

The Role of Para-Social Interaction in Enhancing the Willingness of Consumers to Pay for Virtual Influencer-Endorsed Products in China: The Mediating Role of Brand Preference

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ABSTRACT

This research aimed at evaluating the role of “para-social interaction” in enhancing the willingness of Chinese consumers to pay for “virtual influencer-endorsed products” while examining the role of “brand preference”, surveys 352 Chinese consumers with 21 or more years of age and having decent knowledge about virtual influencers to reach its projected outcome. With the emergence of social media in the past few years, influencer marketing has become the first-choice strategy of many brands worldwide to attract audiences and build a loyal customer base. However, this phenomenon is still in its early days in China due to less exposure, making it an area worth researching. The survey responses are analyzed with the help of SmartPLS through the “Structural Equation Modelling (SEM)” method. The analysis has revealed a strong influence of para-social influence on “brand preference” and the “willingness of consumers to pay” for “virtual influencer-endorsed products”, along with the significant impact of “brand preference” on “willingness of consumers to pay”. With these, the role of “brand preference” as a strong mediator in the relationship between the other research variables has also been found. These findings can be valuable for managers to understand their role and the function of virtual influencers in developing “brand preferences” among consumers. Factors to develop a “brand preference” can also be identified and utilized by them with the help of these. Despite these, future researchers are recommended to take the help of the qualitative research method to reach a concrete conclusion in their studies. This is because no descriptive insights can be generated using a quantitative study, which has been the case here. Still, this research reaches its projected outcome systematically by forming hypotheses and accepting or rejecting them based on statistical insights.

Keywords: “para-social interaction”, “willingness of consumers to pay”, “virtual influencer-endorsed products”, “brand preference”, Chinese consumers.

1. INTRODUCTION

In the current marketing landscape of prevalent advertising, most brands are joining hands with influencers to form a social media marketing strategy and spread their brand messages to target

customers. As stated by Conti et al. (2022), using virtual influencers to market products or services is an emerging trend that has the potential to overtake the popularity of human influencers on social media. The virtual influencer marketplace allows companies to promote their products or services at less cost with the help of influencers. As seen in Figure 1, this is probably the reason that the market size of global influencer marketing has more than tripled since 2020. At the end of 2025, the market size is estimated to reach nearly 33 billion US dollars, which is massive (Statista, 2025). The popularity of virtual influencer marketing has been increasing with every passing day for the past few years.

Major social media channels, such as TikTok, Instagram, and Facebook, are widely used in the brand to attract the attention of potential customers using a virtual marketing strategy (Joshi et al., 2023). The brand is used as an environment to build emotional relationships with target customers and to raise awareness of products or services. Since then, the brand's preference has been closely related to consumer sentiment. According to Kim and Park (2023), the higher the letter of brand products and consumers, the better the virtual representative's charm and the brand's preference, which affects impulse purchases. Thanks to the “para-social interaction”, defined as one-sided interaction, if a person feels related to virtual characters or media figures, consumers can develop strong social relationships with virtual influential people when they encourage profitable business results. It can also increase the value of the brand.

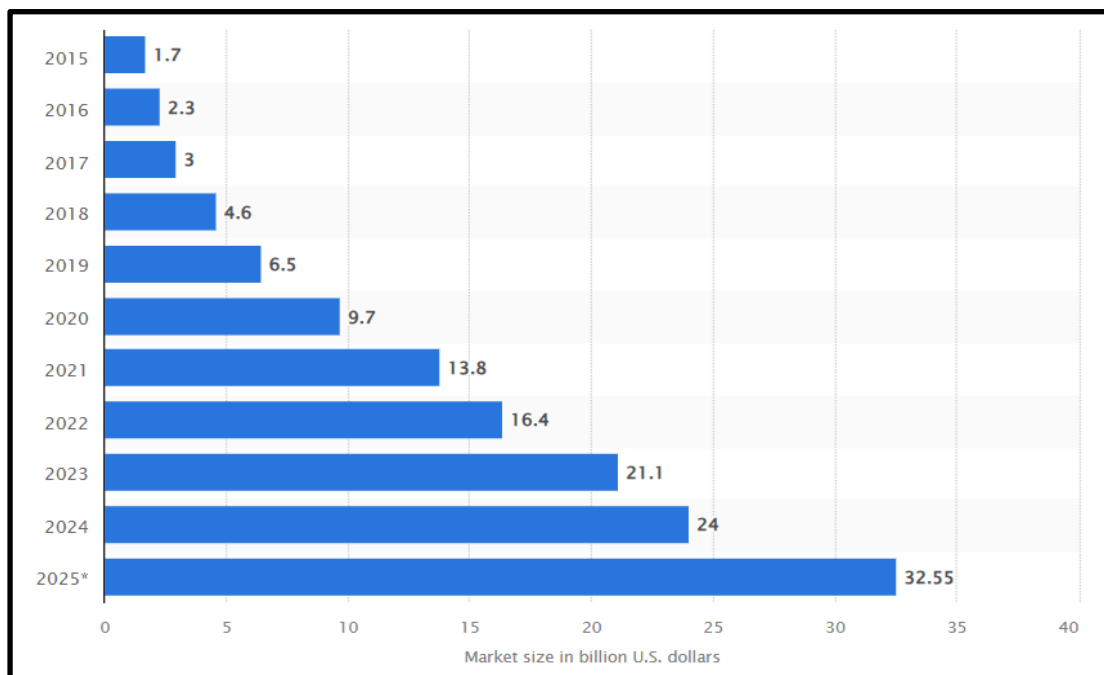


Figure 1: Influencer marketing market size worldwide in 10 years

Source: Statista, 2025

In China, traditional culture is the key to creating a national identity and protecting people from Westernization (Gerlich, 2023). In this context, the culture of virtual influential people is related to this because it affects consumer perception of social network brands through visual effects and audio content (Luo & Kim, 2023). This suggests that virtual influencers in the Chinese market not only do commercial promotions but are also closely associated with cultural communication and national identity. In terms of creating brand awareness, the integration between virtual idols and social media can be done to attract users and help them recognize the brand and its products or services (Hou et al.,

2022). However, Ameen et al. (2023) stated that the perception of Chinese consumers regarding virtual influencers is not clear due to less exposure. As a result, brands enhance their marketing effectiveness by working with virtual influencers. In such a scenario, it is hard to make consumers pay for products that these influencers endorse. This is why this study evaluates how “para-social interaction” can enhance the willingness of consumers in China to pay for “virtual influencer-endorsed products” and how “brand preference” plays a role by mediating the connection between these two.

The current research aims to understand the role of “para-social interaction” in enhancing the willingness of Chinese consumers to pay for “virtual influencer-endorsed products” while evaluating the mediating role of “brand preference”.

Objectives

- To evaluate the influence of “para-social interaction” on the “willingness of Chinese consumers to pay” for “virtual influencer-endorsed products”
- To assess the role of “para-social interaction” in “brand preference” for “virtual influencer-endorsed products” in China
- To analyze the impact of “brand preference” on the “willingness of consumers in China” to pay for “virtual influencer-endorsed products”
- To investigate the mediating effect of “brand preference” in the relationship between “para-social interaction” and “the willingness of Chinese consumers to pay” for “virtual influencer-endorsed products”

2. LITERATURE REVIEW

2.1 The role of “para-social interaction” in enhancing consumer “willingness of consumers to pay” for “virtual influencer-endorsed products”

Marketing through virtual influential people on social networks has become a very popular environment for brands to attract their audience. Virtual influential people are generally associated with followers in social networks, which are specific types of interactions known as social network interactions. Sheng et al. (2025) described “para-social interaction” as a relationship between influencers and their followers. The intertwined relationship influences the perception of audiences about the behavior of the persona. In the context of marketing, this is a type of imaginary reciprocal relationship between a particular persona and its audiences, which is developed over time if the audience continues to follow the activities of the persona on the mass media (Grizzard et al., 2021). In short, the main point is the interaction and relations of the audience towards the character. Researchers like Fu and Hsu (2023) even found that “para-social interaction” can lead to impulsive buying behavior, meaning an immediate and spontaneous purchase without prior plans or no prior recognized need. This is particularly relevant in the case of consumers with limited cognitive controls.

In this regard, there is a concept of preparation for payment, which is the highest price that consumers are ready to pay for their products or services (Herrmann et al., 2022). This reflects the intention of purchasing through evaluation of the product or service cost. When developing a marketing strategy, the brand is willing to use the payment to increase consumer awareness of the product and service (Kasilingam & Krishna, 2022). This means the “willingness of consumers to pay” is stretched beyond just the appearance of a product or the experience of a service, rather the marketing environment also plays a key role. According to Choudhry et al. (2022), in the current marketing era of online influencers, strong relationships that are formulated over time between influencers and their

followers greatly influence payment intentions. The credibility and influence of virtual personas have become crucial factors in consumer decision-making due to the widespread promotion on social media and the trust consumers impose on them.

In this regard, Rodrigo-Martin et al. (2021) mentioned that the coordination of the representative by the product and the virtual influential person is essential to encourage the purchase of products. This should have the opportunity to encourage the audience to pay the cost of the product approved if it is completely compatible with the lifestyle and value of virtual influential people. In case, virtual influencers do this successfully, a good relationship based on social emotions is developed between them and the audience, which can be beneficial for the brand to improve the willingness of individuals to pay for its products. In the opinion of (Su et al., 2022), certain characteristics of media figures like attractiveness and expertise boost “para-social interaction” as a relationship of trust is developed between them and the audience over time. When viewers believe that their beliefs and values are similar to those of virtual influencers, the level of “para-social interaction” increases. Thus, parasocial interaction through influencers helps bridge the gap and benefits brands by encouraging consumers to pay for their products. From this discussion, the following hypothesis can be assumed:

H1: *“Para-social interaction” significantly enhances the “willingness of consumers to pay” for “virtual influencer-endorsed products”*

2.2 The influence of “para-social interaction” on “brand preference” for “virtual influencer-endorsed products”

When a customer consistently chooses one brand over another, it can be called “brand preference”. In other words, after getting familiar with competitors or maybe even trying a few of their products, customers make a choice that they like a particular brand the most; it is “brand preference” (Gómez-Rico et al., 2023). “brand preference” comes along with brand loyalty because when faced with the dilemma of choosing a brand, customers with “brand preference” will always go for the brand that they like the most. However, Alamsyah et al. (2021) stated that developing a “brand preference” takes time as it requires the brand and its products to be consistent. Although there are no golden rules for developing it quickly, some researchers have proposed certain ways that can help brands develop it. For instance, Kowaas et al. (2023) highlighted the significance of creating appealing branding in this regard, the process of which starts from the first introduction of the brand to customers and the characteristics that they are most likely to remember for a long time. This is because an appealing brand proves immensely helpful in creating connections and familiarity with both existing and potential customers.

Srivastava et al. (2022) further stated that an appealing brand helps to stand out from the crowd by signaling what it has to offer to its audiences. This means the brand itself needs to tell its customers why they should choose it over a competitor, and an appealing brand that resonates with the target audience does that effectively. Moreover, Chanana and Sangeeta (2021) stated that engaging with the audience is utmostly important to build a strong connection with them. The process of engagement needs to be open in both ways, meaning customers should also get the scope to communicate their opinions about the brand. This is why Joy et al. (2022) mentioned that brands need to find ways to talk with their customers, which can come in many forms like asking them questions or responding to their comments. The brand needs to present itself in a way to its target audience that they get to believe it is more than just a website or logo. All these can be ensured by developing a para-social relationship through celebrities or content acting like influencers. As per Sheng et al. (2022), “para-social interaction” forms a relatively one-sided relationship, one in which the brand itself or celebrities share posts for a target audience using a social platform, and the audience feels like they are connecting with the brand directly.

With this technique, brands can take the help of “para-social interaction” to develop connections on social media with customers whom they do not know personally. Currently, brands are turning towards virtual influencers, which offer similar usefulness to human influencers. The main reason behind this is that any entity of human characteristics usually triggers a parasocial response (Stein et al., 2024). It also means virtual influencers create a positive image of the brand and make them see it as more credible. According to Kuo and Le (2025), the physical and social attraction of virtual influential people can be greater than the brand and product that supports the virtual influential people along with the viewing period. At the same time, the “para-social interaction” between the virtual influence and the target audience also plays an important role in affecting the audience to create a preference for the brand. Therefore, the following hypothesis can be developed:

H₂: *“Para-social interaction” significantly influences “brand preference” for “virtual influencer-endorsed products”*

2.3 The impact of “brand preference” on the “willingness of consumers to pay” for “virtual influencer-endorsed products”

“Brand preference” has gained immense importance as a factor in attracting customers among brands in recent times. Regarding a consumer's choice of a brand, he or she tends to choose a specific brand rather than other brands, regardless of what it provides (Puriwat & Tripopsakul, 2021). This is simple information about the brand from the customer's perspective. The properties that the brand sends to the potential customers affect the brand choice (Key et al., 2023). Influencers are key in creating “brand preference” which is noteworthy as they influence individuals to pay for the products or services of a brand to a great extent. Yu et al. (2023), in this regard, commented that the characteristics of influencers like professionalism and innovativeness in storytelling conveyed to the audience of a brand result in positive brand perceptions. Influencers bring innovation to the marketing landscape by communicating the message of a brand regarding what it has to offer to customers innovatively. At the same time, they do this in a manner that makes the audience see the real value and image of the brand, thereby increasing trustworthiness.

According to Belanche et al. (2021), innovative activities performed by influencers in a brand endorsement increase consumer favorability towards the brand, which translates into good “brand preference” in the long term. This eventually proves helpful for brands as consumers with good “brand preferences” recommend the brand to others. In this regard, brand managers can play a significant role. As stated by Hamdan and Lee (2022), managers can help increase “brand preference” by utilizing influencers to increase brand-consumer interactivity through increasing interactions on social media. When consumers start getting a good feel about a brand from these influencers, they are likely to form a preference for that brand. As a result of this, customers tend to pay for that brand while ignoring the offerings of its competitors. This is why authors like Sudirjo (2023) also stated in their studies that in a competitive market environment, “brand preference” acts as a key driver in promoting the purchase intention of customers and attracting them. In an era where virtual influencers have developed strong connections with audiences through mass media, utilizing them to influence the willingness of customers to pay for their products or services can be immensely beneficial.

Using virtual influencers to endorse products not only proves helpful in influencing the willingness of customers to pay but also guides the brand to devise more accurate product pricing strategies by improving resource allocation (Davlembayeva et al., 2025). In this regard, the credibility of influencers is crucial as they need to possess the ability to make a brand the first preference of the audience. In case, customers decide on their “brand preference”, their intention to pay for that brand will also increase with time. However, if the brand fails to represent a good image, the result can be the

opposite. As per Hofmann et al. (2021), brand image, the perception of individuals about specific products or services, can enhance or diminish the “willingness of consumers to pay”. This is mainly because it is closely related to the creation or erosion of customer satisfaction or advocacy. This is the reason a brand always needs to deliver consistent quality, service, and value with its offerings, which ultimately translates into “brand preference” among the audience. In this context, influencer-endorsed brands get the upper hand over others due to the development of a relationship of trust between the influential personality and the target group of the audience. Hence, the following hypothesis can be generated:

H3: *“Brand preference” significantly impacts the “willingness of consumers to pay” for “virtual influencer-endorsed products”.*

2.4 The mediating role of “brand preference”

The market of virtual influential people on social networks has become an effective environment for brands to attract and preserve a wide range of audiences. Ham et al. (2024), a virtual influential person is a digital character who can imitate human behavior and feelings and interact with his followers through social network channels. They constantly develop friendly social relationships with those who interact with them. If a person gives a person to recognize themselves beyond interaction, “para-social interaction” can lead to para-social relationships (Zhang et al., 2022). Sometimes, these relationships can be further strengthened by “para-social interaction”, leading to the para-social attachment. The rapid rise of social media has dramatically changed the nature of para-social relationships by facilitating direct communication or enabling an individual to contact a media figure online, making para-social relationships more social (Zhong et al., 2021). In this way, social media takes the para-social relationships to a social dimension where customers start feeling a personal connection with the brand. As a result, the “willingness of consumers to pay” the desired amount for products or services of a brand increases.

Virtual influential people increase their effects and regularly post content on social networks to attract the audience divided into values. Mrad et al. (2025) stated that virtual influential faces continue to post content on social networks and improve the identity and similarity of followers. These activities contribute to the senses of followers, and they begin to believe that the virtual influential people are part of their social identity. As a result, they are faithful to the brand they and their support. Another reason why users affect activities is that people are most influenced by recognizing that the value promoted by virtual influence is similar to theirs (Lou et al., 2023). Thus, with the help of “para-social interaction”, virtual influencers impact the consumption decisions and behaviors of their followers, which eventually proves useful for the brand.

However, the contribution of “brand preference” needs not to be forgotten in this regard. As stated by Mirzaei et al. (2022), when people prefer a brand, they are more likely to stick with it and form a loyal customer base, which depends on many factors, including how the brand presents itself to its audience or how it promises to serve them. Loyal customers usually tend to pay a bit extra for a product or service when they prefer a brand. However, if the brand fails to create a loyal customer base by not fulfilling their needs or repeatedly falling short of their expectations, “brand preference” might not be created. In such scenarios, para-social relationships formed by virtual influencers with their followers might also not work as customers do not like the brand for what it does. Thus, such an expected strong impact of “brand preference” leads to the following hypothesis development:

H4: “Brand preference” significantly mediates the relationship between “para-social interaction” and “the willingness of consumers to pay” for “virtual influencer-endorsed products”.

2.5 Theoretical Underpinning

Formulated by Herbert Kelman in 1958, the social influence theory underlies this research. As a theory, it posits that social influence, defined as the extent to which individuals believe it is essential to think they need to use a new system, induces behavior or attitude change under certain conditions (Spears, 2021). Beyond the mere understanding of the motivation for behavior and attitude change, the social influence theory expands knowledge into several fronts, the first of which is to highlight the structure of social situations that explain the generic processes for the induction of behavior (Lim, 2022). Besides, it also aims to distinguish different modes of influence coming from situational premises. In this regard, the theory assumes that there are three major methods of adopting social influences, that is, identification, compliance and internalization (Kwon et al., 2021). They are the answers to the social impact that can be demonstrated as a result of the dynamic interaction process with an influential agent in the motivation context. This means that people tend to change their behavior depending on others and to act to motivate them. The main reason for selecting this theory here is that it proves helpful in understanding how “para-social interaction” influences the behavior of Chinese consumers to purchase “virtual influencer-endorsed products”. In doing so, the role of “brand preference” in changing the attitude of customers by impacting their “willingness of consumers to pay” for a brand is also explored with its help.

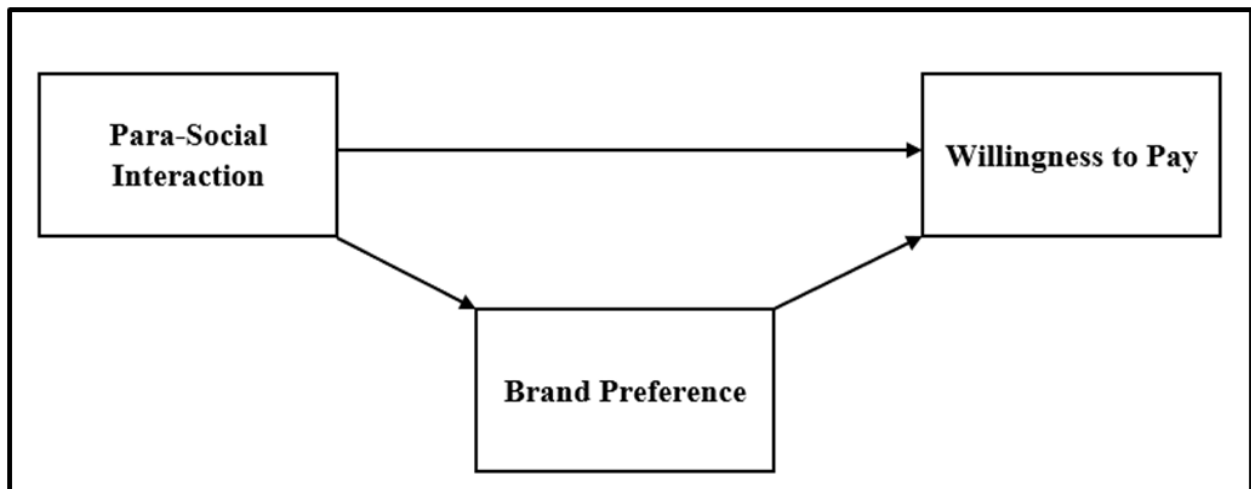


Figure 2: Conceptual framework

2.6 Literature Gap

Although many researchers explored how “para-social interaction” influences the “willingness of consumers to pay” (Grizzard et al., 2021; Su et al., 2022) and the “brand preference” of “virtual influencer-endorsed products” (Gómez-Rico et al., 2023; Stein et al., 2024), along with the impact of “brand preference” on the “willingness of consumers to pay” (Key et al., 2023; Sudirjo, 2023), most of them have based their research on a general context. As a result, they fail to offer a clear overview of a specific region or country like China. Besides, past researchers have explored the phenomenon of virtual influencers in their studies (Ham et al., 2024; Belanche et al., 2021) but have not included the discussion related to the way brands need to integrate them into social media for the best results. As a result,

neither an appropriate idea about the situation of influencer-endorsed products in China nor the mechanism of virtual influencers has been derived in the current context. Hence, empirical research is needed to fill these gaps.

3. METHODOLOGY

Since this research deals with factors like “brand preference” and the “willingness of consumers to pay”, understanding which requires human insights, it has been completed using the primary quantitative method or, more specifically, an online survey method to achieve its projected aim. Researchers seek the help of the quantitative research method to achieve the aim with the best possible results while addressing the objectives formulated using measuring instruments (Islam & Aldaihani, 2022). In the current context as well, research objectives are developed with the help of measurement items of all three variables adopted from past studies. After completing this procedure, the researcher started data collection from samples to address the subject matter at hand. In this regard, all Chinese consumers were the target population but only 352 of them with 21 or more years of age were selected as samples. The reason behind selecting such a huge sample size was the 10-times rule, according to which the sample size in quantitative research needs to be at least 10 times more than its variables or arrowheads (Wagner & Grimm, 2023). Another selection criterion was that these consumers had to have some knowledge about virtual influencers or follow some content on social media platforms.

The researcher adopted the convenience sampling technique to recruit them. The main advantage of this sampling method is that researchers can randomly select those who are easily accessible to them without any set rules (Golzar et al., 2022). With its help, the researcher posted content relevant to the purpose of this study on social media platforms like Weibo and added those to a WeChat group that reached out to him through that. Then, the researcher selected 352 individuals who fulfilled the selection criteria. After their successful selection, the researcher shared the participation sheet and the consent form with each of them before elaborating further on their role and the purpose of the survey. Once participants filled those out, the survey link with a one-week validity was shared with them. The questionnaire in the survey link comprised both demographic and descriptive questions to obtain information like the age, gender, and “brand preference” of respondents, along with key insights regarding the subject matter at hand.

All questions were close-ended and designed using the 5-point Likert scale, where ‘1’ indicates ‘Strongly disagree’ and ‘5’ suggests ‘Strongly agree.’ The collected data was then cleaned before analyzing statistically with the help of SmartPLS. Tests like descriptive statistics, correlation, moderation regression, and regression analyses were run to analyze the demographic characteristics of respondents, the validity and reliability of gathered responses, and how research variables are related to each other. Following this, the results are compared and contrasted with those of the past literature related to the subject matter. The privacy of participants and the collected data from them is assured by storing all information in a password-encrypted hard drive, with access to the researcher only. Moreover, it is promised to be deleted as soon as the course is over.

Measurement scales

The variable “para-social interaction” is constructed from the 3-item scale developed by Aw and Chuah (2021). The variable “willingness of consumers to pay” is developed from the 3-item scale provided by Netemeyer et al. (2003), whereas “brand preference” is designed from the 3-item scale created by Gabriele and Chiasson (2020).

4. RESULTS

Table 1: Demographic characteristics of respondents

Variable	Category	Frequency	Percent	Valid Percent	Cumulative Percent
Gender	Male	212	60.2%	60.2%	60.2%
	Female	140	39.8%	39.8%	100.0%
Age Group	21-25 years	126	35.8%	35.8%	35.8%
	26-30 years	194	55.1%	55.1%	90.9%
	31-35 years	25	7.1%	7.1%	98.0%
	Above 35 years	7	2.0%	2.0%	100.0%
Professional Status	Student	52	14.8%	14.8%	14.8%
	Part-time employee	44	12.5%	12.5%	27.3%
	Full-time employee	190	54.0%	54.0%	81.3%
	Others	66	18.8%	18.8%	100.0%
Educational Background	High school	144	40.9%	40.9%	40.9%
	Bachelor’s degree	163	46.3%	46.3%	87.2%
	Master’s degree	45	12.8%	12.8%	100.0%
Number of Social Media Channels	1-2	275	78.1%	78.1%	78.1%
	3-4	53	15.1%	15.1%	93.2%
	More than 4	24	6.9%	6.9%	100.0%

Table 1 presents the key demographic features of survey respondents. It reveals that the group predominantly consists of males (60.2%), with only 39.8% females. In terms of the age group, the majority of them are between 26 to 30 years of age (55.1%), followed by participants aged between 21 and 25 years (35.8%). Regarding professional status, more than half of the respondents are full-time employees (54%), while a notable 18.8% are in the others category. When asked about their educational background, the majority of them stated that they hold a bachelor’s degree (46.3%), closely followed by those with a high-school degree (40.9%). Talking about social media usage, 78.1% of respondents use one social media channel or two, while 6.9% have more than four on their smartphones. To summarize, the demographic in the survey is mostly young and well-educated, who are also actively engaged in social media.

Table 2: Reliability

	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
“brand preferences”	0.888	0.888	0.930	0.817
“para-social interaction”	0.921	0.933	0.950	0.864
“willingness of consumers to pay”	0.881	0.882	0.927	0.808

Table 2 showcases the reliability statistics of the key constructs used to conduct this research. With a Cronbach’s alpha value and an AVE value of 0.888 and 0.817, respectively, the construct of “brand preference” suggests strong internal consistency and reliability. Subsequently, supported by a Cronbach’s alpha value of 0.921 and an AVE value of 0.864, the construct of “para-social interaction” also indicates excellent reliability. With 0.881 and 0.808 as Cronbach’s alpha and AVE, respectively, the construct of “willingness of consumers to pay” is robust as well. On the whole, the measurement model of this study is statistically significant as every construct exceeds the threshold value for reliability and convergent validity.

Table 3: Outer loadings

	“brand preferences”	“para-social interaction”	“willingness of consumers to pay”
BP1	0.921		
BP2	0.892		
BP3	0.898		
PSI1		0.972	
PSI2		0.913	
PSI3		0.903	
WtP1			0.906
WtP2			0.901
WtP3			0.890

The outer loadings of the key constructs measured in this study are presented in Table 3. The values of the constructs of “brand preferences” ranging from 0.892 to 0.921 indicate high reliability, with BP1 being the highest-valued construct. The constructs of “para-social interaction” exhibit similarly excellent internal consistency, with values ranging from 0.903 to 0.972 and PSI1 standing as the highest-valued construct. Similarly, the loadings of “willingness of consumers to pay” also demonstrate strong reliability as they range from 0.890 to 0.906, where WtP1 has the highest value. Thus, the sufficient reliability demonstrated by all constructs supports the validity and robustness of the measurement model formed here.

Table 4: Model fit

	Saturated model	Estimated model
SRMR	0.051	0.051
d_ ULS	0.119	0.119
d_ G	0.332	0.332
Chi-square	537.832	537.832
NFI	0.856	0.856

Table 4 presents the model fit data and signifies the well-formulated structural model. It can be seen that both models here have a ‘Standardized Root Mean Square Residual (SRMR)’ value of 0.051, which is an acceptable fit as they are within the standard value of 0.1. Furthermore, a minimal deviation is shown by both discrepancy measures with values like 0.119 (d_ ULS) and 0.332 (d_ G). It also suggests consistency between saturated and estimated models. In addition, the Chi-square and NFI values of both models remain the same at 537.832 and 0.856, respectively, further reflecting the good fit of the model.

Table 5: Path coefficients

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
Parasocial Interaction -> “willingness of consumers to pay”	0.594	0.593	0.037	15.881	0.000
Parasocial Interaction -> “brand preferences”	0.916	0.917	0.007	130.520	0.000
“brand preferences” -> “willingness of consumers to pay”	0.357	0.358	0.037	9.687	0.000
Parasocial Interaction -> “brand preferences” -> “willingness of consumers to pay”	0.327	0.328	0.034	9.56	0.000

Table 5 shows the path coefficients of research variables and demonstrates the direct and indirect effects of “para-social interaction” on others. Directly, with an original sample (O) value of 0.594 and a *p*-value of 0.000, “para-social interaction” is found to have a significant positive influence on the “willingness of consumers to pay”. Subsequently, it shows a substantial favorable influence on “brand preferences”, as the O-value and *p*-value are calculated as 0.916 and 0.000, respectively. Additionally, with the exact *p*-value and 0.357 as the O-value, “brand preferences” can be seen to have a significant effect on “the “willingness of consumers to pay”. In terms of the indirect effect, the *p*-value of 0.000 and the O-value of 0.327 signify that “para-social interaction” influences “willingness of consumers to pay” via “brand preferences”. In this way, these findings highlight the influential role of

“para-social interaction” in shaping the “willingness of consumers to pay” and the key mediating role of “brand preference”.

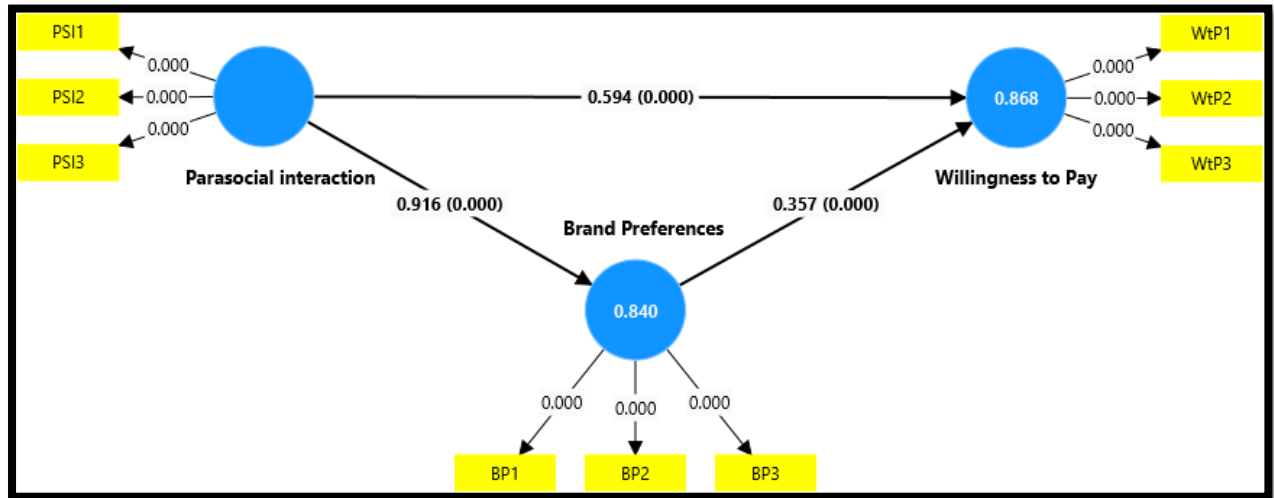


Figure 3: Structural model

In Figure 3, the structural model of the data represents strong associations between latent constructs and their respective indicators. To be precise, the strong mediating effect of “brand preference”, supported by robust construct reliability and validity, is represented in the model.

5. DISCUSSION

As can be seen from Table 6 of the hypothesis results, there is a significant influence of “para-social interaction” on “brand preference” and the “willingness of consumers to pay” for “virtual influencer-endorsed products”, as well as a substantial impact of “brand preference” on “willingness of consumers to pay”. The results also establish “brand preference” as a strong mediator in the connection between “para-social interaction” and the “willingness of consumers to pay” for virtual-endorsed products. These findings are quite similar to the findings of research reviewed earlier. Regarding the first research hypothesis related to the role of “para-social interaction” in enhancing the “willingness of consumers to pay” for “virtual influencer-endorsed products”, it has been found while reviewing the past literature that “para-social interaction” can impact the impulsive buying behavior of individuals (Fu & Hsu, 2023). The willingness of consumers with limited cognitive controls is also found to be increasing simultaneously in this regard. Subsequently, researchers like (Su et al., 2022) also found in their study that certain characteristics of media figures, including their attractiveness and expertise, prove effective in boosting “para-social interaction”, which ultimately develops a relationship of trust with the audience. In the current findings as well, with an O-value of 0.594 and a p-value of 0.000, “para-social interaction” is found to have a significant influence on the “willingness of consumers to pay” for virtual-endorsed products. Besides the acceptance of the first hypothesis, these results also adhere to the principle of the social influence theory regarding how para-social influences the purchasing behavior of consumers. Thus, it is clear that the characteristics of virtual influencers that Chinese brands use will also play a significant role in influencing consumers to pay the desired amount for their products or services.

The second hypothesis, which deals with the significant influence of “para-social interaction” on “brand preference” for “virtual influencer-endorsed products”, is also true as per the current research findings. This is because the O-value and p-value have been calculated as 0.916 and 0.000 in the context

of the influence of “para-social interaction” on “brand preferences”. In the literature review section of the study (Sheng et al., 2022), “para-social interaction” has been found to develop a one-sided relationship directly connected to the brand through posts that the audience exchanges on social networks. Kuo and Le (2025) also concluded that the physical and social appeal of virtual influential people forced users to raise their positive perceptions of brands and products. In this regard, “para-social interaction” also serves as a core driver that helps people with virtual influence approach the audience and create “brand preference”. In this way, the acceptance of the second research hypothesis is justified. Besides, it also bridges the gap regarding the way Chinese brands need to integrate virtual influencers in mass media by proposing the development of para-social relationships between them and the audience as an effective tactic.

Similar to this, with 0.000 as the p -value and 0.357 as the O -value, the current findings have suggested that “brand preference” significantly influences the “willingness of consumers to pay” for “virtual influencer-endorsed products”, leading to the acceptance of the third research hypothesis. A resemblance with the findings of past studies reviewed in the literature review indicates it to be justified. For example, it has been found that if consumers have a good feeling about a brand, which depends very much on the capability of managers and influencers, they tend to develop a preference for that brand (Hamdan & Lee, 2022). Managers can contribute by increasing the number of brand-consumer interactions on social media, while influencers can play their part by making those interactions as attractive as possible and developing a long-term relationship with the audience based on trust. This ultimately encourages consumers to pay whatever that brand charges by ignoring the alternative offerings. In their study, Gomes et al. (2023) also stated the same thing by highlighting that “brand preference” is developed among consumers only when they perceive something good about a brand. This development proves to be the key factor in influencing the “willingness of consumers to pay” for the products or services of a brand. In this way, the current findings, with the underlying principle of the social influence theory, have explored the role of “brand preference” in terms of changing the attitude of consumers to pay for a brand. Therefore, managers of Chinese brands have to work proactively to make their brand the preferred one for consumers through virtual influencers.

A strong mediating role of “brand preference” in the relationship between “para-social interaction” and the “willingness of consumers to pay” for “virtual influencer-endorsed products” is found in the current results. It means “para-social interaction” might not always be adequate to influence consumers to pay for “virtual influencer-endorsed products”. This resembles the findings of studies included in the literature review. For instance, Mirzaei et al. (2022) mentioned that when individuals prefer a brand, they are more likely to stay loyal to it, but it relies on certain factors like the presentation and promises of the brand. It also means if the brand fails to fulfill its promises made to the audience, it will fail to be the preferred choice of consumers. In this regard, Lou et al. (2023) talked about the importance of “para-social interaction”, which can be developed by virtual influencers with the audience to influence their consumption decisions. Users are influenced because they resonate their values with those of virtual influencers. This is why the fourth hypothesis associated with the mediating role of “brand preference” is accepted here.

Table 6: Hypothesis testing

Hypotheses	Description	Summary
1	“para-social interaction” significantly enhances “the “willingness of consumers to pay” for “virtual influencer-endorsed products”	Accepted
2	“para-social interaction” significantly influences “brand preference” for “virtual influencer-endorsed products”	Accepted
3	“brand preference” significantly impacts “the “willingness of consumers to pay” for “virtual influencer-endorsed products”	Accepted
4	“brand preference” significantly mediates the relationship between “para-social interaction” and “the “willingness of consumers to pay” for “virtual influencer-endorsed products”	Accepted

9. CONCLUSION

In the context of China, the intermediate role of “brand preference” showed that “para-social interaction” has a great influence on the preparation for payment and the preference of the brand by using analysis and testing methods of “para-social interaction” in increasing consumer preparation for products supported by virtual influential people. “Brand preference” also has a significant impact on the “willingness of consumers to pay”. Since then, the current results have confirmed the role of “brand preference” in the relationship between the other variables. The research has reached this conclusion by analyzing the survey responses of 352 eligible consumers selected from across China with the help of SmartPLS. In summary, it is safe to say that when Chinese brands have the skill to make themselves the first preference of consumers through developing para-social relationships with the help of virtual influencers, consumers will tend to pay the required amount for their products or services.

Theoretically, these research findings immensely contribute to the research field of virtual influencer endorsements using the social influence theory that was not explored deeply by most researchers in the context of “para-social interaction” and “brand preferences”. With this theory at its foundation, the research has helped to understand how “para-social interaction” can change the purchasing behavior of consumers and how “brand preference” can change their attitude toward paying for a brand. Managerially, these findings can be helpful for managers of Chinese firms to take note and understand the way virtual influencers can be utilized to create a “brand preference”. Subsequently, they will also get to know about the factors that are essential to make consumers pay for specific products or services.

Although the research has contributed immense knowledge to the research field by reaching its projected outcome systematically, the use of the primary quantitative research method can be termed one of its key limitations. The main reason behind this is that no descriptive statistics have been derived by following this method. The presence of those would have made the findings more interesting in the context of a region like China. This is why future researchers are suggested to follow a qualitative research method in their studies and derive useful descriptive insights. Moreover, they are recommended to base their studies on some specific industries or in the context of other nations like Singapore or Malaysia to contribute valuable knowledge from other perspectives as well.

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