



DO VIRTUAL FACES LEAD TO REAL PURCHASES? INVESTIGATING AI ANTHROPOMORPHISM & ITS IMPACT ON PURCHASE INTENTION

Humna Hamad Butt¹, Maha Gul², Umme Rehma³, Rukhba Ather Zia⁴, Dr. Asma Nisar⁵

DOI: <https://doi.org/10.63544/jbii.v5i10.254>

Affiliations:

^{1,2,3,4} Business Studies Department,
Kinnaird College for Women
University, Lahore
Email: mailhumna@gmail.com

⁵ Assistant Professor, Business Studies
Department, Kinnaird College for
Women University, Lahore

Corresponding Author's Email:

¹ mailhumna@gmail.com

Copyright:

Author/s

License:



Article History:

Received: 11.09.2026

Accepted: 02.10.2026

Published: 15.10.2026

Abstract

The research paper focuses on the impact of AI anthropomorphism on purchase intention, with the mediating role of marketing personalization, entertainment value and perceived homophily in the context of AI influencers/models. Brands around the world are adopting AI marketing tools, in which AI influencers/models are a relatively newer domain. The aim of the research is to fill the gap of research done on AI influencers/models in the Pakistani consumer market, discussing its practical implications on the fashion industry in particular. The study involved a sample size of 220 respondents, Pakistani residents aged 16 to 45 years, who had either seen or interacted with AI influencers/models before in any media type, using convenience and snowball sampling technique for data collection, which was then run through SPSS using Process Hayes Mediation Model 4. The results of the mediation analysis represented that the three proposed hypotheses in the study were accepted. The hypotheses were; marketing personalization mediates the positive relationship between AI anthropomorphism and purchase Intention, entertainment value mediates the positive relationship between AI anthropomorphism and purchase intention, and lastly, entertainment value mediates the positive relationship between AI anthropomorphism and purchase intention. The proven hypotheses signify the importance of the practical implications of the research on the Pakistani fashion industry, as big global brands are moving towards and investing in newer technologies like AI marketing tools.

Keywords: AI Anthropomorphism, Purchase Intention, Marketing Personalization, Entertainment Value, Perceived Homophily, AI Influencers

1. Introduction

In the past decade, social media has evolved into a powerful marketing tool, fundamentally transforming the way businesses connect with consumers. Consequently, influencer marketing has emerged as a key strategy for brands (Varsamis, 2018), who shape public sentiment and purchasing decisions through the content they share with their audiences (Yodel, 2017). AI has been introduced in this domain, emerging as AI influencers. Zhang and Wei (2021) suggest that AI influencers lead to better control over branding as they continuously learn and process data of interactions with customers and can be used by brands to enhance marketing. Parallel to that, AI is used to create human-like models for advertisements. Huang (2025) notes that AI has the ability to allow the creation of realistic faces that have a high degree of resemblance with actual human faces, and these faces can often be photorealistic and must be carefully curated to adhere to the psychology of the consumers, such that they perceive it as authentic and not touch the boundaries of hyperrealism. In these ways, AI models can be used in advertisements on different media platforms for



profiteering. Hence, the aim of this study is to develop a comprehensive understanding of how consumers interact with virtual influencers/models and to explore the psychological mechanisms through which virtual faces lead to real purchases.

The origins of virtual influencers could be traced back to the mid-2010s, with Lil Miquela, a computer-generated imagery character released in 2016, then celebrities like Shudu, Imma, and Noonouri gained millions of followers and collaborations with premium labels such as Prada, Calvin Klein, Balmain, and Dior (Jayasingh et al., 2025). The virtual influencer market was seen to be valued at around USD 4.6 billion in 2024 and is expected to rise indicating global brands' growing faith in AI-generated personalities as marketing assets (Jayasingh et al., 2025). Anthropomorphism, or the attribution of human-like features, feelings, and behaviours to non-human entities, is a crucial factor propelling this adoption. It has been found to be a crucial factor in determining consumer engagement and trust in AI-driven marketing scenarios (Gomes et al., 2025). The Pakistani market has yet to fully embrace AI influencers and virtual models. A few local fashion brands, like Saya, Nishat Linen, Meme Retail, Engine, and ZERO, have started experimenting with AI-generated models in their ads and campaigns indicating the trend's early emergence in Pakistan (Rana et al., 2024).

However, research on consumer responses to AI anthropomorphism of AI influencers/models in Pakistan is limited, particularly in terms of understanding the psychological mechanisms such as marketing personalization, entertainment value, and perceived homophily that mediate the relationship between anthropomorphism and purchase intention. This study therefore situates itself at the crossroads of AI marketing innovation and an underexplored consumer market, with the goal of contributing both theoretical depth and practical insight to a fast-expanding field. In the contemporary era, there is an increased focus to create anthropomorphic qualities in AI-based marketing tools, as AI without anthropomorphism leads to lower trust (Chi & Hoang Vu, 2023). Personalized recommendations positively lead to increased purchase intention (Yin & Qiu, 2021). Moreover, since anthropomorphism is related to human likeness, another aspect to consider is perceived homophily, which strengthens the relationship between anthropomorphism and virtual influencers' parasocial interactions (Lee et al., 2025). AI influencers/models also have an entertainment value component attached to them like human influencers (Cao, 2025). So, there is a gap in the contemporary research to prove how AI anthropomorphism leads to purchase intention via these above-stated variables, that are technical, social and hedonic in nature respectively, when AI influencers/models are considered. This is necessary to draw out a significant comparison on how AI anthropomorphism can be effectively utilized by discussing the three distinct features that the AI influencers/models can be built on. Moreover, there is a gap in research on AI influencer/models, considering a multi-factor approach, particularly because the concept is rare in the Pakistani market (Rana et al., 2024). This research aims to target those gaps.

2. Literature Review

Artificial Intelligence has created a revolution in the way a firm interacts with their customer (Beyari & Hashem, 2025). AI influencers/models are now being used for marketing, which are personas designed and generated by computers to not just look but also behave like humans on social networking sites, are a noteworthy innovation (Jayasingh et al., 2025).

2.1. Underpinning Theories

The Uses and Gratification Theory (UGT), developed by Katz, Blumler, and Gurevitch in 1974, would serve as a major theoretical pillar in this study. With regard to entertainment value, UGT's hedonic pleasure dimension is immediately applicable. In the context of AI influencer marketing, perceived homophily satisfies specific social and identity-based demands (Toyib & Paramita, 2024). The theoretical foundation for marketing personalisation is UGT's cognitive pleasure dimension, which includes the preference for content that is accurate and personally meaningful to each particular consumer (Katz et al., 1974). Previous UGT applications in influencer marketing research have primarily focused on human influencers (Lou & Yuan, 2019; Lee & Watkins, 2016). This discovery broadens the scope of UGT by demonstrating that the theory's explanatory power is not dependent on the biological humanity of the media actor, but rather on the perceived social and hedonic features of the media stimulus.



Anthropomorphism Theory was first articulated in the consumer behaviour literature by Epley, Waytz, and Cacioppo (2007). This study introduces an important theoretical refinement, the nonlinear, U-shaped relationship between AI influencer anthropomorphism and purchase intention, as demonstrated by Pan (2024), which is compatible with Mori's original uncanny valley theory. The uncanny valley effect predicts that mid-level anthropomorphism sufficiently realistic to resemble human but falling short of full perceptual convincingness induces feelings of eeriness, uneasiness, or distrust in observers, suppressing positive behavioural intentions.

2.2. AI Anthropomorphism and Purchase Intention

Recent literature increasingly suggests a relatively positive and direct relationship between AI anthropomorphism and purchase intention. When AI influencers depict anthropomorphic characteristics such as humanlike features, especially visage, personalities, and interactions, consumers react to them in ways comparable to human endorsers (Chi et al., 2020). Epley et al. (2008) found that anthropomorphism stems from two motivations: the desire to interact with the unknown environment in a natural and understanding way, and the desire to form social bonds and relationships. This is especially true when a person lacks real-life social encounters and consequently relies on a human-non-human relationship.

Empirical studies strengthen this connection. According to various studies anthropomorphic AI influencers improve perceived warmth and credibility, which boosts consumers' readiness to purchase. For instance, a study by Gerlich & Michael (2023) suggests that AI influencers with human-like ways of interacting and personalities are found to considerably influence consumers' sentiments regarding marketed products, hence increasing buying intention. In the fashion industry in particular, realistic visuals and human-like aesthetics are particularly important. A study by Wang et al. (2025) states that consumers have a higher probability to buy clothing recommended by AI influencers who are in accordance with the cultural beauty standards and human aesthetics of the society. However, Pan (2024) presented a contrasting study that demonstrated that the relationship between anthropomorphism and purchase intention frequently follows a U-shaped pattern, with either low (clearly animated) or high (highly realistic) anthropomorphism being effective, while mid-level anthropomorphism can elicit the uncanny valley effect and reduce purchase intention. Overall, the research backs up the claim that AI anthropomorphism directly increases buying intention, making it a crucial precondition for influencer marketing techniques powered by AI.

2.3. AI Anthropomorphism and Purchase Intention: A Mediated Process by Marketing Personalization

AI influencers/models anthropomorphism plays a significant role to ensure the purchase intention of consumers. Previous research reveals a U-Shape trend for the relationship between AI influencers/models anthropomorphism and purchase intention, i.e., the AI influencers/models should either be animated (low anthropomorphism) or very realistic (high anthropomorphism), but never have realistic imagery with bad graphics as it reduces purchase intention. So, if the right amount of anthropomorphism is chosen, the purchase intention of consumers would be higher (Pan, 2024). Moreover, consumers willingly pay higher prices when AI tools are more anthropomorphic (Sidlauskienė et al., 2023).

Recent research shows that consumers perceive personalization positively when they come in contact with AI-based technology, and those AI tools have more anthropomorphic features integrated in them. This creates familiarity with the human-likeness of the AI, showing that AI anthropomorphism positively influences marketing personalization (Laban & Araujo, 2020). This analogy is used on the variables AI influencers/models anthropomorphism, leading to AI marketing personalization, as AI influencers/models are also an AI tool. In the context of AI influencers/models, AI Marketing Personalization makes people more likely to buy and be attracted to such platforms that gauge consumer interests better (Liu et al., 2023). So looking at the previous studies, it can be hypothesized that if AI Anthropomorphism leads to marketing personalization, and AI Marketing Personalization leads to Purchase Intention, all whilst the relation between AI Influencer/Models Anthropomorphism and Purchase Intention is positive, marketing personalization mediates this relation. Hence, the studies formulated the following hypothesis:

Hypothesis 1: Marketing Personalization mediates the positive relationship between AI Anthropomorphism and Purchase Intention.



2.4. AI Anthropomorphism and Purchase Intention: A Mediated Process by Entertainment Value

Research indicates that entertainment value holds strong significance to inculcate emotional attachment with virtual influencers. If the close and personal interactions of consumers with them are interesting, they result in cognitive consistency and emotional attachment. These anthropomorphic results make the consumers build virtual influencer ecosystems, driving brand recognition and purchase intention (Liu et al., 2025). The aforementioned features are parallel to anthropomorphism, such that consumers when interacting with AI influencers/models, feel a level of cognitive similarity and emotionality with it due to perception of entertainment. Studies note that in the online ecosystems, consumer experience is shaped by the entertainment component and perceived enjoyment instilled by the anthropomorphic cues of AI. Increased anthropomorphism due to entertainment leads to greater purchase intention of customers (Klein & Martinez, 2023).

According to a recent study, the higher the consumer engagement is with AI influencers/models, the more is the entertainment perception of consumers. If AI influencers/models have the characteristic of being entertaining or amusing, that leads to enjoyment or escapism. These features are important to divert the attention of the consumers via the perceived entertainment that they provide. The entertainment component of AI influencers/models also enhance user satisfaction. So, interactions with AI influencers/models lead to increased entertainment, user satisfaction and then in turn these increase purchase intention (Cao et al., 2025). One research reports via five studies that entertainment value itself leads to higher purchase intention in social media marketing. Entertainment leads to enjoyment and pleasure that increase the probability that the followers would be more likely to be attached to the influencer (Ao et al., 2023). Like for human models/influencers, consumers form a perception about AI models/influencers that is significantly dependent on the entertainment value that they provide, in turn influencing their purchase actions and intentions. These studies help us formulate our hypothesis:

Hypothesis 2: Entertainment Value mediates the positive relationship between AI Anthropomorphism and Purchase Intention.

2.5. Anthropomorphism and Purchase Intention: A Mediated Process by Perceived Homophily

Previous studies reveal that AI Influencer/Models Anthropomorphism leads to enhanced purchase intention by consumers and sometimes even lead to consumer's willingness to pay more, as their human-likeness enhances their purchase decisions (Pan et al., 2024; Sidlauskienė et al., 2023). It's because consumers are more likely to relate to high or low anthropomorphism, i.e. animated or hyper-realistic AI influencers/Models; medium range anthropomorphism in AI influencers/models ads looks uncanny, diffusing consumers' reliability and decreased buying interest. Perceived homophily plays an integral role in forming emotional bonds between consumers and AI influencers/models. When consumers perceive shared values or preferences, they become more likely to develop a sense of identification and psychological closeness (Lee & Watkins, 2016). The perceived similarity strengthens message credibility and also boosts persuasion effectiveness, specifically in social media environments (McPherson et al., 2001). A study by Cottrell (2023) proves that positive anthropomorphism results in homophily. Also, homophily has positive correlation with purchase intention, particularly in the aspects of physical appearance and perceived similarity of virtual influencers/models. Just like for human influencers and actors in ads, if virtual influencers/models are authentic, then it will lead to purchase intention (Dondapati & Dehury, 2024). Hence, the studies formulated the following hypothesis:

Hypothesis 3: Perceived Homophily mediates the positive relationship between AI Anthropomorphism and Purchase Intention.

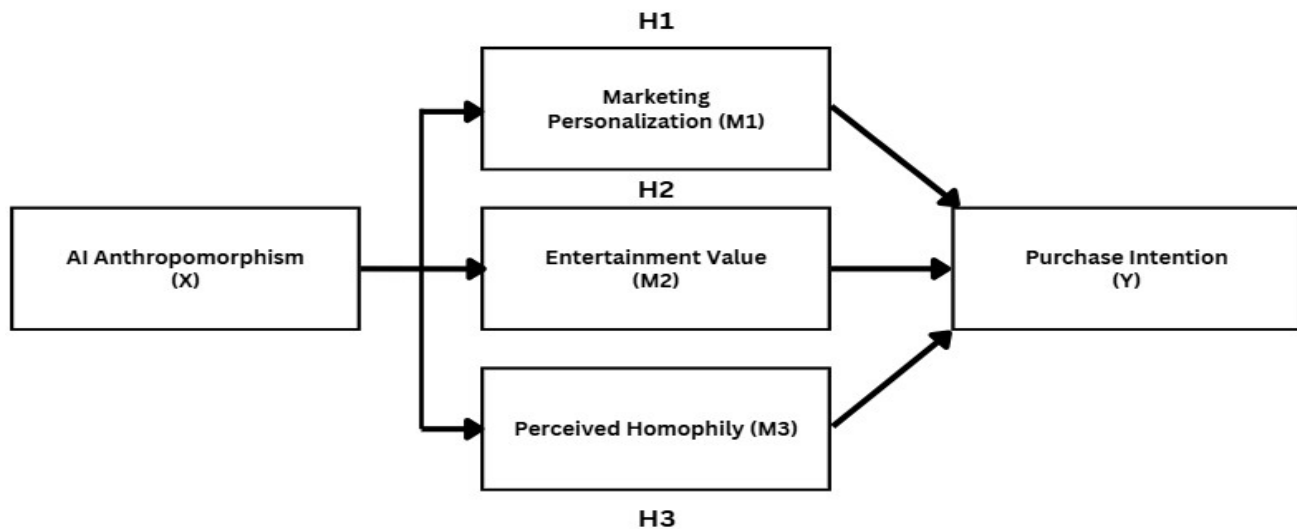
2.6. Theoretical Framework

Based on the formulated hypotheses, we present the following framework:



Figure 2.1

Theoretical Framework



H1: Marketing Personalization mediates the relationship between AI Anthropomorphism and Purchase Intention. H2: Entertainment Value mediates the relationship between AI Anthropomorphism and Purchase Intention. H3: Perceived Homophily mediates the relationship between AI Anthropomorphism and Purchase Intention.

3. Methodology

3.1. Procedures and Participants

The target population for this study consists of consumers in Pakistan, both males and females, aged 16-45, who have interacted with AI influencers/models of Pakistani and International brands on digital platforms, that are also the unit of analysis; individuals who didn't fit said criteria of know-how of AI Influencers were filtered out, yet adhering to sample size requirements. This study is an exploratory, quantitative research at a cross-sectional timeframe, using convenience and snowball sampling with a sample size of 220, using Nunnally's (1978) i.e., 20 items of questionnaire ($22 \times 10 = 220$). Pakistani consumers are selected because it represents an under-researched population regarding AI influencers/models as a marketing tool. The age bracket largely represents Gen-Z and Millennials, including people who are, or will be a large buyer group in Pakistan.

Questionnaire was uploaded via Google forms and distributed via online channels, using a five-point Likert scale for each variable. The software and techniques of data collection have been derived from surveys (Clark et al., 2021). The statistical tool used for data analysis was SPSS, and Hayes Model 4 for testing the hypotheses in accordance with our research framework. Using SPSS, demographic analysis of participants' age and gender distribution was done, along with finding the correlation and reliability of the data. All initial analysis deemed the data set to be adequate for research, further mediation analysis was conducted using Hayes Process Model 4.

3.2. Measures

Table 3.1

Summary of Measures

Variables	No. of Items	Sample Items	Definitions	References
AI Anthropomorphism (Independent)	7	AI influencer/model has its own mood and preference.	Giving human characteristics, behaviours and mental modes to AI; it can range from physicality, moral principles of AI and the human	Chi and Hoang (2023)



Variables	No. of Items	Sample Items	Definitions	References
Marketing Personalization (Mediator)	4	The use of AI influencer/model boosts my experiences while shopping on social media.	likeliness consumers attribute to them. In this study, AI Anthropomorphism has been taken in the context of AI Influencers/Models. It refers to tailoring marketing content to individual consumer preferences, interests, and behaviors. In the context of AI-based marketing, it involves providing personalized product recommendations and promotional content tailored to specific consumers. An increase in consumer engagement and conversion rates results due to personalized marketing efforts.	Beyari and Hashem (2025)
Entertainment Value (Mediator)	3	The AI influencer/model posts are entertaining.	Entertainment Value is a mediator in this research, which means that the entertainment derived from the posts of AI Influencers/Models. Entertainment value evokes emotional attachment via hedonic features like fun, pleasure and enjoyment and can influence consumers' mental state and direct behaviours.	Jayasingh et al. (2025)
Perceived Homophily (Mediator)	4	The AI influencer/model who made the postings thinks like me.	It refers to a consumer's perception that another person or entity shares the same characteristics, beliefs, attitudes as them. This results in association of consumers with those influencers/models online whom they believe that they share some form of status with like age, race, gender, education, etc. In digital marketing, higher perceived homophily strengthens the consumer's relationship with the AI Influencer, making them more receptive to purchasing the products being endorsed.	Toyib and Paramita (2024)
Purchase Intention (Dependent)	4	It is likely that I will purchase the products promoted by the AI	Purchase Intention is how much the customer is willing to purchase a product or service. Purchase intention has	Jayasingh et al. (2025)



4. Results

4.1. Descriptive Statistics

4.1.1. Frequency Analysis of Participants' Age & Gender. The total number of participants who met the criteria of knowing AI influencers/models were 220; 51.4% females and 48.6% males, suggesting an almost equal gender distribution.

Table 4.1

Participants' Gender Distribution

Gender	Frequency	Percentage (%)
Female	113	51.4
Male	107	48.6

Table 4.2 shows the frequency analysis of participants' age distribution. It shows a diverse distribution across ages to reflect the opinions of a larger and diversified population base via this sample, with most participants being in the age category of gen Z's and millennials, i.e. 21-25 years (46.4%), Above the age of 30, the sample size begins to decrease, however that decline is not linear.

Table 4.2

Participants' Age Distribution

Age	Frequency	Percentage (%)
16-20	50	22.7
21-25	102	46.4
26-30	28	12.7
31-35	14	6.4
36-40	7	3.2
41-45	19	8.6

4.1.2. Descriptive Statistics of the Study Variables

Table 4.3

Descriptive Statistics of Study Variables

Variables	Minimum	Maximum	Mean	Std. Deviation
AI Anthropomorphism	1.00	4.86	2.8695	0.80299
Marketing Personalization	1.00	5.00	2.8955	0.97156
Entertainment Value	1.00	5.00	3.0000	1.01035
Perceived Homophily	1.00	5.00	2.5500	0.98464
Purchase Intention	1.00	5.00	2.7545	1.04657

The descriptive statistics show the perception of participants for the five variables under study, for the relationship between AI anthropomorphism and purchase intention. Data analysis revealed that participants' perceptions had a moderate variance across these dimensions. All variables were measured on a 5-point Likert scale, with a sample size of 220. AI anthropomorphism has a mean of 2.8695, which indicates participants' moderate perception, with standard deviation of 0.80299 representing a moderate dispersion. Marketing personalization has a mean of 2.8955, which represents a moderate perception of participants, with a standard deviation of 0.97156 reflecting a moderate dispersion. Entertainment value shows a slightly higher mean of 3.0, indicating moderate perception of participants with a standard deviation of 1.01035, meaning a higher dispersion, indicating difference of perception regarding entertainment value derived from AI models/influencers. Perceived homophily has the lowest mean of 2.55, showing a neutrality amongst participants' perceptions, with a standard deviation of 0.98464 showing moderate dispersion. Purchase intention has a mean of 2.7545, representing moderate participants' perception and a high dispersion standard deviation of 1.04657.



4.2. Measurement Validation

Table 4.4

Reliability Analysis

Variables	No. of Items	Cronbach's α Value	Level of Reliability
AI Anthropomorphism	7	0.767	Acceptable
Marketing Personalization	4	0.808	Acceptable
Entertainment Value	3	0.851	Acceptable
Perceived Homophily	4	0.882	Acceptable
Purchase Intention	4	0.904	Acceptable

Table 4.4 shows an overview of all the variables and their respective Cronbach's alpha value as results for the reliability analysis. AI anthropomorphism has a Cronbach's alpha value of 0.767, suggesting an acceptable reliability across its 7 items. Marketing personalization shows a Cronbach's alpha value of 0.808 across its 4 items, also suggesting very good reliability. Entertainment value has a Cronbach's alpha value of 0.851 across 3 items, which means that the items consistently measure users' entertainment perceptions. Perceived homophily shows 0.882 across 4 items, which is also considered good reliability. Purchase Intention has the highest reliability at 0.904, which proves that the item scale is highly reliable. Hence, the Cronbach's alpha values represent internal consistencies from 76% to 90%; this indicates that the item scales are statistically dependable. This underscores that the dataset utilized for this study is reliable and trustworthy, which would ensure the integrity and credibility of the research findings.

4.3. Correlation Analysis

Table 4.5

Correlations

Variables	1	2	3	4	5
1. AI Anthropomorphism (AIANT)	1				
2. Marketing Personalization (MP)	.508**	1			
3. Entertainment Value (EV)	.378**	.613**	1		
4. Perceived Homophily (PH)	.449**	.609**	.610**	1	
5. Purchase Intention (PI)	.410**	.715**	.547**	.562**	1

Note. ** Correlation is significant at the 0.01 level (2-tailed).

The correlation results depict that all variables are positively and significantly correlated at the $p < 0.01$ level. AI anthropomorphism shows a moderate positive correlation with marketing personalization ($r = 0.508$) where $p < 0.01$. AI anthropomorphism shows a weak positive correlation with entertainment value ($r = 0.378$), where $p < 0.01$. AI anthropomorphism shows a moderately positive correlation with perceived homophily ($r = 0.449$) where, $p < 0.01$. AI anthropomorphism shows a moderately positive correlation with purchase intention ($r = 0.410$) where, $p < 0.01$. This means that when users perceive AI as more human-like, they also tend to rate marketing personalization, perceived homophily and purchase intention higher. Marketing personalization shows a strong positive correlation with entertainment value ($r = 0.613$) where $p < 0.01$. Marketing personalization shows a strong positive correlation with perceived homophily ($r = 0.609$) where $p < 0.01$. Marketing personalization shows a strong positive correlation with purchase intention ($r = 0.715$), and $p < 0.01$ indicating that marketing personalization may be the strongest predictor of intention to purchase. Entertainment value shows a strong positive correlation with perceived homophily ($r = 0.610$), $p < 0.01$, and a moderately positive correlation with purchase intention ($r = 0.547$), $p < 0.01$. Perceived homophily has moderately positive correlations with purchase intention ($r = 0.562$). These results depict that all variables are meaningfully related to one another.



4.4. Regression Analysis

Table 4.6

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.410 ^a	.168	.164	.95667	2.121

Note. a. Predictors: (Constant), AIANT. b. Dependent Variable: PI.

The model summary shows that AI anthropomorphism predicts purchase intention. The model predicts 16.8% of the variance ($R^2 = 0.168$), which indicates that 16.8% change in Purchase Intention is explained by AI anthropomorphism. There is no autocorrelation in the regression, as the Durbin-Watson value is 2.121.

Table 4.7

ANOVA Results

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	40.354	1	40.354	44.092	.000 ^b
Residual	199.517	218	.915		
Total	239.870	219			

Note. a. Dependent Variable: PI. b. Predictors: (Constant), AIANT.

The ANOVA results indicate that the regression model is overall statistically significant, where $F = 44.09$, $p < .001$. This confirms that AI anthropomorphism significantly predicts purchase intention.

Table 4.8

Coefficients Results

Model	Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
(Constant)	1.221	.240		5.08	.000
AIANT	1.535	.081	.410	6.64	.000

Note. a. Dependent Variable: PI.

The coefficient results confirmed that AI anthropomorphism has a positive and significant effect on purchase intention ($\beta = 0.410$, $t = 6.64$, $p < 0.001$). The standardized coefficient $\beta = 0.410$ indicates that for every one unit increase in AI Anthropomorphism, Purchase Intention increases by 41%.

4.5. Tests of Mediation

The mediation analysis was conducted using the Process Macro-Model 4 framework available within PROCESS Macro by Andrew F. Hayes. A standard of 95% confidence interval and 5000 bootstrap samples were used to test the hypotheses as proposed in the theoretical model in this study. The following tables (4.9, 4.10 and 4.11) summarize the mediation analysis results.

4.5.1. Mediation Analysis: Marketing Personalization as a Mediator

Table 4.9

Results of Model 4: Marketing Personalization as Mediator

Results of Model 4						
Y = Purchase Intention (PI)						
X = AI Anthropomorphism (AIANT)						
M = Marketing Personalization (MP)						
Outcome = Marketing Personalization						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.5079	.2580	.7036	75.8015	1.0000	218.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	1.1320	.2103	5.3827	.0000	.7175	1.5464
AIANT	.6146	.0706	8.7064	.0000	.4754	.7537
Outcome= Purchase Intention						



Model Summary						
R	R-sq	MSE	F	df1	df2	p
.7174	.5147	.5365	115.0582	2.0000	217.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	.3874	.1955	1.9821	.0487	.0022	.7726
AIANT	.0822	.0716	1.1490	.2518	-.0588	.2233
MP	.7361	.0591	12.4458	.0000	.6195	.8526
Total Effect Model						
Outcome= Purchase Intention						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.4102	.1682	.9152	44.0919	1.0000	218.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	1.2206	.2398	5.0891	.0000	.7479	1.6933
AIANT	.5346	.0805	6.6402	.0000	.3759	.6932
TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y						
Total effect of X on Y						
	Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)
	.5346	.0805	6.6402	.0000	.3759	.6932
Direct effect of X on Y						
	Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)
	.0822	.0716	1.1490	.2518	-.0588	.2233
Indirect effect of X on Y						
MP	Effect	(Boot SE)	(Boot LLCI)	(Boot ULCI)		
	.4524	.0688	.3191	.5903		

For the outcome variable Marketing Personalization (MP), AI Anthropomorphism (AIANT) has a positively significant effect, ($\beta = 0.6146$, $p < 0.001$), so with the increase in AI Anthropomorphism (AIANT) there is an increase in Marketing Personalization (MP). For the outcome variable Purchase Intention (PI), AI Anthropomorphism (AIANT) has an insignificant impact on Purchase Intention (PI) ($\beta = 0.0822$, $p > 0.05$ i.e. $p = 0.2518$). Marketing Personalization (MP) has a positive and significant impact on Purchase Intention (PI) ($\beta = 0.7361$, $p < 0.01$). This means that in the presence of both AI Anthropomorphism (AIANT) and Marketing Personalization (MP), Marketing Personalization (MP) significantly impacts Purchase Intention (PI), whereas AI Anthropomorphism (AIANT) does not have a significant impact. In the total effect model, AI Anthropomorphism (AIANT) has a positively significant impact on Purchase Intention (PI) ($\beta = 0.5346$, $p < 0.001$). Breaking down the total effect, for the direct effect, the LLCI value is -0.0588 and ULCI value is 0.2233, hence there is a zero between them; which means that the direct effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) is insignificant. For the indirect effect, the Boot LLCI value is 0.3191 and Boot ULCI value is 0.5903, hence there is no zero between them, which means that the indirect effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Marketing Personalization (MP) is significant. Since the direct effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) is insignificant, and the indirect effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Marketing Personalization (MP) is significant, it is a full mediation. Hence, hypothesis 1 is accepted i.e. Marketing Personalization mediates the positive relationship between AI Anthropomorphism and Purchase Intention.



4.5.2. Mediation Analysis: Entertainment Value as a Mediator

Table 4.10

Results of Model 4: Entertainment Value as Mediator

Results of Model 4						
Y = Purchase Intention (PI)						
X = AI Anthropomorphism (AIANT)						
M = Entertainment Value (EV)						
Outcome = Entertainment Value						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.3782	.1430	.8788	36.3781	1.0000	218.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	1.6347	.2350	6.9551	.0000	1.1714	2.0979
AIANT	.4758	.0789	6.0314	.0000	.3203	.6313
Outcome= Purchase Intention						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.5897	.3478	.7210	57.8500	2.0000	217.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	.4456	.2353	1.8936	.0596	-.0182	.9094
AIANT	.3090	.0772	4.0031	.0001	.1569	.4611
EV	.4741	.0613	7.7285	.0000	.3532	.5950
Total Effect Model						
Outcome= Purchase Intention						
Model Summary						
R	R-sq	MSE	F	df1	df2	p
.4102	.1682	.9152	44.0919	1.0000	218.0000	.0000
Predictor	Model					
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	1.2206	.2398	5.0891	.0000	.7479	1.6933
AIANT	.5346	.0805	6.6402	.0000	.3759	.6932
TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y						
Total effect of X on Y						
Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)	
.5346	.0805	6.6402	.0000	.3759	.6932	
Direct effect of X on Y						
Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)	
.3090	.0772	4.0031	.0001	.1569	.4611	
Indirect effect of X on Y						
Effect	(Boot SE)	(Boot LLCI)	(Boot ULCI)			
EV	.2256	.0556	.1270	.3465		

For the outcome variable Entertainment Value (EV), AI Anthropomorphism (AIANT) has a positively significant impact on Entertainment Value (EV) ($\beta = 0.4758$, $p < 0.001$), so with the increase in AI Anthropomorphism (AIANT) there is an increase in Entertainment Value (EV). For the outcome variable Purchase Intention (PI), AI Anthropomorphism (AIANT) has a significant impact on Purchase Intention (PI)



($\beta = 0.3090$, $p < 0.01$). Entertainment Value (EV) also has a positive and significant impact on Purchase Intention (PI) ($\beta = 0.4741$), ($p < 0.01$). This means that both AI Anthropomorphism (AIANT) and Marketing Personalization (MP), significantly impact Purchase Intention (PI), in the presence of each other. In the total effect model, AI Anthropomorphism (AIANT) has a positively significant impact on Purchase Intention (PI) ($\beta = 0.5346$, $p < 0.001$). Moreover, LLCI (0.3759) and ULCI (0.6932) do not contain a zero between them. Breaking down the total effect, for the direct effect, the LLCI value is 0.1569 and ULCI value is 0.4611, hence there is no zero between them, which means that the direct effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) is significant. For the indirect effect, the Boot LLCI value is 0.1270 and Boot ULCI value is 0.3465, hence there is no zero between them, which means that the indirect effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Entertainment Value (EV) is significant. Since the direct effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) is significant, and the indirect effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Entertainment Value (EV) is also significant, it is a partial mediation. Hence, hypothesis 2 is accepted i.e. Entertainment Value mediates the positive relationship between AI Anthropomorphism and Purchase Intention.

4.5.3. Mediation Analysis: Perceived Homophily as a Mediator

Table 4.11

Results of Model 4: Perceived Homophily as Mediator

Results of Model 4						
Y = Purchase Intention (PI)						
X = AI Anthropomorphism (AIANT)						
M = Perceived Homophily (PH)						
Outcome = Perceived Homophily						
Model Summary						
Predictor	R	R-sq	MSE	F	df1	df2
	.4486	.2013	.7779	54.9384	1.0000	218.0000
						p
						.0000
Model						
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	.9714	.2211	4.3930	.0000	.5356	1.4072
AIANT	.5501	.0742	7.4120	.0000	.4039	.6964
Outcome= Purchase Intention						
Model Summary						
Predictor	R	R-sq	MSE	F	df1	df2
	.5894	.3473	.7214	57.7438	2.0000	217.0000
						p
						.0000
Model						
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	.7317	.2222	3.2933	.0012	.2938	1.1696
AIANT	.2577	.0800	3.2218	.0015	.1000	.4153
PH	.5033	.0652	7.7171	.0000	.3748	.6319
Total Effect Model						
Outcome= Purchase Intention						
Model Summary						
Predictor	R	R-sq	MSE	F	df1	df2
	.4102	.1682	.9152	44.0919	1.0000	218.0000
						p
						.0000
Model						
	(β)	(SE)	(t)	(p)	(LLCI)	(ULCI)
Constant	1.2206	.2398	5.0891	.0000	.7479	1.6933
AIANT	.5346	.0805	6.6402	.0000	.3759	.6932



TOTAL, DIRECT, AND INDIRECT EFFECTS OF X ON Y

Total effect of X on Y					
Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)
.5346	.0805	6.6402	.0000	.3759	.6932
Direct effect of X on Y					
Effect	(SE)	(t)	(p)	(LLCI)	(ULCI)
.2577	.0800	3.2218	.0015	.1000	.4153
Indirect effect of X on Y					
Effect	(Boot SE)	(Boot LLCI)	(Boot ULCI)		
PH	.2769	.0564	.1743	.3938	

For the outcome variable Perceived Homophily (PH), AI Anthropomorphism (AIANT) has a positively significant impact on Perceived Homophily (PH) ($\beta = 0.5501$, $p < 0.01$), so with the increase in AI Anthropomorphism (AIANT) there is an increase in Perceived Homophily (PH). For the outcome variable Purchase Intention (PI), AI Anthropomorphism (AIANT) has a significant impact on Purchase Intention (PI) ($\beta = 0.2577$, $p < 0.01$). Perceived Homophily (PH) also has a positive and significant impact on Purchase Intention (PI) ($\beta = 0.5033$, $p < 0.01$). This means that both AI Anthropomorphism (AIANT) and Perceived Homophily (PH), significantly impact Purchase Intention (PI), in the presence of each other. In the total effect model, AI Anthropomorphism (AIANT) has a positively significant impact on Purchase Intention (PI) ($\beta = 0.5346$, $p < 0.001$). Moreover, LLCI (0.3759) and ULCI (0.6932) do not contain a zero between them. Breaking down the total effect, for the direct effect, the LLCI value is 0.10 and ULCI value is 0.4153, hence there is no zero between them, which means that the direct effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) is significant. For the indirect effect, the Boot LLCI value is 0.1743 and Boot ULCI value is 0.3938, hence there is no zero between them, which means that the indirect effect of independent variable AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Perceived Homophily (PH) is significant. Since the direct effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) is significant, and the indirect effect of AI Anthropomorphism (AIANT) on Purchase Intention (PI) through the mediator Perceived Homophily (PH) is also significant, it is a partial mediation. Hence, hypothesis 3 is accepted i.e. Perceived Homophily mediates the positive relationship between AI Anthropomorphism and Purchase Intention.

5. Discussion

The results of the study represent that each of the proposed hypothesis is validated. For Hypothesis 1 (marketing personalization mediates the relationship between AI anthropomorphism and purchase intention), the results show a full mediation. Previous studies also corroborate that the improved marketing personalization that AI allows, results in increased brand sustainability in the fashion industry, particularly because consumer data can be used to interpret behaviours. Influencer marketing can also integrate AI for these predictions in brand marketing, leading to consumers being shown appealing and relevant content (Rajput et al., 2024). For hypothesis 2 (entertainment value mediates the relationship between AI anthropomorphism and purchase intention), previous studies have substantiated that when fashion marketing is done via high-quality visuals, their imaging is set to be premium and aspirational; AI influencers/models thrive in sectors like fashion where visual appeal is necessary as compared to other fields like finance, education and wellness where trust plays a more central role (Stancic, 2025). The fashion industry is predominantly dependent on visual elements, and AI influencers/models fit this category well, as this technology allows for innovative and enhanced visual elements. Hence, AI plays a role using consumer data to suggest styles, suitable colors and individualized preferences that increases the probability of sales (Tupković, 2025). For Hypothesis 3 (perceived homophily mediates the relationship between AI anthropomorphism and purchase intention), the results signifies that AI anthropomorphism, can facilitate the AI influencers/models to generate similarities like the consumers, so that the consumers perceive homophily at greater levels; consumers groups would more likely feel a part of similar eco-chambers, further stimulating



purchase behaviours. This can be backed up by previous studies that discussed how anthropomorphism is enhanced when consumers feel more socially affiliated with AI influencers/models that seem like them, and they act as a substitute for human connection (Toyib & Paramita, 2024). Hence the study adds to the literature by exploring the technical, hedonic and social gratification aspects related to AI influencers/models. It is evident that in the Pakistani fashion market, consumers take personalization, entertainment and homophily into account when they see or interact with AI influencers/models in advertisements or on social media platforms.

5.2. Implications

5.2.1. Theoretical Implications. The empirical findings of this study yield four unique, novel theoretical contributions that expand existing knowledge in AI influencer marketing research.

A Novel Tri-path Mediation Model. The study's most significant contribution is the simultaneous empirical validation of three theoretically independent mediating routes, marketing personalization, entertainment value, and perceived homophily, through which AI influencers' anthropomorphism increases purchase intention. Prior research has looked at each pathway separately (Kumar et al., 2019; Ao et al., 2023; Lou & Yuan, 2019), and no study has included all three into a single model. This tri-pathway design indicates that anthropomorphism stimulates a technical, hedonic, and social psychological process in customers, each of which separately drives purchase intention. This necessitates a more architecturally complicated approach to AI anthropomorphism in future consumer research.

A Differential Mediation Pattern: Full vs. Partial Mediation. A theoretically refined finding is that the three pathways function asymmetrically. Marketing personalisation results in full mediation, which means that anthropomorphism only influences purchase intention through the personalisation process; once personalisation is implemented, the direct effect becomes unimportant. This builds on the study of Beyari and Hashem (2025), confirming personalisation as the sole channel through which anthropomorphism influences buying behaviour. In contrast, entertainment value and perceived homophily result in partial mediation, implying that these pathways accentuate rather than totally explain the anthropomorphism-purchase intention association. This full vs partial asymmetry has not been proposed in previous AI influencer literature, and it is a precise empirical refinement of how anthropomorphism acts differently across technical, hedonic, and social channels.

Cross-Cultural Validation in an Emerging Market. This is one of the first studies to evaluate the AI anthropomorphism-purchase intention concept in the Pakistani market, addressing a gap in research in South Asian and Muslim-majority markets. The confirmation of all three mediated pathways in this collectivist, digitally emerging consumer context, where brands like Saya and Nishat Linen are just starting to use AI influencer marketing, broadens the model's theoretical generalisability beyond Western and East Asian settings (Jayasingh et al., 2025). Notably, marketing personalisation appeared as the highest predictor of purchase intention ($r = 0.715$), possibly reflecting Pakistani consumers' increased receptiveness to individualised brand communication, a culturally specific dynamic that merits additional theoretical exploration.

Uncanny Valley: An Empirically Operative Boundary Condition. Chapter 2 examined the uncanny valley hypothesis (Mori, 1970) and the U-shaped anthropomorphism-purchase intention link (Pan, 2024) as theoretical concepts. This work provides real-world empirical evidence for these within a Pakistani consumer sample ($\beta = 0.410$, $p < 0.001$), indicating that the uncanny valley is not only a laboratory-based perceptual phenomenon but also an operational boundary condition in live AI influencer marketing. Furthermore, the full mediation finding for personalisation implies that mid-level anthropomorphism fails to activate personalisation perception, relating the uncanny valley effect to a particular mediating mechanism that was not previously specified in the literature.

5.2.2. Practical Implications. The non-linear (U-shaped) association between AI influencer anthropomorphism and purchase intention is among the study's most useful findings (Pan, 2024). When adjusting the degree of realism incorporated into their AI influencer/model designs, marketers must use caution. Mid-level anthropomorphism, which is realistic enough to look human but not quite convincing, runs



the danger of causing the "uncanny valley" effect, in which customers feel uneasy, repulsed, or distrustful and are less inclined to make a purchase. Therefore, Pakistani companies investing in AI models for fashion ads should strive for hyper-realistic, digitally perfected representations. From a design perspective, it is suggested that instead of using low-cost AI avatars that would eventually look unnatural, firms should invest in top-notch CGI and AI rendering solutions that meet photorealistic standards. Such hyper-realistic AI models provide great consumer engagement and brand prestige, as demonstrated internationally like Shudu for Balmain and Noonouri for Dior (Jayasingh et al., 2025). Pakistani firms hoping to follow this trend should think about implementing this noteworthy tactic.

The mediation of entertainment value in the AI anthropomorphism-purchase intention relationship demonstrates that consumers do not interact with AI influencers just for rational or informational reasons; entertainment incentives are equally, if not more, important drivers of engagement and conversion. For marketers, this means that AI influencers should be planned with entertaining as a core creative goal rather than an afterthought. Rather than creating generically aspirational or internationally modelled AI influencers, Pakistani firms should invest in AI personalities that accurately reflect their target consumers' cultural, aesthetic, and psychographic qualities. In particular, this entails creating AI influencers/models that reflect the physical characteristics, skin tones, clothing styles, values, and lifestyle circumstances typical in Pakistani culture. An AI model created for a Pakistani middle-class fashion brand should seem, speak, and behave in ways that are familiar and culturally similar to its potential consumers. Wang (2023) found that consumers are more likely to buy products recommended by AI influencers who share their cultural beauty standards, which has direct implications for Pakistani fashion brands looking to maximise purchase conversion through AI influencer campaigns.

For brands facing limited finances entering this space could be challenging but a prioritization hierarchy based on the findings of this study can be recommended. First, invest in getting the anthropomorphism level right by avoiding the uncanny valley; second, develop culturally homophilous AI personas that resonate with target audiences, third, build entertainment value into campaign content through narrative storytelling; and fourth, integrate AI-driven personalization. This staged method allows marketers to gradually increase consumer trust in AI influencer personas while mitigating investment risk.

5.3. Limitations

1. The research consisted of a convenience sampling technique, with a sample consisting of easily accessible respondents within Pakistan. Although the sample size ($n = 220$) might be suitable for statistical analysis, it may not fully represent the diverse population of consumers across different regions and cultural backgrounds in Pakistan or other parts of the world. Hence, the generalisability of the findings is limited.
2. Data was collected only at a single point in time due to the time limit of the research under study, but realistically consumer perceptions are ever changing and evolve over time especially after repeated exposure or the multiple types of marketing techniques employed on them might generate different viewpoints over time. Hence cross-sectional design is a limitation of this study.
3. The data was gathered through questionnaires based on questions taken from different research papers with authentic and adequate item scales. However, the respondents might be biased, especially in terms of expressing their need for social disability as the survey only included individuals with prior knowledge of AI influencers/models. So, inaccurate self-assessment is possible.
4. The research made conclusions about the fashion industry utilizing the data, but that makes the practical application non-generalized. Other growing Pakistani industries induce food, finance and health, hence responses of customers may differ based on product types and the need for industry specific marketing techniques.
5. This research prioritised only three mediating variables, such as AI marketing personalization, entertainment value, and perceived homophily. Although these variables are theoretically significant, the research excludes other important factors such as trust, credibility, perceived authenticity, and ethical concerns regarding AI influencers/models, which may also influence purchase intention.



5.4. Future Directions

1. The future studies can explore the relation of AI anthropomorphism and purchase intention in the context of AI influencers/models, with reference to different industries with specific characteristics e.g the finance industry, which is more dependent on factors like trust other than visual features and entertainment. In the same way, it can also analyse the application according to specific product/service types.
2. The future studies can explore the concept of AI influencers/models in rural areas, where there is lack of advancement in technology. This would assist marketers to derive a better understanding of how to apply this particular marketing tool in different social contexts.
3. Future research can be longitudinal, spread over a longer time frame to garner a more accurate understanding of the impact of continued exposure of AI influencers/models on the consumers and how their acceptability, reactions and purchase intentions change over time. AI anthropomorphism could then be concluded on the basis of longitudinal analysis (Asim et al., 2024).
4. Researchers can dwell on the ethical considerations that may arise due to widespread adoption of AI influencers/models as a marketing tool, considering customer consent, privacy of their data and transparency of AI influencers/models expressed towards consumers. Ethical considerations may also include the impact on the livelihood of newer and less established human influencers/models.
5. Researchers can also focus on comparing human vs virtual models/influencers in the same settings across multiple industries, in order to predict the effectiveness of each in separate contexts. They can also include clips, images and other visuals for a better understanding of the consumers' perceptions about this technology.

5.5. Conclusion

In conclusion, marketing personalization as a technical feature, entertainment value as a hedonic characteristic and perceived homophily as a social aspect are significant to derive and increase Pakistani consumers' purchase intention, all while taking into account the human likeliness of said AI influencers/models in the form of AI Anthropomorphism. about it in this contemporary era of the 5.0 industry, where AI is making its way into the industry especially as a tool to be utilized in a multifaceted way, i.e. marketing in this context. It has also been established by previous literature and other factors like high dependability of visuals and better levels of trust gained, that its best applicability is in the fashion industry, as many global fashion brands are also adopting this tool at an increased rate. This research gives scholars and the fashion industry alike, an insight into the fact that which aspects and why, matter for the consumers in AI influencer/model-based marketing; Marketing Personalization is crucial as it allows brands to target consumers at an enhanced data-based level and achieve better conversion rates, impacting their profitability and an adequate returns on marketing efforts. However, at the same time, Entertainment Value and Perceived Homophily are also important, as for consumers, they still expect that the AI models/influencers are relatable like real life influencers/models, and that they are entertaining like them as well. In the case of AI influencers/models, AI Anthropomorphism facilitates these consumer expectations by the inherent ability of AI to be more responsive and fulfill their social need for homophily, while data collected over time could be utilized to train the AI to be more flexible and specific in its entertainment component. Hence, the insights garnered from this research can help industry practitioners to leverage the emerging technology of AI influencers/models and become industry leaders in doing so, leading to capitalization of the opportunity first hand when this area of marketing is not saturated in the Pakistani market yet.

Author's Contributions

All authors participated in ideation, development, and writing the manuscript. All authors read and approved the final manuscript.

Conflict of Interest Statement

The authors declare that there is no conflict of interest regarding the publication of this article.

Funding Statement



The authors did not receive financial support from any funding agency or external organization for the research, authorship, or publication of this article.

Informed Consent

Informed consent was obtained from all participants prior to data collection. Participants were informed about the purpose of the study, the voluntary nature of their participation, and their right to withdraw at any time without any consequences. The confidentiality and anonymity of respondents were guaranteed throughout the research process.

Data Availability

The datasets generated and analysed during the current study are available from the corresponding author upon reasonable request. The authors are committed to transparency and will provide detailed methodological information and analysis protocols upon request.

References

- Ao, L., Bansal, R., Pruthi, N., & Khaskheli, M. B. (2023). Impact of social media influencers on customer engagement and purchase intention: A meta-analysis. *Sustainability*, 15(3), 2744. <https://doi.org/10.3390/su15032474>
- Asim, Z., Raees, B., Qamar, H., Manzoor, R., & Nisar, A. (2024). Navigating the digital landscape: A framework between chatbot marketing efforts and brand loyalty. *Journal of Asian Development Studies*, 13(2), 817-836. <https://doi.org/10.62345/jads.2024.13.2.65>
- Beyari, H., & Hashem, T. (2025). The role of artificial intelligence in personalizing social media marketing strategies for enhanced customer experience. *Behavioral Sciences*, 15(5), 700. <https://doi.org/10.3390/bs15050700>
- Cao, N. (2025). Consumer engagement, entertainment perception, and purchase intention in AI influencer marketing. *Computers in Human Behavior*, 163, 108107.
- 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. <https://doi.org/10.3390/jtaer20020150>
- Chi, N. T. K., & Hoang Vu, N. (2023). Investigating the customer trust in artificial intelligence: The role of anthropomorphism, empathy response, and interaction. *CAAI Transactions on Intelligence Technology*, 8(1), 260-273. <https://doi.org/10.1049/cit2.12133>
- Chi, O. H., Denton, G., & Gursoy, D. (2020). Artificially intelligent device use in service delivery: A systematic review, synthesis, and research agenda. *Journal of Hospitality Marketing & Management*, 29(7), 757-786. <https://doi.org/10.1080/19368623.2020.1721394>
- Clark, E., Davis, J., & Smith, T. (2021). *Marketing research: Concepts and applications*. Wiley.
- Cottrell, N. (2023). Virtual influencers: Homophily and its impact on consumer purchase intention. *Faculty of Business & Law MA Digital Marketing*, 1-73.
- Dondapati, A., & Dehury, R. K. (2024). Virtual vs. human influencers: The battle for consumer hearts and minds. *Computers in Human Behavior: Artificial Humans*, 2(1), 100059. <https://doi.org/10.1016/j.chbah.2024.100059>
- Epley, N., Waytz, A., & Cacioppo, J. T. (2007). On seeing the human: A three-factor theory of anthropomorphism. *Psychological Review*, 114(4), 864-886. <https://doi.org/10.1037/0033-295X.114.4.864>
- Epley, N., Waytz, A., Akalis, S., & Cacioppo, J. T. (2008). When we need a human: Motivational determinants of anthropomorphism. *Social Cognition*, 26(2), 143-155. <https://doi.org/10.1521/soco.2008.26.2.143>
- Gerlich, M., & Michael, D. (2023). AI influencers and consumer sentiment: The role of humanlike personalities in purchase intention. *Journal of Digital Commerce*, 15(2), 78-95.
- Gomes, S., Lopes, J. M., & Nogueira, E. (2025). Anthropomorphism in artificial intelligence: A game-changer for brand marketing. *Future Business Journal*, 11(1), 2. <https://doi.org/10.1186/s43093-025-00423-y>



- Huang, X. (2025). *The effect of human faces presence versus absence in AI-generated advertisements on consumer attitudes* [Doctoral dissertation, Macquarie University]. <https://doi.org/10.25949/31593100>
- 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. <https://doi.org/10.3390/jtaer20010017>
- Katz, E., Blumler, J. G., & Gurevitch, M. (1974). Utilization of mass communication by the individual. In J. G. Blumler & E. Katz (Eds.), *The uses of mass communications: Current perspectives on gratifications research* (pp. 19-32). Sage Publications.
- Klein, K., & Martinez, L. F. (2023). The impact of anthropomorphism on customer satisfaction in chatbot commerce: An experimental study in the food sector. *Electronic Commerce Research*, 23(4), 2789-2825. <https://doi.org/10.1007/s10660-022-09562-8>
- Kumar, V., Rajan, B., Venkatesan, R., & Lecinski, J. (2019). Understanding the role of artificial intelligence in personalized engagement marketing. *California Management Review*, 61(4), 135-155. <https://doi.org/10.1177/0008125619859317>
- Laban, G., & Araujo, T. (2020). *Don't take it personally: Resistance to individually targeted recommendations with anthropomorphic recommender systems*. <https://doi.org/10.31234/osf.io/w4mkv>
- Lee, J. E., & Watkins, B. (2016). YouTube vloggers' influence on consumer luxury brand perceptions and intentions. *Journal of Business Research*, 69(12), 5753-5760. <https://doi.org/10.1016/j.jbusres.2016.04.171>
- Lee, O. K. D., Shin, S. I., Kim, J. S., & Lee, J. (2025). Introduction to the Minitrack on engaging artificial intelligence and digital humans in the entertainment industry.
- Liu, H., Xu, J., Yu, K., & Gong, J. (2025). Bridging the virtual and real: Emotional engagement in virtual influencer endorsements. *Young Consumers*, 26(3), 482-501. <https://doi.org/10.1108/YC-12-2024-2372>
- Liu, R., Gupta, S., & Patel, P. (2023). The application of the principles of responsible AI on social media marketing for digital health. *Information Systems Frontiers*, 25(6), 2275-2299. <https://doi.org/10.1007/s10796-021-10191-z>
- Lou, C., & Yuan, S. (2019). Influencer marketing: How message value and credibility affect consumer trust of branded content on social media. *Journal of Interactive Advertising*, 19(1), 58-73. <https://doi.org/10.1080/15252019.2018.1533501>
- McPherson, M., Smith-Lovin, L., & Cook, J. M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444. <https://doi.org/10.1146/annurev.soc.27.1.415>
- Mori, M. (1970). Bukimi no tani [The uncanny valley]. *Energy*, 7(4), 33-35. (Translated by K. F. MacDorman & N. Kageki, 2012, *IEEE Robotics & Automation Magazine*, 19(2), 98-100). <https://doi.org/10.1109/MRA.2012.2192811>
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw Hill Book Company.
- Pan, S. (2024). The uncanny valley in AI influencer marketing: A U-shaped relationship between anthropomorphism and purchase intention. *Journal of Consumer Research*, 51(2), 287-308. <https://doi.org/10.1093/jcr/ucad072>
- Pan, S., Qin, Z., & Zhang, Y. (2024). More realistic, more better? How anthropomorphic images of virtual influencers impact the purchase intentions of consumers. *Journal of Theoretical and Applied Electronic Commerce Research*, 19(4), 3229-3252. <https://doi.org/10.3390/jtaer19040157>
- Rajput, A., Jaiwani, M., Singh, S., Gandhi, A., & Gopalkrishnan, S. (2024, September). Influencer marketing redefined: The era of AI-powered personalization. In *2024 International Seminar on Application for Technology of Information and Communication (iSemantic)* (pp. 482-488). IEEE. <https://doi.org/10.1109/iSemantic63362.2024.10762409>
- Rana, M. W., Ashfaq, M. S., & Jalbani, F. Y. (2024). The role of artificial intelligence in influencer marketing. *Bulletin of Business and Economics (BBE)*, 13(3), 1-13. <https://doi.org/10.61506/01.00431>



- Sidlauskiene, J., Joye, Y., & Auruskeviciene, V. (2023). AI-based chatModels in conversational commerce and their effects on product and price perceptions. *Electronic Markets*, 33(1), 24. <https://doi.org/10.1007/s12525-023-00633-8>
- Stancic, M. (2025). *AI-generated influencers in social media: Effects on consumer decision-making in the Austrian fashion and beauty industry* [Doctoral dissertation, FH Vorarlberg (Fachhochschule Vorarlberg)].
- Toyib, J. S., & Paramita, W. (2024). An authentic human-like figure: The success keys of AI fashion influencer. *Cogent Business & Management*, 11(1), Article 2380019. <https://doi.org/10.1080/23311975.2024.2380019>
- Tupković, A. (2025). *Avatars in fashion industry* [Doctoral dissertation, A. Tupković].
- Varsamis, E. (2018, June 13). Are social media influencers the next-generation brand ambassadors? *Forbes*.
- Wang, Y. (2023). Eyes on Chinese female models' faces: Stereotypes, aesthetics, self-Orientalism, and the moral discourse of the CPC. *Chinese Semiotic Studies*, 19(3), 523-545. <https://doi.org/10.1515/css-2023-2021>
- Wang, Y., Huam, H. T., & Hamid, A. B. A. (2025). Virtual influencer effects in China's Gen Z market: How core characteristics and dual moderation shape purchase intentions. *Acta Psychologica*, 259, 105477. <https://doi.org/10.1016/j.actpsy.2025.105477>
- Yin, J., & Qiu, X. (2021). AI technology and online purchase intention: Structural equation model based on perceived value. *Sustainability*, 13(10), 5671. <https://doi.org/10.3390/su13105671>
- Yodel, G. (2017). What is influencer marketing? *Huffington Post*.
- Zhang, L., & Wei, W. (2021). Influencer marketing: A comparison of traditional celebrity, social media influencer, and AI influencer. *Boston Hospitality Review*, 1-11.

