

THE MEDIATING ROLE OF SOURCE CREDIBILITY IN THE RELATIONSHIP BETWEEN AI INFLUENCERS' PERCEIVED ANTHROPOMORPHISM AND PURCHASE INTENTION*

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This study complies with research and publication ethics.

Abstract

In this study, the concept of artificial intelligence influencers (AIs), which are developed using the technology of artificial intelligence (AI) and computer graphics, represents communication actors on social media platforms. A cross-sectional survey design was employed in order to investigate the impact of anthropomorphism and the credibility of AIs on purchasing intention. As part of the study's framework, a sample comprising 421 *Instagram* users between 18 and 34 years old was considered. For analysis, the data were analyzed using regression analysis, structural equation modeling, and the use of Hayes' PROCESS macro. As revealed by the findings, it emerged that the role of the credibility of AIs served as a mediator for anthropomorphism and purchase intention. In this respect, the study contributes to research on AI-mediated influencer communication and interactive marketing.

Keywords: artificial intelligence influencers, source credibility, purchase intention, anthropomorphism, social media.

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KAYNAK GÜVENİLİRLİĞİNİN YAPAY ZEKÂ ETKİLEYİCİLERİNİN ALGILANAN ANTROPOMORFİZMİ İLE SATIN ALMA NİYETİ ARASINDAKİ İLİŞKİDE ARACI ROLÜ*

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Bu çalışma araştırma ve yayın etiğine uygun olarak gerçekleştirilmiştir.

Öz

Yapay zekâ (YZ) teknolojileri ve bilgisayar tarafından üretilmiş görüntülerle oluşturulan yapay zekâ etkileyicileri (YZE), sosyal medya platformlarında iletişim aktörleri olarak işlev görmektedir. Bu çalışmada, algılanan antropomorfizm ve YZE'lerin kaynak güvenilirliğinin satın alma niyeti üzerindeki etkisinin incelenmesi için kesitsel anket tasarımı kullanılmıştır. Araştırma kapsamında; 18-34 yaş arası 421 *Instagram* kullanıcısından oluşan bir örneklem analiz edilmiş ve verilerin değerlendirilmesinde regresyon analizi, yapısal eşitlik modellemesi ve Hayes'in PROCESS makrosu kullanılmıştır. Sonuçlar, antropomorfizm ve satın alma niyeti arasındaki ilişkide kaynak güvenilirliğinin bir aracı değişken olarak işlev gördüğünü göstermiştir. Bu yönüyle çalışma; YZ aracılı etkileyici iletişim ve etkileşimli pazarlama araştırmalarına katkı sağlamaktadır.

Anahtar Kelimeler: yapay zekâ etkileyicileri, kaynak güvenilirliği, satın alma niyeti, antropomorfizm, sosyal medya.

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Introduction

AI influencers (AIs) have emerged as prominent actors in social media (SM) communication, especially when brands seek ways to interact with consumers using digital humans (Belanche et al., 2024; Li et al., 2023). In contrast to human influencers, AIs do not exist physically; they are created using AI technologies, computer-generated imagery (CGI), and narrative identity design. However, AIs appear on SM platforms as social actors who can talk, interact, endorse products, and create distinct personas (Dabiran et al., 2024). This raises an important communication question: How do consumers judge these artificially created but human-like sources, and under what circumstances do these judgments influence purchase intention?

In AI-based influencer marketing, effective strategies for successful communication have become more dependent on the needs and desires of consumers (Ozan, 2024, p. 461). It is also noteworthy that the increased popularity of AIs makes them strategically significant for brand communication. A recent market report indicates that the virtual influencer industry is expected to expand rapidly (Grand View Research, 2024). Nonetheless, the persuasive potential of AIs should not be considered solely in terms of technological innovation or visual realism. As AIs function as message sources on SM platforms, consumers' perceptions of AIs depend on their interpretation of their human-like attributes and whether these attributes can be translated into credibility. In this regard, AIs provide an interesting setting for the study of anthropomorphism, source credibility, and purchase intention. Anthropomorphism is defined as the attribution of human traits, intentions, emotions, and mental states to non-human entities (Waytz et al., 2010). Anthropomorphic attributes of AIs could include elements such as facial expressions, gestures, names, personal stories, and visual reality.

Anthropomorphic cues may make users perceive artificial characters as social actors, which is also compatible with the theory of Computers are Social Actors perspective, according to which people might use social norms toward computer-generated agents if these agents display human-like characteristics (Nass & Moon, 2000). Nevertheless, anthropomorphism may not always result in positive outcomes. Existing literature demonstrates that human-like artificial figures may elicit positive evaluations if they increase familiarity, social presence, and interaction, but at the same time, they may cause negative feelings if they appear overly artificial or uncanny (Doğan Erdinç & Uzunçarşılı Soydaş, 2024; Sands et al., 2022b; Wiese & Weis, 2020).

This ambiguity points to the need for another explanatory mechanism: source credibility. In the source credibility model, it is stressed that the outcomes of persuasion depend on how the source is evaluated by the audience in terms of credibility-related dimensions, namely trustworthiness, expertise, and attractiveness (Ohanian, 1990). The case of AIs is especially important since their artificiality might complicate perceptions of trustworthiness and

expertise. While an AI that has a human-like appearance might attract the audience's attention, such attention might not be enough to form purchase intention unless the source is perceived as credible.

Various aspects of AIs have been explored in previous research such as consumers' perceptions of virtual influencers, human-likeness, emotions, artificiality, and behavioral outcomes (Belanche et al., 2024; Ferraro et al., 2024; Kim & Park, 2024; Mirowska & Arsenyan, 2023; Sands et al., 2022a). Nevertheless, there is still limited understanding of how anthropomorphism perceptions can be transformed into purchase intentions through evaluations of AIs as credible sources of communication. This issue becomes particularly important within the field of communication studies, given that AIs cannot be considered only as visual brand assets but also as communication sources in persuasive and interactive communication.

This current research addresses this knowledge gap by exploring the mediating role of source credibility in the relationship between AI influencers' perceived anthropomorphism and purchase intention. In this regard, the research seeks to go beyond the simplistic idea that 'human-like appearance leads to purchase intention' and focuses instead on the credibility pathway as a means of persuasion. This study contributes to research in AI-mediated influencer communication, digital marketing communication, and strategic communication by bringing the roles of trustworthiness and expertise into focus.

The empirical context for the study is Instagram users in age groups 18-34 years old in Türkiye. The reason why this population was chosen lies in the fact that AIs are typically accessed via SM platforms and younger people are more active participants in influencer communication. The study utilizes a quantitative cross-sectional survey approach that analyzes data collected from 421 *Instagram* users. Hypotheses are tested by regression analysis, structural equation modeling, and Hayes' PROCESS macro. The emphasis on the mediating role of source credibility helps clarify how consumers perceive AIs as communication sources and how these perceptions shape purchase intention.

Anthropomorphism and Humanizing AIs

Anthropomorphism is a phenomenon of seeing non-human things as human-like and giving them human attributes (Spada, 1997). The concept is defined by Spada (1997) as the attribution or transfer of human appearance and certain characteristics to any living or non-living thing, primarily gods. Early definitions of anthropomorphism explain it as the remnants of human assumptions applied to animals (Spada, 1997) and the attribution of human mental experiences to animals (Asquith, 1984). Today, it is defined as the attribution of human-like characteristics, motivations, intentions and emotions to non-human entities, whether they are currently present or desired (Waytz et al., 2010). This process helps individuals make sense of the uncertainty around

them by leveraging the cognitive and perceptual advantages of humanized environments, thereby eliminating anxieties, filling gaps in relationships or friendships, and offering opportunities to better understand their surroundings (Khogeer, 2013; Waytz et al., 2010).

With the advancement of technology, computers and CGI agents have gradually been anthropomorphized through various software programs and are now considered social actors. CASA (Computers Are Social Actors) theory postulates that computer generated systems that simulate human motion and facial expressions can be analyzed using social norms in the same way that human interactions would be analyzed (Reeves & Nass, 1996; Nass & Moon, 2000). The concept of CASA is important when analyzing AIs because they are not only visual objects but also interactive social actors on SM. Studies based on this paradigm show that individuals evaluate objects with higher levels of anthropomorphism more positively than objects with lower levels of anthropomorphism (Seeger et al., 2017), and users are more likely to develop positive attitudes and behavioral intentions towards these 'things' (Gambino et al., 2020). Likewise, research into conversational agents has found that anthropomorphic cues might help create a better experience for interactions and might facilitate consumer responses (Sheehan et al., 2020). Extending this perspective to the virtual influencer context, Kim and Park (2024) showed that the human-like characteristics of virtual influencers can enhance consumer experiences by strengthening perceived social presence.

Thus, AIs derive their resemblance to humans from computer imaging techniques and similar digital creation technologies (Rickitt, 2000, pp. 32-33). In addition to their anthropomorphic appearances, these designs, supported by AI technology, can also give cognitive and emotional responses and are currently active communication actors on SM platforms, interacting with their followers (MacInnis & Folkes, 2017; Waytz et al., 2010). Consequently, the positioning of AIs becomes crucial not only due to their visual design but also in view of their ability to act as sources of messages on SM.

The literature on AIs can be categorized into three streams of research. To begin with, researchers explore the emergence of AIs and their incorporation into SM applications (Abidin & Brown, 2019; Blanton & Carbajal, 2022; Darnier & Arvidsson, 2019; Jauffret & Aubrun, 2022). Secondly, the literature is devoted to the connection between AIs, reality perception, and artificiality (Chiluwa & Samoilenko, 2019; Molin & Nordgren, 2019). Finally, the literature addresses the role of such characters in digital communications and marketing strategies (Appel et al., 2020; Audrezet & Koles, 2023). Overall, from the literature review, it can be concluded that AIs should be viewed not only as technical or visual constructs but also as SM actors that have human-like qualities and affect audience perception.

A significant aspect of consumer perception of AI in literature is negative evaluations. Nevertheless, the perception of AIs by consumers does not seem

to be unidirectional; instead, they seem to be ambivalent. For example, in the study by Sands et al. (2022b), AIs were described as 'false idols' and it was concluded that they could be perceived hostilely by some consumer groups. It is suggested that this negative perception may be related to the uncanny valley effect and the feeling of discomfort regarding artificiality (Mori, 1970; Ciechanowski et al., 2019; Wiese & Weis, 2020; Doğan Erdiñç & Uzunçarşılı Soydaş, 2024). Conversely, there are also studies in literature that point to positive evaluations of AIs. These studies (Franke et al., 2023; Penttinen et al., 2023) have shown that enriching the communication processes of AIs with anthropomorphic features can increase consumer interaction. Similarly, Mirowska and Arsenyan (2023) highlight individual differences, emphasizing that the ability of AIs to empathize plays a key role in their acceptance by consumers. Therefore, the anthropomorphic design of the latter may help consumers to interact with them but hinder such interactions due to the artificial nature of such cues. Recent evidence further suggests that positive responses to virtual influencers do not depend solely on their individual attributes. Kim and Park (2023), for example, found that the effect of virtual influencer attractiveness on purchase intention operates through and varies according to product-endorser fit.

Accordingly, the literature shows that consumer perception of AIs is not one-sided; rather, both positive and negative evaluations emerge simultaneously. This means that anthropomorphism can affect the evaluation of AIs as communicators, but it alone might not be enough to account for the intention to make purchases. Based on this duality, how AIs are perceived by consumers and the effects they have on them are evaluated not only through the lens of anthropomorphism but also through different concepts. In this regard, the current study aims to investigate whether anthropomorphism can affect source credibility and purchase intention. The relevant hypotheses are as follows:

H1: The level of anthropomorphism of AIs affects perceived source credibility.

H2: The level of anthropomorphism of AIs affects consumers' purchase intentions.

Source Credibility in AI Contexts

Following from the above discussion about anthropomorphism, source credibility becomes an important factor since being anthropomorphic does not necessarily mean that the AIs become persuasive. The anthropomorphic characteristics may attract attention from the user and lead them to perceive the AIs as social agents; nevertheless, if the AIs are to use their anthropomorphism as a way of influencing purchase intention, the user must first recognize them as credible sources of communication.

Source credibility is defined as the degree to which a communication source is perceived as being credible, knowledgeable, and persuasive. Source Credibility Model was initially created by Hovland and Weiss (1951), then further developed by Ohanian (1990). Ohanian (1990) came up with a model based on the previous work of Hovland and Weiss (1951) and McGuire's (1985) source attractiveness approach. The concept of source credibility according to the model created by Ohanian (1990) is viewed as a three-dimensional construct of trustworthiness, expertise, and attractiveness. Trustworthiness entails honesty and reliability of the source, while expertise involves knowledge, competence, and authority of the source. Attractiveness includes both physical attractiveness and relational attractiveness. By combining all three dimensions, we can determine the level of credibility of the source and its effects on the audience.

With respect to AIs, the importance of the topic of source credibility emerges, because such agents fall somewhere between human beings and computer-generated communication sources. Companies that formerly relied on working with celebrities or opinion leaders have been cooperating with human influencers and AIs that are active online (Srinivas, 2024). This cooperation is premised on the human-like nature, visibility, and interactive capacity of AIs. Yet, while human influencers can embody these traits due to their physical and experienced human nature, AIs lack the latter and thus rely on how they are perceived by users as artificial humans.

However, just as there are two opposing views regarding the perception of anthropomorphism, there are also two opposing views regarding the perception of source credibility of AIs. Speaking about source credibility in such a collaboration, there are two contradictory viewpoints. One viewpoint is that AIs may have lower source credibility since consumers may have difficulty in trusting recommendations from a virtual being that lacks life experiences (Walters, 2019). Another perspective suggests that AI could be as effective as human influencers if users perceive the agents' behavior as controlled and trustworthy (Maughan, 2018; Darner & Arvidsson, 2019). Thus, AIs' effectiveness depends both on whether they are artificial or human-like and how their performance is evaluated from the perspective of source credibility.

The constant perception of the human likeness in these approaches fits the anthropomorphism discussed in this study and proves the need for studying source credibility as an independent concept. To be accepted by the target audience, the initial human-likeness created by the source needs to be reinforced by trustworthiness, expertise, and consistency. Recent comparisons of human and virtual influencers also indicate that credibility-related evaluations remain important in explaining purchase intention, although their effects may differ across influencer types and product contexts (Djafarova & Davies, 2025). Thus, this article studies the effect of anthropomorphism on consumer purchase intentions by means of source credibility. Hypothesis:

H3: The source credibility of AIs affects consumers' purchase intentions.

Behavioral and Information-Processing Perspectives on Purchase Intention

The increasing influence of information perceptions on how they are positively translated into behavior is constantly changing. Purchase intention can be described as a behavioral response to not just the consumer's rational evaluation, but also how he/she processes persuasive communications from the communication source. In addition to traditional models, comprehensive, evaluation-based models focusing on the interpretation of persuasive cues provided by the sender can also be discussed.

Traditional models, such as the Theory of Reasoned Action (TRA), the Theory of Planned Behavior (TPB), and the Technology Acceptance Model (TAM), focus on the connection between behavior and attitude. The common approach used in these theories is the explanation of intentions through attitude, subjective norms, perceived control, perceived usefulness, and perceived ease of use (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980; Ajzen, 1985; Davis, 1989; Ajzen, 1991; Ajzen & Fishbein, 2000; Montano & Kasprzyk, 2008; Fishbein & Ajzen, 2010). While these frameworks provide a logical approach to intention interpretation, the matter of AIs also necessitates consideration of heuristic and peripheral signals used by consumers when evaluating artificial sources of communication.

In this context, the Heuristic-Systematic Model (HSM) models a process where, through systematic processing, individuals focus intensely on the message's content and rationality predominates, whereas in heuristic processing, individuals make quick decisions based on superficial cues (Chaiken, 1980; Chaiken & Maheswaran, 1994). According to another model, the Elaboration Likelihood Model (ELM), information is processed through central processing -which relies on high interest and cognitive capacity- and peripheral processing, which focuses on cues such as source credibility, physical attractiveness, and social endorsement (Cyr et al., 2018; Petty et al., 1983; Petty & Cacioppo, 1984; Chen et al., 2025).

The models discussed above can be considered especially important for AIs since consumers do not always judge the influencer generated by AI based on the message itself but may use peripheral or heuristic cues like human appearance, voice tone, facial expression, expertise, and credibility. In the processing of AIs' messages concrete elements such as tone of voice and facial expressions, achieved through high anthropomorphism, can trigger emotional arousal in individuals, potentially leading to reduced cognitive processing and faster decision-making. Hence, the anthropomorphic signals may serve as an initial attraction factor, yet their effect on purchase intentions will be realized through the source credibility (Lee, 2011; Chang et al., 2015).

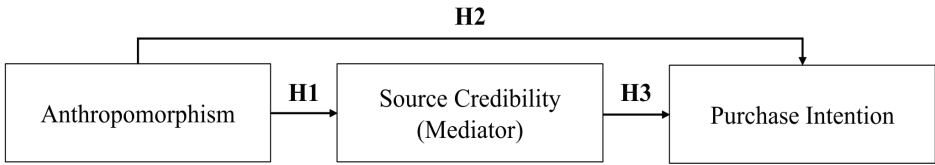
In this context, peripheral and heuristic -such as source credibility and social proof- highlighted by models like HSM and ELM provide a rationale for treating source credibility, as examined in this study, as a mediating mechanism explaining the relationship between anthropomorphism and purchase intention. Thus, source credibility is the mediator that can enable consumers' perceptions of anthropomorphic features of AIs to result in purchase intention. The corresponding hypothesis is presented below:

H4: Source credibility mediates the relationship between anthropomorphism and purchase intention.

Methodology

This study proposes a conceptual mediational model that examines how the anthropomorphic characteristics of AIs influence consumers' purchase intentions through source credibility. The proposed model is presented in *Figure 1*.

Figure 1. Research model



Hypotheses and rationales

For this research, source credibility is conceptualized as a multidimensional construct that includes trustworthiness, expertise and attractiveness (Ohanian, 1990). Likewise, anthropomorphism is conceptualized with two variables; liveliness and anthropomorphism according to the measurement scale (Bartneck et al., 2009). Accordingly, the following hypotheses are formulated at the construct level rather than separately for each dimension:

H1: The level of anthropomorphism of AIs affects perceived source credibility.

H2: The level of anthropomorphism of AIs affects consumers' purchase intentions.

H3: The source credibility of AIs affects consumers' purchase intentions.

H4: Source credibility mediates the relationship between anthropomorphism and purchase intention.

This study employs a quantitative research design to examine how anthropomorphism and source credibility of AIs shape consumers' purchase intentions. AIs, created using CGI and AI technologies, are designed to resemble real humans and function as digital personas in SM environments (Creasey &

Anido, 2020).

As such, the research utilized a visual stimulus that included Lil Miquela, an influencer built by an AI company named Brud (2023) through CGI technology back in 2016. The reason for choosing this influencer is that she had a defined identity on SM. It is important to note that during the data collection procedure, the Lil Miquela stimulus was provided to participants prior to completing the scale questions related to anthropomorphism, source credibility, and purchase intention.

Research design

In this research, the survey model was employed for collecting quantitative data. The survey technique was structured to collect information about the variables present in the research model (Neuman, 2020).

The survey instrument comprised four parts. The first part had demographic questions. The second section included the 11-item 'Anthropomorphism' scale developed by Bartneck et al. (2009), which has 6 items for liveliness and 5 items for anthropomorphism as latent variables. The third section included the 5-item attractiveness, 5-item trustworthiness, and 5-item expertise latent variables of the 'Source Credibility' scale developed by Ohanian (1990), and the final section included the 4-item 'Purchase Intention' scale developed by Kim and Park (2023). All items were measured using a five-point Likert scale (1 = strongly disagree, 5 = strongly agree). The data were analyzed using IBM SPSS Statistics (Version: 25.0) for descriptive statistics, reliability, correlation, and regression analyses. Additionally, the data were subjected to first- and second-order confirmatory factor analysis using AMOS (Version 24.0), and hypothesis tests were performed using structural equation modeling and Hayes' PROCESS macro (Model 4).

Sampling and data collection

The population of the study consists of SM users in Türkiye. According to the 2024 We Are Social report, *Instagram* is the most widely used SM platform. 76.7% of general internet users in Türkiye are *Instagram* users. The age ranges of users vary between 16-24 and 25-34 (Kemp, 2024). According to Turkish Statistical Institute's data, Istanbul has the largest population aged 18-65 in Türkiye and, according to the Council of Higher Education's statistics, is home to 1,399,508 higher education students (Turkish Statistical Institute, 2025; Council of Higher Education, 2025a). Accordingly, the study sample consisted of male and female *Instagram* users aged 18-24 and 25-34 who resided in Istanbul, were enrolled in higher education institutions, and actively used *Instagram*.

A priori power analysis was conducted using G*Power 3.1 to determine the minimum required sample size. Based on a medium effect size (), an alpha level of .05, and a statistical power of .95, the minimum required sample size was calculated as 107 participants. A non-probability quota sampling method

was used to ensure the inclusion of relevant user groups (Şimşek, 2012). In addition to the eligibility criteria, minimum quotas based on university type and gender were determined before data collection. The quota proportions were calculated using official statistics published by the Council of Higher Education concerning students enrolled in higher education institutions in Istanbul.

According to these data, of the 1,399,508 higher education students in Istanbul, 53.4% (747,963 students) were enrolled in state universities, whereas 46.6% (651,545 students) were enrolled in foundation higher education institutions (Council of Higher Education, 2025a). When these proportions were applied to the minimum sample size of 107 determined through G*Power, the minimum quota targets were calculated as 57 participants from state universities and 50 participants from foundation higher education institutions. In addition, official statistics indicated that 615,133 (44%) of the higher education students in Istanbul were male and 784,375 (56%) were female (Council of Higher Education, 2025b). Based on this distribution, the minimum gender quotas for the required sample of 107 were set at 47 male and 60 female participants. Compliance with the eligibility and quota criteria was assessed through demographic screening questions presented at the beginning of the questionnaire.

The data was collected through face-to-face administration of the questionnaire to students enrolled in higher education institutions in Istanbul. As data were collected from each participant at a single point in time, the study employed a cross-sectional design. The ethical approval of the study was approved by Marmara University Institute of Social Sciences Ethics Committee, İstanbul/Türkiye (Approval No: 2024-24/1). Informed consent was obtained from all participants prior to data collection.

Findings and Results

Pre-test

To test the compatibility of the scales used in the study with the research sample, a pilot study was conducted with 87 individuals who were considered to share the characteristics of the main sample. The 'Anthropomorphism' (Bartneck et al., 2009), 'Source Credibility' (Ohanian, 1990), and 'Purchase Intention' (Kim & Park, 2023) scales, which had previously been validated in different sample groups, were reassessed in this pilot study to examine their suitability for the present research context.

The factor structures of the scales were tested using confirmatory factor analysis (CFA). The analyses were performed using IBM SPSS Statistics (Version 25.0) and AMOS (Version 24) software.

According to the CFA results, items that were problematic in terms of factor loadings and were included in the liveliness latent variable were removed

from the model. Thus, a new model was designed with 3 items under the liveliness latent variable and 5 items under the anthropomorphism latent variable. In the analysis of the Source Credibility scale, one item within the attractiveness latent variable that had issues with factor loadings was removed from the model. These items were removed because their inadequate factor loadings indicated that they did not represent their intended dimensions consistently within the pilot sample. Conceptually, the removed items were considered less compatible with the way participants evaluated AIs' than the retained items. Specifically, when the removed items are analyzed from a conceptual perspective, participants' evaluation of the AI influencer's realism, interactivity, and responsiveness based solely on static images may have reduced the observability of the process. Furthermore, the perceived realism dimension, on the other hand, can be said to overlap with other indicators of humanlikeness within the anthropomorphism dimension. Additionally, the attractiveness item on the source credibility scale was removed on the grounds that it exhibited high overlap with other sub-dimensions in the same dimension -such as style, beauty, and elegance- and did not offer a distinct separation.

The fit indices of all the models that were created using the revised items were generally consistent with the threshold values recommended in the literature ($CFI > 0.90$ and $RMSEA < 0.08$; Schermelleh-Engel et al., 2003). According to Cronbach's alpha coefficient, the reliability levels of all scales were found to be high ($0.77 \leq \alpha \leq 0.93$).

Findings

Following the completion of the pretest phase of the study, a total of 486 participants answered the revised questionnaire. After the removal of outlier responses, it was established that the data set comprised answers provided by 421 respondents.

The sample of participants consists of 58.7% females ($n=247$) and 41.3% males ($n=174$). As for the age distribution, 40.9% are 20 years old or younger ($n=172$), 41.8% are aged 21-25 ($n=176$), 10.05% are aged 26-30 ($n=44$) and 6.9% are aged 31-34 ($n=29$). The distribution of respondents according to their educational status is as follows: 88.1% of participants are currently studying for an undergraduate degree ($n=371$), 9.3% are enrolled in graduate programmes ($n=39$) and 2.6% are pursuing an associate degree ($n=11$). Regarding university type, 54.9% of the participants were enrolled in foundation universities ($n = 231$), whereas 44.7% were enrolled in state universities ($n = 188$). University-type information was missing for two participants (0.5%).

Validity and reliability analyses

The responses of the 421 participants who took part in the survey were used to assess the validity and reliability of all the scales used in the study, through IBM SPSS Statistics (version 25.0) and AMOS (version 24). The measurement tools were evaluated separately for each scale.

Within the reliability analysis, the Cronbach's alpha coefficients calculated for all sub-dimensions ranged from 0.81 to 0.95. The general reliability of the anthropomorphism scale was found to be 0.86, the source credibility scale 0.94, and the purchase intention scale 0.95. These results demonstrate that the scales used in the study show a high level of internal consistency, with the total Cronbach's alpha coefficient reported as 0.93.

Confirmatory factor analyses

The scales subjected to confirmatory factor analysis (CFA) in this study were examined using AMOS (version 24.0). The values obtained indicate that the scales generally demonstrate acceptable model fit in line with the threshold values recommended in the literature (CFI, TLI > 0.90; RMSEA < 0.08; GFI and AGFI > 0.85) (Schermelleh-Engel et al., 2003).

The analysis results are as follows:

The anthropomorphism scale was found to have a generally acceptable model fit. χ^2/df (Chi-Square) = 4.099, AGFI = 0.918, GFI = 0.963, NFI = 0.961, CFI = 0.970, IFI = 0.970, TLI = 0.940, RMSEA = 0.086.

The source credibility scale was found to have acceptable levels of model fit. (χ^2/df (Chi-Square) 3.691, AGFI 0.871, GFI 0.914, NFI 0.948, CFI 0.961, IFI 0.962, TLI 0.950 and RMSEA 0.080).

The purchase intention scale was reported to have generally acceptable levels of model fit. (χ^2/df (Chi-Square) = 4.554, AGFI = 0.948, GFI = 0.995, NFI = 0.997, CFI = 0.998, IFI = 0.998, TLI = 0.998, RMSEA = 0.091).

Second-order confirmatory factor analyses

'Anthropomorphism' and 'Source Credibility' scales used in the research included multiple latent variables; second-order CFA was applied to test the possibility of their combined evaluation before proceeding to the hypothesis tests.

The analysis revealed that the second-order confirmatory factor analysis of the anthropomorphism scale had the following goodness-of-fit values: χ^2/df (Chi-Square) 3.349, AGFI 0.930, GFI 0.975, NFI 0.971, CFI 0.979, IFI 0.979, TLI 0.955 and RMSEA 0.075. These results indicate that the total scores of the latent variables of liveliness and anthropomorphism can be used as the total score of the scale.

The second-order confirmatory factor analysis of the source credibility scale yielded the following goodness-of-fit values: χ^2/df = 3.698, AGFI 0.877, GFI 0.918, NFI 0.948, CFI 0.961, IFI 0.962, TLI 0.950 and RMSEA 0.080. These findings support the use of the total scores of attractiveness, trustworthiness and expertise latent variables as the scale's overall total score.

Hypothesis tests

The first hypothesis of the study, 'The level of anthropomorphism of Alls affects perceived source credibility' was tested. First, Pearson correlation analysis revealed a positive and significant relationship between anthropomorphism and source credibility ($r = 0.620$, $p < 0.001$). As the correlation coefficient was below 0.80, multicollinearity was not considered a concern. The regression analysis showed that anthropomorphism explained 38% of the variance in source credibility ($R^2 = 0.384$). The ANOVA result confirmed that the model was significant ($p < 0.001$). The coefficient table showed that the effect of anthropomorphism on the dependent variable was positive and significant ($B = 0.599$, $p < 0.001$, $VIF = 1.000$). This finding supports the CASA (Reeves & Nass, 1996) model, indicating that human-like characteristics increase perceived source credibility.

The second hypothesis of the study, which states 'The level of anthropomorphism of Alls affects consumers' purchase intentions' was tested using regression analysis. Prior to the analysis, Pearson correlation analysis revealed a moderate, positive and significant relationship between anthropomorphism and purchase intention ($r = 0.308$, $p < 0.05$). The regression analysis revealed that the anthropomorphism variable explained 9% of the variance in purchase intention ($R^2 = 0.095$). The ANOVA results were significant ($p < 0.05$). In the coefficient analysis, it was determined that anthropomorphism had a positive and significant effect on purchase intention ($B = 0.381$, $p < 0.05$). Therefore, H2 was supported.

The third hypothesis, 'Source credibility of Alls affects consumers' purchase intentions', was tested using regression analysis. Prior to the analysis, Pearson correlation analysis showed a high, positive and significant relationship between source credibility and purchase intention ($r = 0.544$, $p < 0.05$). As the correlation coefficient was below 0.80, multicollinearity was not considered a concern.

The regression analysis showed that source credibility explained 29% of the variance in purchase intention ($R^2 = 0.296$). The Durbin-Watson value (1.57) confirmed the independence of the errors. ANOVA results were significant ($p < 0.05$). The coefficients table showed that an increase in source credibility had a significant and positive effect on purchase intention ($B = 0.688$, $p < 0.05$). The VIF value (1.000) did not indicate a multicollinearity problem. This means that H3 was confirmed. From the results above, we can see that the source credibility variable is more predictive of purchase intentions than anthropomorphism in the regression analysis, thus confirming the significant role of source credibility dimensions established by Ohanian (1990).

To examine the relationships between latent variables in the study, structural equation modeling (SEM) was conducted to investigate the effects of anthropomorphism on source credibility and purchase intention (Stein et al., 2012).

The effect of anthropomorphism, which was positioned as an exogenous variable, on the endogenous variables of source credibility and consumer purchase intention was analyzed, and the model's goodness-of-fit values are reported below.

Table 1. Structural equation model fit values

CMIN/DF	AGFI	GFI	NFI	CFI	IFI	TLI	RMSEA
2.782	0.840	0.874	0.915	0.943	0.944	0.933	0.065

As can be seen from *Table 1*, model fit indices suggested overall satisfactory fit (Schermelleh-Engel et al., 2003). SEM results indicate that the exogenous variables significantly affected source credibility and purchase intention. According to the analysis results, anthropomorphism has a positive and significant effect on attractiveness, trustworthiness, and expertise, while liveliness has a negative and significant effect on these dimensions. Similarly, anthropomorphism had a significant positive effect on purchase intention, whereas liveliness had a significant negative effect. Overall, the two dimensions differed in the direction of their effects on both source credibility and purchase intention. These relationships are presented as supplementary dimension-level findings rather than as separate hypothesis tests.

The results show that a high level of liveliness negatively affects consumers' perceptions of attractiveness, trustworthiness, expertise, and purchase intention. This finding aligns with the Uncanny Valley theory (Mori, 1970), which suggests that overly human-like artificial agents can cause discomfort among users.

Structural equation modelling (SEM) was used to examine the effect of source credibility on purchase intention. The effect of source credibility, which is positioned as an exogenous variable in the model, on consumer purchase intention, which is positioned as an endogenous variable, has been analyzed and the model's goodness of fit values are reported below.

Table 2. Structural equation model fit values

CMIN/DF	AGFI	GFI	NFI	CFI	IFI	TLI	RMSEA
2.831	0.880	0.915	0.951	0.967	0.968	0.959	0.066

As can be seen from *Table 2*, model fit indices suggested overall satisfactory fit (Schermelleh-Engel et al., 2003).

Analyzing the regression coefficients, it can be concluded that the attractiveness exogenous variable does not significantly impact the purchase intention endogenous variable ($B = 0.058$, $p = .296$). On the other hand, trustworthiness ($B = 0.450$, $p < .001$) and expertise ($B = 0.158$, $p = .039$) significantly and positively influence the intention to buy. Thus, purchase intention was primarily predicted by the trustworthiness and expertise dimensions of source

credibility rather than by perceived attractiveness.

The findings indicate that consumers' purchase intentions are primarily influenced by the trustworthiness and expertise of AIs, while attractiveness has no significant effect. The fourth hypothesis proposed that source credibility mediates the relationship between anthropomorphism and purchase intention. To test this hypothesis, composite scores for the study variables were analyzed using Hayes' PROCESS macro (Model 4) with 5,000 bootstrap samples.

Table 3. Hayes' PROCESS Macro Model (4) Results

Dependent Variable	Independent Variable	B	SE	t	p	LLCI	ULCI	Beta (Standardized)
Source Credibility (M)	Anthropomorphism (X)	0.567	0.038	14.735	0	0.491	0.643	0.584
Purchase Intention (Y)	Anthropomorphism (X)	0.03	0.065	0.47	0.638	-0.097	0.157	0.025
	Source Credibility (M)	0.618	0.067	9.279	0	0.487	0.748	0.485
Total Effect	X → Y	0.381	0.058	6.618	0	0.268	0.494	0.308
Direct Effect	X → Y	0.03	0.065	0.47	0.638	-0.097	0.157	0.025
Indirect Effect	X → M → Y	0.35	0.048	-	-	0.263	0.448	0.283

According to PROCESS analysis, anthropomorphism had a statistically significant prediction for source credibility, and source credibility had a statistically significant prediction for purchase intention. However, there was no statistically significant direct effect of anthropomorphism on purchase intention, whereas there was a significant indirect effect through source credibility. The explanatory capacity of the source credibility model ($R^2 = .341$) was greater than that of the total effect model ($R^2 = .095$), which highlights the importance of source credibility in the mediation model. All relevant coefficients, confidence intervals, and statistical information about models can be found in Table 3.

Source credibility model: $R^2 = 0.341$ ($F = 217.121$, $p < 0.001$).

Purchase intention model: $R^2 = 0.249$ ($F = 69.403$, $p < 0.001$).

Total effect model: $R^2 = 0.095$ ($F = 43.802$, $p < 0.001$).

Based on the results of this study, it can be said that the influence of anthropomorphism on purchase intention was mediated via source credibility, which confirms the complete mediating effect predicted by hypothesis H4. This means that anthropomorphism, taken alone, was not enough to predict purchase intention once source credibility was controlled for.

Discussion and Conclusion

The present study examined the influence of anthropomorphic attributes and source credibility of AIs on consumers' purchase intent. The findings from the regression analysis demonstrate that there is a statistically significant relationship between anthropomorphism and purchase intention at the first stage; however, this association vanishes when source credibility is used as a mediator. Therefore, the core contribution of this research to the field lies in the proof of the intermediary role of source credibility in translating AIs' anthropomorphism into purchase intention.

The first hypothesis generated during the study suggests that anthropomorphism significantly affects the perception of the source's credibility. In other words, consumers may perceive AIs with human-like features as more socially significant and credible communication sources. Hence, the results of the study support the CASA model proposed by Reeves and Nass (1996). Hypothesis two concerns the effect of anthropomorphism on purchase intention. While there is a significant relationship between anthropomorphism and purchase intent, it explains relatively little variance, which means that the factors influencing consumer behavior are far more complicated than anthropomorphism. Recent studies support this argument (Kim & Park, 2023), and this implies that an anthropomorphized design may boost social presence and source salience; however, it cannot automatically lead to purchase intent if there are no positive perceptions of the source's credibility. Moreover, the SEM results imply that the impact of the sub-factor 'Liveliness' on the other sub-factors, which is negative and significant, means that although certain human features may foster familiarity, other human features may contribute to increasing artificiality and creating unpleasant feelings toward the source (Ciechanowski et al., 2019).

According to hypothesis three, source credibility positively impacts consumer purchase intent. In other words, people are more likely to buy a product if the information source is credible. Nevertheless, it must be emphasized that according to the findings of SEM analysis, attractiveness failed to affect purchase intention, while trustworthiness and expertise had a more pronounced effect. This interpretation is supported by new findings in studies demonstrating that credibility judgments are crucial in consumer behavior reactions (Djafarova & Davies, 2025).

Finally, hypothesis four is related to the mediating role of source credibility. According to the results of the mediation analysis, anthropomorphism had an indirect effect on purchase intent through source credibility. This finding shows that source credibility serves as a mediating process and supports the role of message source attributes in the ELM framework (Petty & Cacioppo, 1986).

The research also backs up the Uncanny Valley hypothesis (Mori, 1970) that indicates that anthropomorphic cues in terms of AIs that excessively imitate

humans could have a bad influence on consumer perceptions. In other words, the negative relationship between liveliness and variables such as attractiveness, trustworthiness, expertise, and purchase intention indicates that all anthropomorphic cues do not influence consumer perceptions in the same way.

These findings also offer practical implications for brands using AI influencers in advertising and influencer communication. Since human-like design primarily exerts its influence through source credibility, it should not be considered sufficient on its own to increase purchase intent. Therefore, brands should prioritize consistently presenting expertise and credibility by ensuring reliable product information, transparent commercial communication, and a clear fit between the established identity of the AI influencer and the product being promoted. The nonsignificant effect of attractiveness also demonstrates that visual appeal should not replace credibility-building strategies. Furthermore, negative effects associated with liveliness suggest that maximizing human-likeness without considering perceived artificiality can negatively impact consumer responses. Therefore, anthropomorphic features should be used in a balanced way rather than maximized.

Limitations of the study include its quantitative and cross-sectional nature, the country setting of the research, and the use of a single AI. As a result, it is necessary to discuss limitations associated with this case and consider future research that can extend the results through comparative analysis with other influencers and countries.

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