

Social Media Marketing: How do Pet Influencers on Social Media Affect Consumers' Purchase Intention?

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Abstract: Given the popularity of non-human social media influencers, this study aims to analyze specifically pet influencers. Previous studies have analyzed how social media influencers affect consumers' purchase behavior. However, when it comes to the pet influencer domain, there is still a lack of relevant research as more and more pet influencers are also starting to promote their online presence through social media platforms. Using a quantitative analysis of pet influencers' attributes and consumers' perceived characterizations, this study focuses on how pet influencers affect consumers' purchase intention, taking into account pet influencers' special attribute of anthropomorphism. By exploring factors affecting consumers' purchase intention, this study helps social media pet influencers to find effective advertising appeals to promote products. The data of this study were collected through a questionnaire with a sample size of 250 social media users following pet influencers in China. The collected data were analyzed through Hayes Process Macro SPSS. This study finds that attitude homophily, social attractiveness, and use of anthropomorphism indirectly affect consumers' purchase intention by influencing consumers' trustworthiness, perceived expertise, and parasocial relationship with pet influencers.

Keywords: Social media influencer marketing; Pet influencers; Anthropomorphism; Adopted theory of persuasion; Purchase intention

1 Introduction

1.1 Background of the study

Social media platforms are gaining increasing popularity in recent years. Over 3.6 billion people are using social media across the world in 2021, which increases by 26% compared to 2017 (Wei et al., 2021). Under the trend of user-generated media, where the users can post self-created content and gain followers to become the leading creators, the concept of social media influencers is gradually formed

(Masuda et al., 2022). To be more specific, influencers act as advertisers, brand promoters online, and friends building parasocial relationships with followers and increasing the possibility of purchasing (Castillo & Fernández, 2019). Working with social media influencers is becoming more common among brands that are taking advantage of this new opportunity to connect with their target audiences (Masuda et al., 2022).

Among millions of influencers on social media, one of the popular and emerging trends is the pet influencers. According to Jacobson et al. (2022), influencers are defined as individuals who have attracted a large number of followers. In this paper, the pet influencers are defined as individuals whose social media accounts focus on pet content and have received a large following. There is a specialized classification for pets on *Bilibili*, which is one of the most popular video-sharing websites in China (Chen, 2021). The most popular pet account gains millions of followers, which draws the marketers' and brands' attention because influence brings engagement (Myers et al., 2022). There are several reasons behind the popularity of pet influencers. The distinct difference between pet influencers and some other types of social media influencers is that pet influencers' followers first intention is to entertain themselves by the content on social media (Myers et al., 2022). Also, followers are likely to follow the pet influencers out of their spontaneous needs to interact with the pets. Therefore, the followers are more likely to engage in the advertisement content for the reason that it correlates with their interests. Additionally, according to Lloyd and Woodwise (2013), animals are employed in advertisements to help people feel included in or be able to relate to the message being conveyed. Pet influencers are gaining increasingly more opportunities on social media for commercial value.

The promoted products of pet influencers are not limited to pet care products only. On *Bilibili*, a pet influencer with 1.6 million followers posted several native advertising videos. The promoted products vary from skin care products to vacuum cleaners. The most famous one winning 12.81 million times of views is a story about a pet cat helping a mouse to prepare for its wedding ceremony. It turns out to be a sponsored native advertising video for a soft drink brand at the end of the video. According to Myers et al. (2022), the famous Grumpy Cat earned net worth of \$100 million. Little pets have huge potential on social media nowadays.

Anthropomorphism is a common method used by pet influencers in animal advertising videos. For example, the famous pet influencer on *Bilibili* mentioned above has a video in which the cat decides to lose weight to get a girlfriend. The promoted product in this video is a soft drink that claims its attribute health. Anthropomorphism is defined as the tendency for people to attribute human features, senses, ideas, and intentions to nonhuman beings, such as animals (Apaolaza et al., 2022). According to Jacobson et al. (2022), advertisements using animals as allegories are characterized by animals anthropomorphized to imitate human behaviors. This method is proved by Lerner and Kalof (1999) to be the least

controversial and almost the most efficacious way to get animals involved in ads to promote.

1.2 Purpose of the Study

The purpose of the study is to discuss how pet influencers on social media affect consumers' purchase intentions. As increasingly more pet influencer accounts become popular on social media, the deeper reasons behind the phenomenon affecting consumers' purchase intention are worthy of exploration.

In the social media influencer marketing domain, no previous study has specifically discussed about how pet influencers affect consumers' purchase intention. The study developed by Masuada et al. (2022) discusses how influencer attributes affect the consumers' purchase intention in social media influencer marketing. The study does not subdivide the specific types of influencers. However, when it comes to specifically pet influencers, different attributes can be taken into account to make it more accurate to analyze non-human influencers. Anthropomorphism, which is a significant feature of pet influencers, is a method that had been proved a long time ago to successfully make consumers respond positively (Jacobson et al., 2022). This study aims to take anthropomorphism into consideration in the influencers' attributes to test its effects on purchase intention.

1.3 Research Objectives

By combining the model of the adopted theory of persuasion and the theory of anthropomorphism, how effective the attributes of pet influencers contributing to consumers' purchasing intention is will be explored and discussed.

Based on the pet influencers' attributes influencing consumers' perception, possible effective advertising appeals for pet influencers to attract consumers will be explored and discussed.

1.4 Significance of the Study

Pet influencers' gaining popularity on social media has become an important phenomenon especially after the pandemic situation. Exploring why and how this phenomenon happens helps to find out consumers' common psychological reasons or common clues hiding behind them. The practice of involving animals in advertisements to promote is common. According to research about the Swedish dairy business on social media (Linn'e, 2016), the depiction of cows in advertisements improved consumer sense of the dairy industry as being compassionate and moral. Animals or pets can effectively improve the audience's perception of the brand or product. The development of social media provides a business model different from celebrity endorsement in that social media influencers build community with their followers and convert the followers to

potential customers for the brands (Jacobson et al., 2022). The popularity of pet influencers provides a new way of promotion by affecting the consumers' perceived characterization of the influencers (Masuda et al., 2022). For example, according to Jacobson et al. (2022), pet influencers show the usage of products in their daily routine, which becomes persuasive to the followers when there is a parasocial relationship between them. The parasocial relationship is the followers' perceived characterization of the influencers, which can influence the consumers' purchase intention towards a brand or a product. In order to find the inner relationship of such a phenomenon, this thesis develops an insight of how the pet influencers' attributes affect their perceived characterizations of the influencers, thus influencing the purchase intention.

1.5 Theoretical Framework

1.5.1 Adopted Theory of Persuasion (Masuda et al., 2022)

Adopted theory of persuasion is adopted from one branch of the persuasion theory which used the elaboration likelihood model (ELM). This model defines two avenues of persuasion: the more elaborative central and the less elaborative periphery. In the peripheral route, a person evaluates the communication source's attractiveness without careful deliberation. It is designed to facilitate heuristic persuasion, in which individuals' ideas or convictions are influenced by interpretations of the authenticity of information sources. The theory of persuasion is applied to social media influencers by considering influencers' characterizations, which is directly related to the credibility, as influencing factors of behavioral intentions. The theory further considers that influencers' personal attributes decide followers' characterizations of them. 3 characterizations are defined as followers' perceived characterizations for influencers: trustworthiness, perceived expertise, and PSRs. Influencers can be distinguished by three qualities that have been found to be particularly significant: attitude homophily, physical attractiveness, and social attractiveness (Masuda et al., 2022).

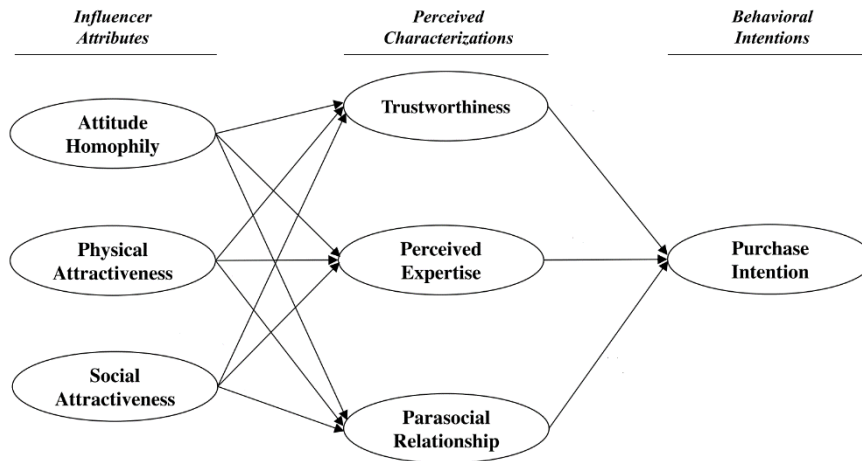


Figure 1: Theoretical Framework - Adopted theory of persuasion

1.5.2 Theory of Anthropomorphism (Wan & Chen, 2021)

The theory of anthropomorphism developed by Wan and Chen (2021) discusses how anthropomorphism satisfies people's needs in three domains: comfort and pleasantness, self-identity, and self-efficacy. When people's needs for these 3 aspects are satisfied by anthropomorphism, the object attachment will be strengthened because the satisfaction stimulates people's positive feelings and evaluations of the objects. While people's needs for these 3 aspects are threatened by anthropomorphism, it decreases people's degree of object attachment by arising people's negative feelings about the objects.

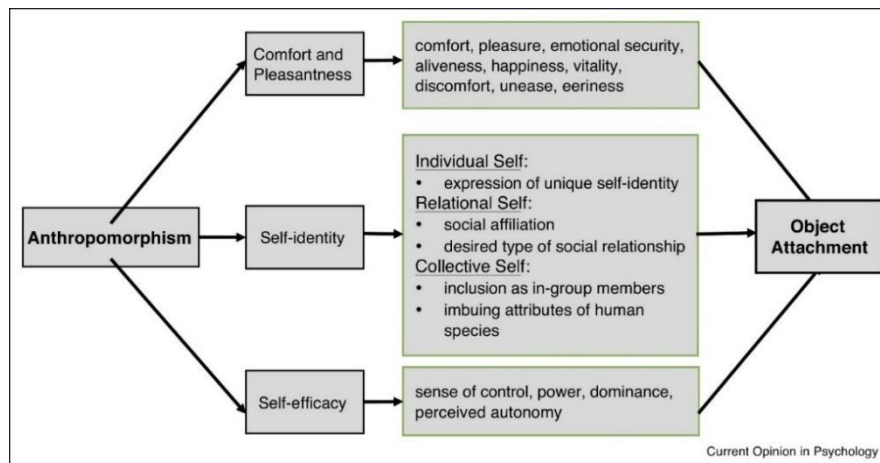


Figure 2: Theoretical Framework – Theory of Anthropomorphism

1.6 Conceptual Framework

Based on the literature review and combined with the 2 theoretical models, the conceptual model is presented in Figure 3. The physical attractiveness of influencers is replaced by use of anthropomorphism. In the study conveyed by Masuda et al. (2022), physical attractiveness focuses on the appearance of a human. When it comes to pets, their physical attractiveness tends to be evaluated as cute in general. The difference in physical attractiveness between different pets is not that significant.

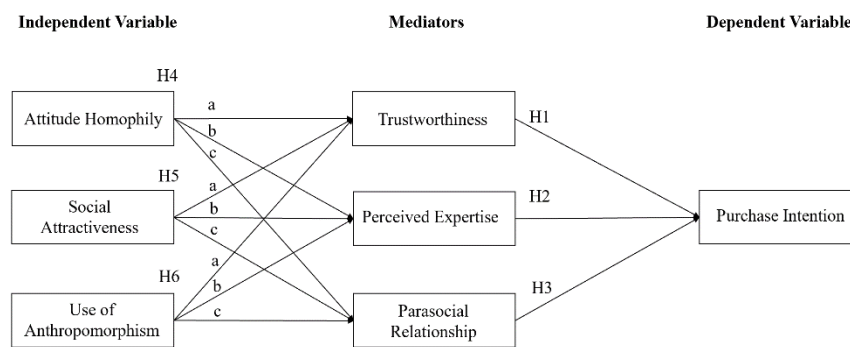


Figure 3: Conceptual Framework

1.7 Hypothesis Development

H1: Trustworthiness positively influences purchase intention.

H2: Perceived expertise positively influences purchase intention.

H3: Parasocial relationship positively influences purchase intention.

H4a: Attitude Homophily positively influences trustworthiness.

H4b: Attitude Homophily positively influences perceived expertise.

H4c: Attitude Homophily positively influences parasocial relationship.

H5a: Social attractiveness positively influences trustworthiness.

H5b: Social attractiveness positively influences perceived expertise.

H5c: Social attractiveness positively influences parasocial relationship.

H6a: Use of anthropomorphism positively influences trustworthiness.

H6b: Use of anthropomorphism positively influences perceived expertise.

H6c: Use of anthropomorphism positively influences parasocial relationship.

2 Literature Review

2.1 Pet Influencers on Social Media Platforms

With the increasing diversity of advertisements and the development of social media, the popular ways of product promotion vary from traditional advertisements with celebrity endorsement to social media influencers' advice and recommendation. According to Jacobson et al. (2022), social media influencers are defined as people who have accumulated a bunch of followers on social media platforms. Social media influencers work to develop a sense of community with their audience, which includes potential clients for brand partners, and a sense of trust is built through authenticity. Social media influencer marketing has similarities with celebrity endorsements in traditional mass media, but the interaction between social media influencers and their followers focuses more on content (Lou and Kim, 2019). The practice of micro-celebrity has been used by social media influencers as a self-presentation strategy to post their updated status. The strategy is also used by many social media users to build friendly relationships with their followers, who are addressed as fans in this strategy, rather than just serving the ego for themselves (Ngai, 2022).

Among all kinds of social media influencers, pet influencers have the highest engagement rate according to market research. Animals participate in social media by the means of widely-spread pet memes to famous pet influencers (Baklanov, 2021). According to a survey carried out by the world's largest petcare company, 65% of pet owners showed a frequency of 2 times a week to post pet-related content on social media platforms, and 17% of pet owners had registered a separate social media account focusing on their pet (Mars Petcare US, 2016). During the COVID-19 period, people have less human contact, resulting in the phenomenon of a higher degree of dependence on both pets and social media platforms. The phenomenon of keeping pets and posting them to social media platforms becomes more common for pet owners, which contributes to the booming of social media pet influencers (Ngai, 2022).

2.2 Theoretical Framework and Hypothesis Development

2.2.1 The Adopted Theory of Persuasion Framework

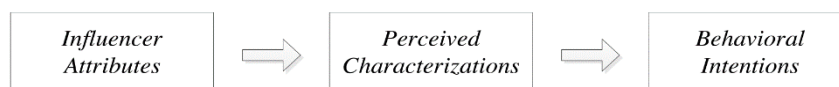


Figure 4: The adopted theory of persuasion

The adopted framework was proposed by Masuda et al. (2022), which is adjusted from the theory of persuasion for social media influencer research. The Persuasion

Knowledge Model proposed by Friestad and Wright (1994) is one of the important theoretical bases in this field. It analyzed how consumers understand persuasive behavior through identification and assessment as well as how they deal with it. Consumers' attitude towards dealing with persuasive behavior was usually considered to be defensive. However, a study of persuasive advertising claimed that persuasive behavior may also bring entertainment and knowledge about products to consumers (Verlegh et al., 2015).

Various models are used in the persuasion theory. The ELM model is also one of the most influential models in persuasion theories, which divided the routes of persuasion into central and peripheral to analyze the changes in attitudes. The strength, durability, and resistance of the consumers' strength may differ as the route varies. The ELM model integrated the four classical sources, which include source, message, recipient, and context, to evaluate their effects on the persuasion process based on different routes (Shrum, 2012). The persuasion knowledge model focuses on the persuasion process in the marketplace, which evaluates the consumers' acquisition of the intention and strategies used in marketing communication. In other words, the degree of persuasion knowledge acquisition affects the consumer's awareness of the methods, timing, and purposes of the marketers, resulting in skeptical and critical thoughts or evaluations in marketing messages (Myers, 2022). The source effect model is used to evaluate the persuasion contexts in a study of influencer marketing. The model illustrates that the effectiveness and degree of receiving in the communication process are influenced by the features of the communication source. The factors influencing the source effect include source credibility, attractiveness, similarity, source visibility and identity, etc. (Farivar, 2021).

2.2.2 Perceived Characterizations

2.2.2.1 Trustworthiness

According to Van der Walddt et al. (2009), trustworthiness refers to the honesty, integrity, and believability the endorser possesses. The degree of loyalty and trust between customers and influencers has a significant role in the long-term success of the connection between the two parties, as well as in the sales of the products and endorsed brands. (AlFarraj et al., 2021). Trustworthiness is included in the contrast of source credibility, which means communicators' positive features that affect the receiver's perception when accepting the message (Pornpitakpan, 2004).

In the research of celebrity endorsers, Pornpitakpan (2004) aimed to verify the study of the credibility dimension conducted by Ohanian in America (1991), which proved expertise to be the only factor affecting the purchase intention significantly. High attractiveness and low trustworthiness were seen as common characteristics of celebrities by the audience, so the 2 factors were easy to be ignored. However, research focusing on Asian groups showed that trustworthiness led to better outcomes in regard of purchase intention. Given the fact that Singaporeans are

collectivists, which is different from the individualism in America, they need to ensure a sense of interpersonal trustworthiness in the connectedness in celebrity endorsement (Singelis, 1994; Pornpitakpan, 2004). To examine the results with cross-cultural generalizability, Pornpitakpan used the questionnaire development method in Singapore and successfully supported the hypothesis that trustworthiness affects purchase intention positively for Singaporeans.

Because of the sense of insecurity and uncertainty caused by the inability to interact face-to-face on the internet, trust is considered a crucial stimulator in purchase behavior over the internet (Dutta & Bhat, 2016). In the research of social media influencer marketing, the trustworthiness of influencers was proved to have both indirect and direct positive affect on consumers' purchase intention, using a sample size of 76 valid respondents and the data analysis method of SmartPLS 3 (Saima & Khan, 2020).

As a result, the following hypothesis is proposed:

H1: Trustworthiness positively influences purchase intention.

2.2.2.2 Perceived Expertise

The weight of source expertise in persuasion was predicted to be affected by three dimensions of culture, including power distance, uncertainty avoidance, and individualism-collectivism (Pornpitakpan & Francis, 2000). The source credibility model counts both source trustworthiness and source expertise as crucial dimensions in illustrating the influence of endorsements on consumer behavior (Hovland & Weiss, 1951). In the source credibility model (Hovland & Weiss, 1951), the definition of source expertise is the degree to which a communicator can be seen as a source of a valid and credible assertion. A study involving expert influencers in electronic product promotion shows that expert influencers increase consumers' purchase intention by exhibiting a positive effect on brand attitude using the questionnaire with a sample size of 421 responses (Trivedi & Sama, 2020).

A study of expertise in the social media influencer domain defines expertise as the degree of followers' perception of experience, knowledge, qualification, and reliability for influencers (Ki et al., 2020). The level of knowledge and experience will be taken into consideration when the consumers decide whether to buy the products endorsed by social media influencers or not (Weismueller et al., 2020). According to a study focusing on pet influencers on social media, when consumers are seeking knowledge of pet caretaking or pet-related purchases from the pet influencer for their expertise, the pet influencers are demonstrating their opinion leadership among their followers (Hänninen, 2021).

Hence, the following hypothesis is proposed:

H2: Perceived expertise positively influences purchase intention.

2.2.2.3 Parasocial Relationship

Compared to traditional celebrity endorsement, social media influencer marketing increases the followers' degree of engagement slightly (Arora et al., 2019). The way of communication that celebrity endorsement delivers information to the audience is one-way, which means the audience has no access to respond to the celebrity (Yuan & Lou, 2020). However, the followers can build a parasocial relationship with the social media influencers through the way of making comments or liking the content posted by the influencers on social media platforms, which can be seen as limited two-way communication (Masuda et al., 2022).

According to two different research, purchase intention is positively affected by parasocial relationships (Hwang & Zhang, 2018; Chung & Cho, 2014; Colliander & Dahlén, 2011). The previous study about television hosts shows that consumers' exposure is greatly influenced by the parasocial relationship between television viewers and the hosts on the shopping program, thus encouraging the viewers' intention to purchase the products promoted (Kim & Kim, 2015). Research on vloggers shows that consumers' desire for luxury brands was triggered by the comparison of luxury possessions to what the vloggers own. Consumers' perception of the brand can be positively influenced by parasocial interaction between consumers and vloggers, thus increasing the purchase intention (Lee & Watkins, 2016).

Thus, the following hypothesis is proposed:

H3: Parasocial relationship positively influences purchase intention.

2.2.3 Influencer Attributes

2.2.3.1 Attitude Homophily

According to the source attractiveness model, the communication source that makes consumers feel attracted includes three aspects: likability, similarity, and familiarity (McGuire, 1985; Frank & Mitsumoto, 2021). In the field of social media influencer marketing, homophily is adopted as one of the dimensions of source attractiveness. If a listener deduces that an influencer's attitudes are similar to their own, they will be more likely to agree with the influencer's opinions (Kim & Kim, 2021). Trust can be built between the followers and influencers by the source attractiveness, which comes from the perceived similar background and consistent arguments created by the perceived homophily (Frank & Mitsumoto, 2021).

Another study about the perceived credibility in eWOM proves that members' homophily significantly and positively affects the source trustworthiness by analyzing the data of the questionnaire with a sample size of 402 valid respondents from a fashion website's members. Trustworthiness in this study is measured by the credibility of the information source delivered to the members of the fashion website (Chih et al., 2020). When information senders and recipients are homophilic

in their online communication experience, the credibility of the information source is higher. (Brown et al., 2007). The study conveyed by Sokolova and Kefi (2020) also proves the result that attitude homophily is positively related to the credibility of influencers, which is defined as the degree of trustworthiness and reliability in this study. Finding similar values in another individual is explained as the process of internalization (Djafarova & Rushworth, 2017).

Thus, the following hypothesis is proposed:

H4a: Attitude Homophily positively influences trustworthiness.

A study examining the effect of homophily on video bloggers in the beauty product industry shows that perceived expertise can be influenced by 4 dimensions of homophily, including attitude homophily (Ladhari et al., 2020). Compared to other information sources, people in support groups that use computers for mediation can do better in conveying empathy and providing emotional support because of a higher degree of homophily (Wright & Bell, 2003). Wang et al. (2008) conducted a study of online health information as the internet develops and provides more access to health information both through online websites and discussion rooms. Expertise and trustworthiness were considered as two primary dimensions of credibility in this research. The experiment detected that homophily had positive effects on the persuasion of online users in regard to online health information based on perceived credibility. The higher degree of homophily of the online health information stimulus can increase the possibility of users' accepting the advice.

Accordingly, the following hypothesis is proposed:

H4b: Attitude Homophily positively influences perceived expertise.

A study focusing on Instagram and YouTube bloggers' promotion defined attitude homophily as the extent to which people were willing to bond with other people that are similar to them. Attitude homophily is considered the factor explaining the relationship built based on influence or interpersonal communications (Sokolova & Kefi, 2020). One research found that attitude homophily acted as the bridge to fill the gap between the endorsers' characteristics and the consumer-celebrity parasocial relationships. The perceived attractiveness and expertise of celebrities were considered separately as the antecedent factor of perceived attitude homophily and respect for the celebrity using the structural equation model. In this way, the parasocial relationship was built between the celebrity and the consumer to create a positive brand attitude (Zhang et al., 2021). Furthermore, a study conducted by Turner (1993) showed that homophily is a critical factor influencing the strength of parasocial relationships, especially in the aspects of attitude, appearance, and background homophily.

Thus, the following hypothesis is proposed:

H4c: Attitude Homophily positively influences the parasocial relationship.

2.2.3.2 Social Attractiveness

Social attractiveness is measured by the degree of followers' willingness to build an emotional link with the influencers beyond simply giving thumbs-up on the social media platform (Masuda et al., 2022). A study about anthropomorphic interfaces in the computer domain defines social attractiveness for anthropomorphic interfaces as the combination of likable, sociable, friendly, and personal. Social attractiveness can increase users' trustworthiness in computers, which is suggested by the promotion of the users' social responses to anthropomorphic interfaces (Lee, 2010). In a study examining the perceived trustworthiness in Facebook profiles, social attractiveness was counted in the assessment process of the profile owners' trustworthiness (Toma, 2014). Social attractiveness, which was included in positive social judgments, was found to have a curvilinear relationship with the number of friends. Sociometric popular individuals, which is measured by the number of friends, tend to be more trustworthy. As social attractiveness goes up to a point, the number of friends increases while it decreases after social attractiveness exceeds the turning point (Tong et al., 2008).

As a result, the following hypothesis is proposed:

H5a: Social attractiveness positively influences trustworthiness.

Social attractiveness was examined to positively relate to sociometric popularity, which is measured by the number of friends (Tong et al., 2008; Jin & Phua, 2014). The credibility of celebrities with a larger number of followers is generally considered to be higher (Jin & Phua, 2014). As mentioned before, both trustworthiness and expertise are counted as critical dimensions of the source credibility (Hovland & Weiss, 1951).

Thus, the following hypothesis is proposed:

H5b: Social attractiveness positively influences perceived expertise.

In Yuan and Lou's study (2020), trustworthiness, expertise, similarity, and attractiveness were considered as four determinants of source credibility that are positively related to the parasocial relationship. Attractiveness in this study includes both the physical and social attractiveness of a media persona. In a study of the parasocial relationship in Harry Potter in different cultures, attractiveness was divided into physical attractiveness, social attractiveness, and task attractiveness, which separately indicated the characters' physical appearance, personality and agreeableness, and competence and success. Compared to physical attractiveness, social attractiveness was considered to be a more significant predictor influencing parasocial relationships (McCroskey & McCain, 1974; Rubin & McHugh, 1987; Schmid & Klimmt, 2011).

Accordingly, the following hypothesis is proposed:

H5c: Social attractiveness positively influences the parasocial relationship.

2.2.3.3 Use of Anthropomorphism

The use of animal spokes characters in advertising is increasing (Phillips et al., 2019). Spokes-characters are defined as imaginary or virtual characters to endorse the products. Studies have found that anthropomorphism in brands could contribute to the cognitive process of consumers' internalization of the brand by considering the brand as entities with their thoughts, reasons, and feelings (Tuškej & Podnar, 2018). The research found that anthropomorphized objects could also induce similar cognitive processes even when people know the anthropomorphized didn't have humanlike features (Chartrand, 2008; Epley et al., 2007). People's way of understanding the world tends to be related to their own experiences. Because of this mechanism, interactions and interests with the spokes characters or any brands associated with the spokes-characters can be aroused in the promotion process (Delbaere et al., 2011). Many companies use anthropomorphized animals as spokes characters, in which the audience can see their personalities (Sheehan, 2020). Relevance between anthropomorphized spokes character and the products will affect consumers' perceptions of spokescharacter trust positively (Garretson & Niedrich, 2004). Relevance means the extent to which the spokes character is deemed appropriate for the product associated with the promotion (Sheehan, 2020). Employing an anthropomorphized spokes character is to use a symbolic object to promote the products with conveying a brand's personality (Callcott & Phillips, 1996). Strong brand personalities of a product contribute to consumers' unique and harmonious links with the brand. It further creates strong emotional bonds between the brand and consumers, which increases consumers' loyalty and trust in the brand ultimately (Kyung & Sung, 2010).

Using anthropomorphized spokes characters to project positive emotions, which include feelings of trust and loyalty, is a common practice in the marketplace (Khogeer, 2013). According to research on anthropomorphized messengers, people who have lower interpersonal trust, which means the tendency to believe in other people's words and commitments or rely on someone else (Rotter, 1967), are more likely to trust in and be persuaded by anthropomorphized messengers because they think humans are lacking in good intention and unreliable (Touré-Tillery & McGill, 2015). People involved in object anthropomorphism can feel the emotional response of a sense of comfort and pleasure (Wan & Chen, 2021), which positively affects consumers' trustworthiness in the background of electronic commerce (Belanger et al., 2002).

To conclude, the following hypothesis is proposed:

H6a: Use of anthropomorphism positively influences trustworthiness.

Currently, the literature on the relationship between anthropomorphism and perceived expertise mostly focuses on the anthropomorphism of artificial intelligence or brands. A study of the anthropomorphism of computers found that a doctor-like virtual character can trigger the users' expertise heuristic by affecting how people evaluate the credibility of health-related information (Kim & Sundar,

2012). Another study of automated vehicle technology applies anthropomorphized systems with a “personality” to make it more expert-like to make users feel more trustworthy. Both anthropomorphism and expertise are counted in the factors affecting trust (Ekman et al., 2017). A study examining how anthropomorphism affected consumer-brand identification indicated that anthropomorphism could strengthen consumers’ tendency to collaborate with the brand, creating closer and more private connections with the brands. Thus, consumer-brand identification would be positively influenced (Tuškej & Podnar, 2018), which is determined by corporate ability and corporate social responsibility. Corporate ability association was defined as the degree of expertise to deliver services or produce goods and other dimensions that summarized the company’s attributes. The perceived expertise of employees and manufacturing were included in the dimensions to evaluate a company’s corporate ability (Fatma et al., 2016).

Thus, the following hypothesis is proposed:

H6b: Use of anthropomorphism positively influences perceived expertise.

One determining factor of anthropomorphism is sociality (Epley et al., 2007), which suggests that the object people attach anthropomorphism to can work as a substitute for a relation target in human society. Anthropomorphizing abstract objects helps to strengthen the connection with other people, enriching people’s rational selves (Wan & Chen, 2021). The memory of a relationship with one specific person can be triggered by anthropomorphism. The degree of this kind of perception depends on how strong the tendency of anthropomorphism is (Kwok et al., 2018). On the other hand, anthropomorphized objects stand for a good image in people’s desired relationships (Wan & Chen, 2021).

The phenomenon that consumers form a pseudo-social relationship with influencers on social media is similar to the process media personalities expose repeatedly to the audience, making the audience develop a feeling of intimacy (Masuada et al, 2022). In the theory of parasocial relationship, a parasocial relationship is defined as a relationship in which the audience develops an illusion of intimacy and considers it to be an interpersonal relationship with the performer in real life (Dibble et al., 2016). The parasocial relationship is characterized by similar features in relationships formed in direct social interactions from time to time. Television has extended the parasocial relationship to leaders of the world of affairs, virtual figures, film stars, and even anthropomorphized characters who are promoted into celebrities or influencers (Horton & Richard, 1956).

No literature that directly illustrates how anthropomorphism influences the parasocial relationship. However, anthropomorphism satisfies people’s needs for a desired social relationship with others by evoking people’s perceptions of relationships with others and providing long-term commitments and a sense of belongingness (Wan & Chen, 2021; Chen et al., 2017). Parasocial relationship, which is described as “intimacy at a distance” in Horton and Richard’s research (1956), is one of the social relationships people can develop with others. From this

perspective, anthropomorphism can positively influence parasocial relationships, which is included in social relationships with other people.

As a result, the following hypothesis is proposed:

H6c: Use of anthropomorphism positively influences the parasocial relationship.

3 Research Method

3.1 Data Collection and Sample Characteristics

An online questionnaire survey was conveyed in this research to explore pet influencers' effects on consumers' purchase intention in social media marketing. The majority of the participants are social media users aged from 25 to 38 years old in China. The sample involved 251 participants in this study, in which around 80% of the participants reflected relatively high degree of concern in pet influencers. 75.30% of the participants reflected to buy products because of the influencers' recommendation once a week or month and more. 35.06% of the participants viewing pet influencers' content on social media more than three times every day. 42.23% of the participants reported to view the content one to five times a week. Most of the respondents' disposable income were included in the range between 3,001 RMB to 7,500 RMB.

Table 1. Demographics of respondents

Demographics	Frequency %
Gender	
Male	55.78
Female	44.22
Age	
17 or under	6.37
18-24	19.12
25-31	34.66
32-38	26.29
39-45	9.96
46-52	2.79
53 and above	0.80

Degree of concern in pet influencers

Very concerned	36.65
Somewhat concerned	44.22
Seldom concerned	19.12

Frequency of buying products because of recommendation from influencers on social media platforms

Usually (Once a week and more)	33.07
Sometimes (Once a month and more)	42.23
Seldom (Once a year and more)	18.33
Never	6.37

Frequency of viewing content (including videos, posts with pictures or texts) from pet influencers on social media

Over 3 times every day	35.06
1-5 times every week	42.23
1-5 times every month	18.33
1-5 times every year	4.38

Disposable income every month

< 1,500 RMB	7.17
1,500 – 3,000 RMB	2.79
3,001 – 4,500 RMB	23.51
4,501 – 6,000 RMB	33.86
6,001 – 7,500 RMB	24.30
> 7,500 RMB	8.37

3.2 Measures and Reliability Tests

The measurement of this study came from the prior studies. The constructs included attitude homophily (AH), social attractiveness (SA), use of anthropomorphism (UA), trustworthiness (TW), perceived expertise (PE), parasocial relationship (PR), and purchase intention (PI). The questionnaire of the variables social attractiveness

and parasocial relationship were adopted from Masuada et al. (2022). The questionnaire of the variables attitude homophily and purchase intention were adopted from Masuada et al. (2022) and Bu et al. (2022). The questionnaire of the variable use of anthropomorphism was adopted from Harrison and Hall (2010) and Manfredo et al. (2020). The questionnaire of the variable trustworthiness was adopted from Lou and Kim (2019). The questionnaire of the variable perceived expertise was adopted from Lou and Kim (2019) and Müller et al. (2018). A seven-point Likert scale was used in the questionnaire to measure all the variables, spanning from 1 (Strongly disagree) to 7 (Strongly agree).

Under the circumstances of rather restrictive hypothesis, Cronbach's alpha is considered to be an accurate measurement (Eisinga et al., 2013). The cutoff value for Cronbach's alpha is often required to be values of 0.7 or 0.75, which is used to measure the reliability of the test (Christmann & Van Aelst, 2006). According to table 2, Cronbach's alpha value of variables in this study all meet the requirement of 0.7 or 0.75, which proves the reliability of the variables.

Table 2. Cronbach's Alpha (α) of Each Variable

Variables	No. of Items	α
Attitude Homophily (AH)	5	0.849
Social Attractiveness (SA)	5	0.897
Use of Anthropomorphism (UA)	5	0.887
Trustworthiness (TW)	5	0.880
Perceived Expertise (PE)	5	0.861
Parasocial Relationship (PR)	8	0.863
Purchase Intention (PI)	5	0.847

3.3 Correlation Test

In this study, Pearson correlation is used for jointly normally distributed data, which are scaled to the range from -1 to +1. The value of zero in correlation suggests that no linear association exists between the two variables. As the absolute value of correlation gets close to 1, the relationship between the two variables becomes stronger (Schober et al., 2018).

Correlation coefficient values in this study range from 0.205 to 0.491. According to Schober et al. (2018), the coefficient values between 0.10 and 0.39 are interpreted as weak correlation. The values between 0.40 and 0.69 are interpreted as moderate correlation. Table 3 shows that the variables in this study are proved to have weak or moderate correlation.

Table 3. Correlation analysis between the variables

Variable	AH	SA	UA	TW	PE	PR	PI
AH	1						
SA	0.478**	1					
UA	0.491**	0.354**	1				
TW	0.387**	0.205*	0.260**	1			
PE	0.403**	0.263**	0.308**	0.273**	1		
PR	0.463**	0.379**	0.274**	0.271**	0.324**	1	
PI	0.424**	0.361**	0.259**	0.259**	0.244**	0.274**	1

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

* . Correlation is significant at the 0.05 level (2-tailed).

4 Results

4.1 Evaluation of Measurement Results

Linear regression in IBM SPSS Statistics 26 was used to test the hypothesis in this study. Hayes Process Macro was used to test the mediation effect. Mediation analysis is based on linear regression, which is applied to help a researcher to test hypotheses about or better understand how an effect of X on Y operates. X and Y are casual events that are chained together by the mediator, and mediator variable M is casually located between X and Y . The whole process is that X affects M , and M in turn affect Y (Hayes & Rockwood, 2017). In this study, model 4, which matched with the structure of the conceptual framework, was used to do the mediation analysis.

The conceptual framework of this study considers attitude homophily (AM), social attractiveness (SA), and use of anthropomorphism (UA) to be the independent variables that affect the dependent variable purchase intention (PI) through the mediation variables, including trustworthiness (TW), perceived expertise (PE), and parasocial relationship (PR).

4.2 Hypothesis Analysis

Table 4 presents the results of the hypothesis analysis for this study using the linear regression method. From the analysis, results can be concluded that the pet influencers' attributes can positively affect consumers' purchase intention in

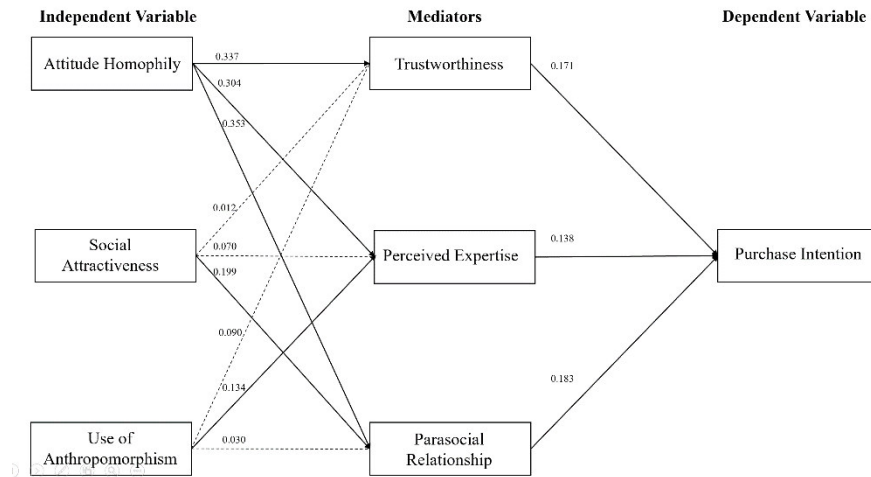
general through affecting the perceived characterizations of pet influencers. H1 is accepted since $\beta = 0.171$, $p = 0.007 < 0.01$, which supports that trustworthiness positively affects purchase intention. In H2, $\beta = 0.138$, $p = 0.032 < 0.05$, thus H2 is supported, which proves perceived expertise to positively affect purchase intention. For H3, since $\beta = 0.183$, $p = 0.005 < 0.01$, H3 is supported, resulting in the conclusion that parasocial relationship positively affect purchase intention. Attitude Homophily ($\beta = 0.337$, $p = 0.000 < 0.01$) positively affects trustworthiness, thus accepting H4a. Moreover, attitude homophily ($\beta = 0.304$, $p = 0.000 < 0.01$) is proved to positively affect perceived expertise, so accepting H4b. H4c is also accepted since $\beta = 0.353$, $p = 0.000 < 0.01$, thus attitude homophily positively affects parasocial relationship. Social attractiveness ($\beta = 0.012$, $p = 0.861 > 0.05$) was found fail to have positive effects on trustworthiness, thus rejecting H5a. Social attractiveness ($\beta = 0.070$, $p = 0.290 > 0.05$) is found fail to have positive effects on perceived expertise as well, thus rejecting H5b. Social attractiveness ($\beta = 0.199$, $p = 0.002 < 0.01$) was indicated to positively affect parasocial relationship, hence accepting H5c. H6a is rejected since $\beta = 0.090$, $p = 0.184 > 0.05$, which indicates that use of anthropomorphism fail to positively affect trustworthiness. However, use of anthropomorphism ($\beta = 0.134$, $p = 0.046 < 0.05$) is proved to positively affect perceived expertise, thus accepting H6b. H6c is rejected because use of anthropomorphism ($\beta = 0.030$, $p = 0.639 > 0.05$) fails to positively affect parasocial relationship.

Table 4. Hypothesis Analysis

Hypotheses	Path	Coefficient	<i>t</i> value	<i>p</i> -value
H1	TW→PI	.171	2.715	.007**
H2	PE→PI	.138	2.855	.032*
H3	PR→PI	.183	3.312	.005**
H4a	AH→TW	.337	4.664	.000**
H4b	AH→PE	.304	4.266	.000**
H4c	AH→PR	.353	5.170	.000**
H5a	SA→TW	.012	.176	.861
H5b	SA→PE	.070	1.061	.290
H5c	SA→PR	.199	3.131	.002**
H6a	UA→TW	.090	1.331	.184
H6b	UA→PE	.134	2.004	.046*
H6c	UA→PR	.030	.469	.639

** . *p*-value is significant at the 0.01 level (2-tailed).

* . *p*-value is significant at the 0.05 level (2-tailed).



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

*. Correlation is significant at the 0.05 level (2-tailed).

Non-significant routes are illustrated in dotted lines above.

Figure 5: Hypothesized model with results

Table 5 and 6 show the results of the mediation analysis of TW, PE, and PR, which are the mediation variables operate between independent variables and the dependent variable. Hayes Process Macro was used to calculate the total and indirect effects in the model. The indirect effects for SA and UA via the mediators TW, PE, PR are significant since $p < 0.01$ and Boot LLCI > 0 , demonstrating that TW, PE, PR play a mediation role between SA, UA and PI. Since Boot LLCI < 0 for AH, TW, PE, PR fail to show significance when playing a mediation role between AH and PI. The statistics are the same for the same independent variable in the total effect of the mediation analysis. Specially, when the correlation with the dependent variables is zero-order, the total effect may be the same (Alwin, 1977).

Table 5. Mediation analysis – Total Effect

Path	Effect	Coefficient	SE	t value	p-value	LLCI	ULCI
AH -> TW - > PI	Total	.4377	.0593	7.3800	.0000**	.3209	.5545
AH -> PE - > PI	Total	.4377	.0593	7.3800	.0000**	.3209	.5545
AH -> PR - > PI	Total	.4377	.0593	7.3800	.0000**	.3209	.5545
SA -> TW - > PI	Total	.2712	.0444	6.1033	.0000**	.1837	.3587
SA -> PE -> PI	Total	.2712	.0444	6.1033	.0000**	.1837	.3587
SA -> PR - > PI	Total	.2712	.0444	6.1033	.0000**	.1837	.3587
UA -> TW - > PI	Total	.2509	.0592	4.2356	.0000**	.1343	.3676
UA -> PE - > PI	Total	.2509	.0592	4.2356	.0000**	.1343	.3676
UA -> PR - > PI	Total	.2509	.0592	4.2356	.0000**	.1343	.3676

Table 6. Mediation analysis – Indirect Effect

Path	Effect	Coefficient	Boot SE	Boot LLCI	Boot ULCL
AH -> TW -> PI	Indirect	.0444	.0299	-.0099	.1082
AH -> PE -> PI	Indirect	.0366	.0312	-.0245	.0990
AH -> PR -> PI	Indirect	.0474	.0380	-.0248	.1255
SA -> TW -> PI	Indirect	.0297	.0153	.0049	.0647
SA -> PE -> PI	Indirect	.0317	.0167	.0048	.0698
SA -> PR -> PI	Indirect	.0457	.0237	.0036	.0959
UA -> TW -> PI	Indirect	.0516	.0233	.0123	.1022
UA -> PE -> PI	Indirect	.0542	.0259	.0095	.1117
UA -> PR -> PI	Indirect	.0583	.0273	.0138	.1198

Table 7. Summary of Hypothesis

Hypothesis	Results
H1: Trustworthiness positively influences purchase intention.	Supported
H2: Perceived expertise positively influences purchase intention.	Supported
H3: Parasocial relationship positively influences purchase intention.	Supported
H4a: Attitude Homophily positively influences trustworthiness.	Supported
H4b: Attitude Homophily positively influences perceived expertise.	Supported
H4c: Attitude Homophily positively influences parasocial relationship.	Supported
H5a: Social attractiveness positively influences trustworthiness.	Rejected
H5b: Social attractiveness positively influences perceived expertise.	Rejected
H5c: Social attractiveness positively influences parasocial relationship.	Supported
H6a: Use of anthropomorphism positively influences trustworthiness.	Rejected
H6b: Use of anthropomorphism positively influences perceived expertise.	Supported
H6c: Use of anthropomorphism positively influences parasocial relationship.	Rejected

Conclusions

The results of this study show that eight hypotheses out of twelve are supported in this study. This paper reveals that three determinants of the source credibility, including trustworthiness and perceived expertise and parasocial relationship (Yuan & Lou, 2020), are important characterizations of social media pet influencers to positively affect consumers' purchase intention. Three pet influencer attributes, including attitude homophily, social attractiveness, use of anthropomorphism, are proved to positively affect the pet influencer characterizations. The results are different from the previous research by Masuada et al. (2022) in regard to attitude homophily and social attractiveness, which means the audience on social media may consider different attributes that are important for the pet influencers. Social attractiveness is considered not to positively relate to trustworthiness and perceived expertise for pet influencers while the previous study supports the two hypotheses. Attitude homophily shows the positive effects on all three characterizations in this study while the previous study fails to show its significance on trustworthiness and perceived expertise. The results indicate that pet influencers are more likely to

create good images among the followers by focusing on building attitude homophily with the followers compared to strengthening their social attractiveness.

Compared to the previous study, this study proves the significant effect of anthropomorphism on perceived expertise, which in turn increases consumers' purchase intention. Perceived expertise is a factor behind celebrity influencers' high pay, which also help other kinds of influencers to create a celebrity status. When the promoted products fit within the influencers' area of expertise, the influencers' credibility in that area can bring greater influence on consumers (Campbell & Farrell, 2020). Pet influencers can seek the chance to transform to experts in the areas that they are good at by using the method of anthropomorphism to increase their informational influence.

Implications

This paper makes a theoretical contribution to research on social media influencer marketing. Previously, there was no study using the persuasion model to analyze specifically the pet influencers. This study enriches the knowledge of a specific segmentation in various kinds of influencers on social media. On one hand, Respondents' data in this study helps to understand customer attitudes towards pet influencers, indicating possible promotion methods specifically for pet influencers. On the other hand, the conceptual model combined the theory of persuasion and theory of anthropomorphism to provide a new perspective for consumer behavior prediction in the pet influencer domain. More comprehensive attributes and characterizations for pet influencers can be added to the marketing approach to improve consumers' purchase intention.

This study provides possible effective advertising appeals involving animals or pets, which are not limited in pet products. The examples used in this study focus on pet influencers promoting human products, creating more possibilities for the animal endorsers or animal spokes characters. Pet influencer marketing is a potential sales or marketing approach, bringing profit to the companies and creating the chance of improving brand images. In a study of brand image, Animals are used in the promotion campaigns to take advantage of secondary features brought by people's perceptions of animals to distinguish the products or brands when they are almost identical in the market (Hussey & Duncombe, 1999). This study also provides the insight of how anthropomorphized animals or pets are used as the spokes character to influence consumers' perceptions of the brands. Moreover, the method of anthropomorphism can be applied not only on the spokes characters, but also on other marketing elements to show the brand personality vividly. Brand anthropomorphism is defined as the method to view the properties of brand products as if they were actual humans. Anthropomorphizing tendency has been encouraged in the market to strengthen the brand personality, which helps to increase the consumers' brand loyalty (Guido & Peluso, 2015).

Acknowledgement

Limitations with this study can provide the inspirations for furthermore in-depth research. This study only discussed the influence of purchase intention that the influencer attributes and perceived characterizations brought on pet influencers. However, broader sights can be extended to explore the influence on other aspects in social media influence marketing. For example, the effectiveness and efficiency of information delivery is also an interesting topic to study. Social media influencers, who have the power to influence their followers, also take the important role in spreading meaningful ideas or socially beneficial values to help the society or individuals develop better.

Additionally, influencer attributes and characterizations that can more effectively influence the consumers' purchase intention or other aspects in social media marketing can be explored considering the hypotheses rejected and the insignificant mediators in this study. Other models in the persuasion theory, including the persuasion knowledge model and the source effect model, etc., can be applied in the study of pet influencers to explore more factors effectively persuade the consumers to purchase the promoted brands or products.

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