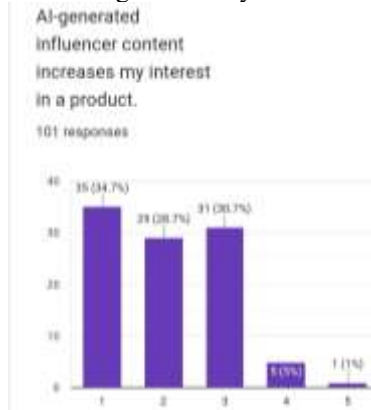
Section 4: Purchase Intent

Figure 11 shows likeliness of respondents to buy a product recommended by an AI-generated influencer

Source: Field Survey

Interpretation: This figure shows likelihood of respondents to buy a product recommended by AI-generated influencers. Most responses are between 1, 2 and 3 showing low to moderate likelihood of consumers willing to buy products recommended by AI-generated influencers. This distribution shows that some consumers are open to the idea of AI-generated influencers recommending products but there is a lack of strong purchase intention evident by fewer responses for 4 and 5.

Figure 12 shows the increase in interest generated by content featuring AI-generated influencers

Source: Field Survey

Interpretation: This figure shows an increase in interest generated in a consumer by content featuring AI-generated influencers about a product. The majority responses are for 1, 2 and 3 showing low to moderate interest generated. Only a few selected higher than moderate agreement levels. This shows that AI influencer integration does not significantly increase product curiosity.

Figure 13 shows level of preference of respondents leaning towards buying product recommended by human influencers

Source: Field Survey

Interpretation: This figure shows preference of respondents for buying products recommended by human influencers. Majority respondents opted for 4 and 5 showing high agreement levels in accordance with human influencer recommendations. Only a few respondents selected the other 3 options. This shows that human influencers still hold significant persuasive power especially when it comes to trust, credibility or personal connection when it comes to buying behavior influencing.

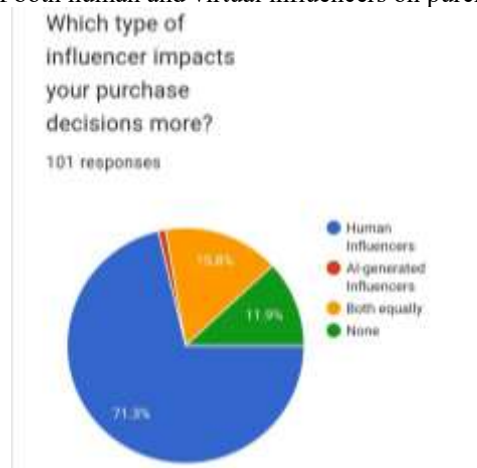Figure 14 shows ease created in product discovery by AI-generated influencers

Source: Field Survey

Interpretation: This figure shows the level of efficiency created by AI-generated influencers in discovering a product. Most respondents chose 3 and 4 showing moderate to good agreement levels. This indicates that AI-generated influencers can assist in product discovery. However, another significant number is for 1 and 2 showing variation in opinions. This suggests that though AI-generated influencers aid in product discovery, there is not consistency throughout the sample.

Section 5: Comparison

Figure 15 shows impact of both human and virtual influencers on purchase decision of respondents

Source: Field Survey

FIG 15: This figure shows which type of influencer, AI-generated or human, affects purchase decisions of consumers more. The responses display human influencers have the strongest impact on purchase decisions with 72 responses. A smaller group suggested that both the influencers affect their purchase decisions equally while 12 stated that neither influences their purchase decision. Only 1 respondent chose an AI-generated influencer specifically. This shows that human influencers still play a dominant role in influencing consumer buying behavior compared to their virtual counterparts.

V. FINDINGS

•A major portion of respondents were familiar with AI-generated influencers, indicating that this concept of virtual influencer is well-recognised among active social media users.
• A considerable level of direct exposure and familiarity with AI-generated influencers is visible, as most respondents have previously seen content featuring virtual influencers.
• The 18-24 demographic forms the largest segment. This suggests that young audiences play a significant role in shaping perceptions towards AI-generated influencers due to their high engagement online on various digital media.
• The male gender is dominant in gender distribution. This suggests that the findings may reflect male-dominant perceptions related to trust, awareness and purchase intent towards AI-generated influencers.
• The majority of respondents are accustomed to influencer-based content and marketing, based on the fact that they follow social media influencers. This makes them capable of evaluating both AI-generated and human influencers.
• The majority of respondents find the visual appeal of AI-generated influencers moderate, suggesting that such virtual entities are attractive but lack impact in the overall perception.
• A major portion of respondents feel that AI-generated influencers do not feel authentic, showing that emotions and human-like behaviour prove to be a significant determinant of credibility.
• The majority of respondents find it difficult to trust AI-generated influencers, which suggests that trust is a major barrier to the stagnating effectiveness of virtual influencers in shaping consumer behaviour.
• Mixed responses are seen for the level of reliability of information provided by AI-influencers, suggesting that no strong general agreement regarding the dependability of their recommendations.
• Human influencers are perceived to be more trustworthy than their AI counterparts, suggesting that emotions and real-life experiences play a critical role in building credibility.
• Low to moderate willingness to purchase products recommended by AI-generated influencers is seen, indicating weak persuasion power and low purchase intent generation.
• AI-generated influencers have not seen much success in generating interest in products, indicating that virtual influencers do not significantly enhance consumer curiosity in the products.

• Human influencers have a strong influence over altering purchase preferences, with the majority preferring recommendations from real influencers.

• AI-generated influencers moderately assist in product discovery, but the effectiveness differs widely throughout the sample, indicating inconsistency in perceived usefulness.

• Overall, human influencers have the most impact in shaping purchase decisions, with only a negligible number of respondents indicating a greater influence by AI-generated influencers.

VI. CONCLUSION

This study evaluates consumer perception, trust and purchase intent related to AI-generated influencers. The findings show that though the majority of respondents are aware of AI-generated influencers and are familiar with their content, they still are drawn towards human influencers due to them being perceived to be more authentic and trustworthy. AI-generated influencers, on the other hand, are perceived as moderately appealing but lacking in the area of authenticity and trustworthiness. Purchase intent influenced by AI-generated influencers remains low, with consumers showing limited willingness to depend on virtual personalities for product recommendations.

Overall, the study suggests that AI-generated influencers contribute to product discovery and digital engagement, but they lack the persuasive power, credibility and emotional connection offered by human influencers. Human influencers continue to maintain a strong position in influencing consumer decision-making.

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