

Article

The effects of social network relationships and social media influencer characteristics on consumer purchase intention in Chinese online community

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Abstract: With the continuous development of network has also greatly developed, exploring the role of social network relationships and attachment emotions on consumer intention helps community managers to promote community purchases for more consumer. As another core component of social e-commerce, social media influencer also has a significant influence on consumer intention. This study systematically analyzed the effects of social network relationships and social media influencer characteristics on consumer purchase intentions. Introduced consumer attachment and perceived value as mediating variables to construct the research framework of this study. This article adopts quantitative analysis methods to test the research hypotheses proposed. This article collected 600 first-hand data in the form of a survey questionnaire and analyzed the data using AMOS and SPSS statistical software. The empirical analysis in this article confirms that social network relationships has a significant impact on consumer purchase intentions; social media influencer characteristics has a significant impact on consumer purchase intentions; consumer attachment has a significant impact on perceived value; consumer attachment plays a mediating role in the effect of social network relationships on consumers purchase intentions; perceived value plays no mediating role in the effect of social media influencer characteristics on consumer purchase intentions; perceived value plays a mediating role in the effect of consumer attachment on consumer purchase intentions; consumer attachment and perceived value have a chain mediating role between social network relationships and consumer purchase intentions.

Keywords: social network relationships; social media influencer characteristics; consumer purchase intention; consumer attachment; perceived value

1. Introduction

With the continuous development of social network has also greatly developed. The classic social e-commerce model is represented by well-known social network such as Facebook and Sina Weibo (Liang and Turban, 2011), which get commissions by cooperating with e-commerce or brand owners by adding shopping links. Social e-commerce community refers to the social media platform as the carrier to promote the purchase and sales of various products and services through various channels such as sharing and interaction (Qin, 2020). With the increasing competitive pressure of e-commerce platforms, the social e-commerce community will face various challenges in its development. The community should maintain the steady growth of users and improve the conversion rate of community user in order to win more profit space.

Previous social e-commerce literature, Lu et al. (2016) suggested that social presence factors grounded in social technologies contribute significantly to the

building of the trustworthy online exchanging relationships in social e-commerce. The social presence factors are found to have positive impacts on trust in sellers. Kuan et al. (2014) examined the effects of the group-buying information on opinions (attitude and intention) and emotions and the two types of group-buying information can be explained by the different social influences exerted by the information. Wang and Yu (2017) conceptualized social interactions in social commerce environments into two forms: Word of mouth communication and observing other consumers' purchases, they found that social interactions significantly affect consumers' intention to buy a product. Chen and Shen (2015) demonstrated that both emotional and informational social support significantly affected consumers' trust and community commitment, which in turn exerted profound impacts on both social shopping and social sharing intention. Horng and Wu (2020) found that social network sites behavior and social capital affect social commerce intentions, while the relationship between social network sites behavior and social commerce intentions is partially mediated by the bonding and bridging social capital.

In the above literature explored trust, social impact, social interaction, social support, social capital and other factors on consumer purchase intention. These studies do not take into account the particularity of consumers' completing purchases in their own e-commerce community. The consumer purchase in the social e-commerce emphasizes the consumers' choice of the social e-commerce community, and relies more on the emotional factors such as the relationship that consumers establish with the social e-commerce community, as well as the attachment and loyalty to the community (Ahmad and Akbar, 2023; Li et al., 2020). As the core component of social e-commerce, social network relationships are a key feature of social e-commerce (Kala, 2023; Wang et al., 2023). Therefore, exploring the role of social network relationships and attachment emotions on consumer purchase intention in the community helps community managers to understand how to promote community purchases for more consumer.

As another core component of social e-commerce, social media influencer also has a significant influence on consumer intention (Ao et al., 2023; Chen and Yang, 2023). Social media influencer has a wide range of fans in social e-commerce, through their recommendations or presentations, consumers are more likely to be attracted by products or services, thus increasing their purchase intentions. The influencer's reputation, expertise and interaction with fans can also enhance their influence, prompting consumers to trust their recommendations and take purchasing actions. Compared with traditional celebrities, consumer think that social media influencer characteristics as more intimate, similar, real and trustworthy (Schouten et al., 2020) and have a significant influence on consumer (Gomes et al., 2022). Therefore, analyzing how social media influencer characteristics influence consumer purchase intention will help social e-commerce community managers to more effectively promote consumer purchase intention and social media influencer will enhance their own influence.

The current social e-commerce-related research mainly focuses on the traditional social e-commerce model. Research related to consumer purchase intention is more focused on the adoption of social e-commerce (Horng and Wu, 2020) and the intention to purchase the products or services (Lu et al., 2016). These studies have not aimed at

the new social e-commerce community or paid attention to where consumers buy the product. There is still a shortage of research on consumer purchase in new social e-commerce communities (Oh et al., 2017).

The impact mechanism for consumer to complete purchase in social e-commerce communities is still unclear. Therefore, to find the answer about the factors, what the social network relationships and social media influencer characteristics are expected to impact the consumer purchase intention in the social e-commerce community is necessary. After fully reviewing the relevant literature, Little Red Book was selected as the research platform (The Chinese innovative model of Little Red Book integrating community, content and e-commerce has become the top product in the field of social e-commerce). The Little Red Book, as a shopping-sharing community, is a typical representative of Chinese social e-commerce community. It was born in 2013 and initially positioned as a content-sharing platform for young users, seizing the opportunity of overseas shopping strategy sharing and attracting the attention of a number of online shopping users.

This study examines two core elements of the social e-commerce community: the influence of social network relationships and social media influencer characteristics on consumer purchase intention. The results benefit the managers of the new social e-commerce community to have a thorough understanding of consumer purchase intention and promoting community purchase. There are three research objectives of this study as followed:

- To analyse the effect of social networking relationships, social media influencer characteristics on consumer purchase intention in the Chinese online community.
- To examine whether consumer attachment plays a mediating role in the relationship between social network relationships and consumer purchase intention and clarifies the mediating role of perceived value in the relationship between social media influencer characteristics, consumer attachment on consumer purchase intention in the Chinese online community.
- To examine whether consumer attachment and perceived value plays a mediating role in the relationship between social networking relationships and consumer purchase intention.

2. Literature review

2.1. The influence of social network relationships and consumer purchase intention

Consumer in social networking relationships build connections with others, allowing consumer to quickly access information about products and services. The diffusion effect of recommendations between consumer on social networks can significantly affect consumer purchase intentions (Hanaysha, 2022). Some consumers are more popular on social network and their number of followers, influence or other factors can have an impact on their followers (AlFarraj et al., 2021). Hu and Zhu (2022) pointed out that in social network relationships, whether to seek information or social, the cognitive and emotional aspects of users are improved through the interaction between community members and information exchange in the social network, thus

affecting their attitudes towards products and social networks, ultimately affecting their purchase intention and final behavior. Kala (2023) developed a research framework by studying advertising perception, consumer psychological states, behavioral consumption related to social network characteristics and verified it using a partial least squares structural equation model (PLS-SEM). The results show that consumers' advertising perception significantly affects their psychological state. Consumers' psychological state and social network relationship significantly affect their purchase intention.

Therefore, the following hypothesis can be formulated.

• H1: Social network relationships have a significant impact on consumer purchase intentions.

2.2. The Influence of social media influencer characteristics and consumer purchase intention

Dwidienawati et al. (2020) point out that social media influencer comments have a positive impact on purchase intentions. There is a positive correlation between information task fit and the influence of online word-of-mouth on purchase intention (Tarkang et al., 2020). Social media influencer the content quality and quasi-social interaction to have a positive impact on the purchase intention of fashion brands (Gomes et al., 2022). Li and Peng (2021) found that the characteristics of influencer (such as professionalism, originality and homogeneity) positively affect consumer attitudes (such as image satisfaction and/or advertising trust) and thus affect consumer purchase intention.

Lee et al. (2022) revealed four motivations for following influencer on Instagram: authenticity, consumerism, creative inspiration and envy, which had varying effects on trust and purchase frequency. It will have an impact on the way how often consumers buy. Therefore, in order to have a positive impact on the consumer experience, the information provided by marketers should meet the needs of consumers (Tarkang et al., 2020).

Therefore, the following hypothesis can be formulated.

 H2: Social media influencer characteristics has a significant impact on consumer purchase intentions.

2.3. The influence of consumer attachment on perceived value

Ahmadian et al. (2023) underscore the substantial impact of brand attachment, brand experience, and brand image on the perceived quality of Mashhad Leather products, highlighting the significance of emotional and experiential connections in shaping consumer perceptions. Bui et al. (2023) shows that the value perception of digital content marketing has a significantly positive impact on experiential evaluations. Experiential evaluations also significantly and positively affect brand loyalty.

Jiang and Hong (2023) investigate emotional value, epistemic value positively affect destination attachment among Generation Z tourists. Lu et al. (2022) drawing on the cognition-affection-connation framework, suggest that the value constructs significantly contribute to the establishment of platform attachment, which in turn

drives repurchase intention toward on-demand services. Social network platform let the user and the same or similar individuals together, make the psychological and emotional connection, dependence and identity, individual's own needs met, more likely to make individual sense of social network platform dependence and perceived identity and in the process to meet the psychological needs of users (Yang et al., 2021).

Therefore, the following hypothesis can be formulated:

• H3: Consumer attachment has a significant impact on perceived value.

2.4. The mediation effect of consumer attachment between social network relationships and consumers purchase intentions

Halkiopoulos et al. (2020) used machine learning and data mining methods to assess the impact of emotional influencing factors on social network consumer. They found that the influencing factors of social network marketing and intermediary variables had a positive impact on consumers' brand purchase intention and understanding the way users behave when connected to social networking sites created opportunities for better interface design and richer social interaction research. Bakar and Zaini (2022) studied information and interest as influencing factors of social network marketing, studied cognition, emotion and trust as mediating variables. The analysis shows that cognition, emotion and trust indirectly influence consumer sharing and purchase intention.

Ma and Wu (2022) pointed out that the content authenticity, originality, practicality and social interaction of short videos have a significant impact on consumer purchase intention and consumer emotional attachment plays an intermediary role in this process. Zhang (2021) showed that emotional attachment completely mediates the influence of self-reference on consumer intention to continue using, partly mediates the influence of vitality on consumer intention to continue using and partly mediates the influence of interactivity on consumer intention to continue using. Bin (2023) indicated that in social network marketing, when consumer trust or attach themselves to a specific product or brand, they have a positive intention to buy the product, which will further change into the actual purchase behavior. Confirm the mediating role of attachment in social network emotional marketing and consumer purchase intention.

Therefore, the following hypothesis can be formulated.

• H4: Consumer attachment plays a mediating role in the effect of social network relationships on consumers purchase intentions.

2.5. The mediation effect of perceived value between social media influencer characteristics and consumer purchase intentions

Xu and Kim (2022) clarify the concept of influencer and consumer purchase intention by sorting out the prior studies on influencer and their four characteristics namely professionalism, credibility, attractiveness and interactivity, introduces two mediating variables, flow and perceived value, then constructs a corresponding research model. By exploring the influence of social media influencer on consumer purchase intention, the existence of a sequential mediation model. Another study shows that social media influencer significantly increases consumer purchase intention,

increasing their brand image and perceived value. This highlights the mediating role of perceived value between social media influencer and consumer purchase decision (Kanwar and Huang, 2022).

Li (2021) combined the characteristics and development trend of social media influencer to build a research model on the influence of social media influencers on consumer purchase intention, found that the perceived functional value has a complete mediating effect between the professionalism of social media influencer and consumer purchase intention. Wu and Huang (2023) discuss how perceived value mediates a role between live broadcast characteristics and purchase intention, emphasizes the importance of consumer trust as an intermediary factor. Guo and Li (2022) show that the role of perceived value as mediating variable between social business characteristics and consumer repurchase intention, the characteristics of social commerce not only indirectly affect the repurchase intention by improving the perceived value of consumers, but also can directly affect the repurchase intention.

Therefore, the following hypothesis can be formulated.

• H5: Perceived value plays a mediating role in the effect of social media influencer characteristics on consumer purchase intentions.

2.6. The mediation effect of perceived value between consumer attachment and consumer purchase intentions

Wenfang and Qian (2022) based on the theory of flow experience and perceived value, it is found that flow experience and perceived practical value mediate the positive relationship between personalized intelligent recommendation and consumers' online impulse purchase intention. Molinillo et al. (2021) found in social networking sites, information and service quality are the key prerequisite of perceived value and perceived value is an important factor of customers' loyalty to these sites. It plays a core role in actively improving customer loyalty, so as to improve the frequency of use of social networking sites. Petravičiūtė et al. (2021) found that the higher the perceived value of a luxury brand, the stronger consumer attachment to the brand, which leads to higher purchase intention. Yang (2021) shows that users 'perceived value not only has a positive impact on social software attachment, but also the impact of users' perceived value on social attachment is partially modulated by privacy concerns.

Therefore, the following hypothesis can be formulated.

• H6: Perceived value plays a mediating role in the effect of consumer attachment on consumer purchase intentions.

2.7. The mediation effect of consumer attachment and perceived value between social network relationships and consumer purchase intentions

When consumers perceive high brand value, their attachment to the brand will also increase, thus further improving their purchase intention (Petravičiūtė et al., 2021). Liu et al. (2021) found that purchase intention is influenced by interactivity, stickiness, sociability and personalization of the social commerce. Customer-to-customer interaction and customer-perceived value have a chain mediating effect between the social commerce technical environmental characteristics and purchase intentions. Yu

and Xie (2024) based on the live broadcast scene of tourism e-commerce, it is found that place dependence and place identity play a role of chain intermediary in the indirect influence of service scene on purchase intention. Zhao and Wang (2021) based on the stimulus-response theory and the perceived value theory, the conceptual model of the influence of the characteristics of e-commerce anchors on consumer purchase intention is constructed, the chain mediation effect of consumer perceived value and consumer trust between the characteristics of e-commerce anchors and consumer purchase intention is proved in the research.

Therefore, the following hypothesis can be formulated.

• H7: Consumer attachment and perceived value have a chain mediating role between social network relationships and consumer purchase intentions.

Figure 1 below is the conceptual framework of this study.

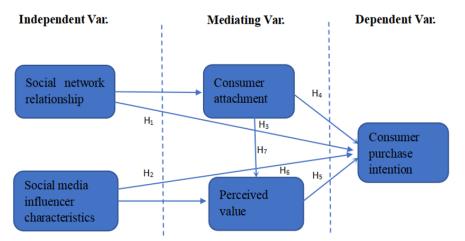


Figure 1. Conceptual framework.

3. Research methodology

3.1. Population and sampling

This study selects consumer in the online social network as the main research objects. The target population of the current study are consumer of Little Red Book, a well-known social e-commerce community in China.

It is argued that the sample size is determined based on the results calculated from the minimum sample. The minimum sample size determined by Hair et al. (2010) is: (number of indicators + number of potential variables) \times (estimated parameters), so the sample size of this study should not be less than 357. This study sets the sample size to 600.

3.2. Data collection

The researcher collected the data through an online questionnaire. The authors created an online questionnaire on the questionnaire star (www.wjx.cn). The questionnaire filling in invitation was posted on Little Red Book community.

3.3. Instrumentation

The measures of social network relationships are adapted from Chung et al. (2016)

to reflect the relationship between consumer and the social e-commerce community and their members.

The social media influencer characteristics is measured by four dimensions: professionalism, product involvement, popularity and visuals. The measurement of professionalism is adapted from Netemeyer and Bearden (1992), Bansal and Voyer (2000). The measurement of product involvement is adapted from Zaichkowsky (1985). The measurement of the popularity is adapted from Meng (2012). The measurement of visuals is adapted from Meng (2012) and Fang and Salvendy (2003).

The consumer attachment is measured by two dimensions: member attachment and community attachment. The measurement of member attachment is adapted from Chung et al. (2016) to reflect the attachment degree to other users in the social ecommerce community. The measurement of community attachment is also adapted from Chung et al. (2016) to reflect the attachment degree of consumer in the social ecommerce community.

The perceived value is measured based on the scale which was created by Sweeney and Soutar (2001), which contains two dimensions: Functional value and emotional value.

The measurement of community purchase intention is adapted from Jiang and Benbasat (2007), Yang (2015), Wang et al. (2022) to reflect consumer purchase intention on social e-commerce community, which contains two dimensions: priority purchase and continued purchase.

3.4. Data analysis techniques

This study first conducted reliability and validity tests on the questionnaire data. This study uses the AMOS software to conduct a structural equation model to validate the research hypotheses.

4. Data analysis and discussion

4.1. Data preparation

Table 1 displays abbreviations of variables in the conceptual framework.

Table 1 displays abbreviations of variables in this chapter.

Table 1. Abbreviation of variables.

Type of variables	Variable name	Abbreviation Dimensions		Abbreviation
	Social Network	SNR	The Output Connection	TOC
	Relationship	SINK	The Input Connection	TIC
In doman dome vanichles			Professionalism	PRO
Independent variables	Social Media Influencers' Characteristics	SMIC	Product Involvement	PI
			Popularity	POP
			Visuals	VIS
	Consumer	CD A	Membership Attachment	MA
Mediation variables	Attachment	CRA	Community Attachment	CYA
	Perceived Value	PV	Functional Value	FV
			Emotional Value	EV

Table 1. (Continued).

Type of variables	Variable name	Abbreviation	Dimensions	Abbreviation
Dependent variable	Consumer Purchase	СРІ	Priority Purchase	PP
	Intention		Continued Purchase	CP

4.2. Demographic characteristics

The demographic characteristics of the sample in this questionnaire survey are shown in **Table 2**.

Table 2. Demographic characteristics of the sample.

Demographic information	Category	Frequency	Percentage (%)
C 1	Male	314	52.3
Gender	Female	286	47.7
	Under 20 years	68	11.3
A ~~	Between 20–29 years	224	37.3
Age	Between 30–39 years	232	38.7
	Between 40-49 years	76	12.7
	High school or below	142	23.7
	Junior college	184	30.7
Educational background	Bachelor	126	21.0
	Master	111	18.5
	Doctor or above	37	6.2
	Under 1000	108	18.0
	Between 1001-3000	136	22.7
Personal monthly income	Between 3001-5000	113	18.8
(RMB)	Between 5001-10,000	133	22.2
	Between 10,001-20,000	70	11.7
	Above 20000	40	6.7
	Less than 1 year	164	27.3
D i-tti (1–2 years	167	27.8
Registration years (years)	3–4 years	137	22.8
	More than 4 years	132	22.0

4.3. Reliability and validity tests

4.3.1. Reliability test

According to the reliability analysis results in **Table 3**, the questionnaire designed in this study includes a total of 58 measurement items, and the overall Cronbach's α coefficient of the questionnaire is 0.949. Among them, the variable SNR scale contains 10 measurement items, and its Cronbach's α coefficient is 0.909; The variable CRA scale contains 10 measurement items, and its Cronbach's α coefficient is 0.908; The variable SMIC scale contains 20 measurement items, and its Cronbach's α coefficient is 0.937; The variable PV scale contains 10 measurement items, and its Cronbach's α coefficient is 0.915; The variable CPI scale contains 8 measurement items, and its

Cronbach's α coefficient is 0.881. The above results consistently indicate that the survey questionnaire used in this study has good reliability.

Table 3. Reliability test results.

Variable	Number of items	Cronbach's α	Overall questionnaire scale's Cronbach's α
SNR	10	0.909	
CRA	10	0.908	
SMIC	20	0.937	0.949
PV	10	0.915	
CPI	8	0.881	

4.3.2. Convergent validity

Table 4 presents the convergent validity test results of this study. From **Table 4**, it can be seen that the standardized factor loadings, CR, and *AVE* of each variable measurement item in this article meet the thresholds. Therefore, the scale used in this article has good convergent validity.

Table 4. Convergent validity test results.

Latent variable	Observation variable	Standardized factor loading	S.E.	C.R.	P	CR	AVE
SNR	TOC	0.763	-	-	-	0.702	0.541
SINK	TIC	0.707	0.078	11.395	***	0.702	0.341
CD A	MA	0.743	-	-	-	0.821	0.524
CRA	CYA	0.675	0.052	14.990	***	0.821	0.534
	PRO	0.737	0.058	16.227	***		
CMIC	PI	0.765	0.057	16.727	***	0.750	0.600
SMIC	POP	0.750	-	-	-		
	VIS	0.799	0.083	13.996	***		
DV	FV	0.775	-	-	-	0.500	
PV	EV	0.741	0.071	12.858	***	0.730	0.575
CPL	PP	0.738	-	-	-	0.707	0.547
CPI	CP	0.741	0.072	15.678	***	0.707	0.547

Note: *** represents *P*-value less than 0.001.

4.3.3. Discriminant validity

Table 5. Discriminant validity test results.

	SNR	CRA	SMIC	PV	СРІ
SNR	0.736	-	-	-	-
CRA	0.198	0.731	-	-	-
SMIC	0.483	0.511	0.775	-	-
PV	0.539	0.278	0.486	0.758	-
CPI	0.653	0.575	0.705	0.712	0.740

Note: The bold numbers on the diagonal represent the square root of the AVE values of each variable, while the remaining numbers represent the correlation coefficients between variables.

The test results of the discriminant validity of each variable in this article are shown in **Table 5**. According to **Table 5**, the square roots of *AVE* values for each variable are greater than the correlation coefficients between variables. From this, it can be concluded that the discriminant validity of the questionnaire in this article meets the standard.

4.3.4. Confirmatory factor analysis

Figure 2 below displays the measurement model of the five variables. Table 6 shows the fitting indicators of the model. According to Table 6, the model fit indicators are all within the reference range, indicating a good fit between the model and the data.

Fitting indicators	Threshold	Estimate value	Result	
χ^2/df	(1, 5)	1.157	Qualified	
NFI	>0.9	0.980	Qualified	
IFI	>0.9	0.997	Qualified	
TLI	>0.9	0.996	Qualified	
CFI	>0.9	0.997	Qualified	
GFI	>0.9	0.986	Qualified	
RMSEA	< 0.06	0.016	Qualified	

Table 6. Model fitting results of the five variables.

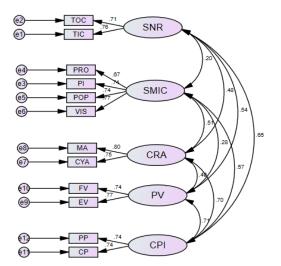


Figure 2. Confirmatory factor analysis model diagram for the five variables.

4.4. Structural equation model (SEM)

4.4.1. Model fitting test

This study constructs a structural equation model to test the relationship between latent variables and the research hypotheses of this paper. Firstly, it is necessary to fit the questionnaire data using structural equation modeling. In this article, the fitness index is used as the standard for model fit. **Table 7** shows the fitting indicators of the structural equation model. According to **Table 7**, the model fit indicators are all within the reference range, indicating a good fit between the model and the data. As can be seen from the **Table 8**, the factor loading of the observation variable is greater than

0.7, indicating that the load is high and highly representative. **Figure 3** below shows the structural equation model and path coefficient values.

Table 7. Model fitting results of the structural equation model.

				—
Fitting indicators	Threshold	Estimate value	Result	
χ^2/df	(1, 5)	1.306	Qualified	
NFI	>0.9	0.911	Qualified	
IFI	>0.9	0.978	Qualified	
TLI	>0.9	0.976	Qualified	
CFI	>0.9	0.978	Qualified	
GFI	>0.9	0.906	Qualified	
RMSEA	< 0.06	0.023	Qualified	

Table 8. Factor loading of observation variable in structural equation model.

Observation variable	Factor loading	
SNR_TOC	0.749	
SNR_TIC	0.759	
CRA_MA	0.821	
CRA_CYA	0.784	
SMIC_PRO	0.704	
SMIC_PI	0.775	
SMIC_POP	0.781	
SMIC_VIS	0.815	
PV_FV	0.788	
PV_EV	0.798	
CPI_PP	0.790	
CPI_CP	0.779	

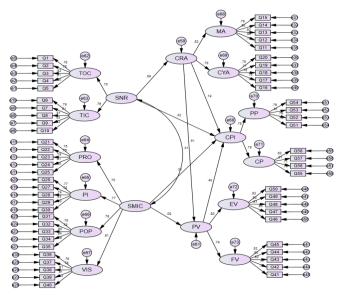


Figure 3. Structural equation model.

4.4.2. Direct effect analysis

Table 9 presents the results of the direct effects test for the structural equation model in this study. From **Table 9**, SNR has a significant positive impact on CPI (r = 0.325, p < 0.05), therefore, the hypothesis H1 is hold; SMIC has a significant positive impact on CPI (r = 0.312, p < 0.05), therefore, the hypothesis H2 is hold; CRA has a significant positive impact on PV (r = 0.510, p < 0.05), therefore, the hypothesis H3 is hold.

Direct effects	Estimate	S.E.	C.R.	P	Hypothesis
$CPI \leftarrow SNR$	0.325	0.071	4.503	***	H1
$CPI \leftarrow SMIC$	0.312	0.059	6.188	***	H2
$PV \leftarrow CRA$	0.510	0.072	7.850	***	Н3

Table 9. Direct effect analysis results.

4.4.3. Indirect effect analysis

Table 10 presents the results of the indirect effects test of the structural equation model in this study. It can be seen from **Table 10** that the standardized estimate of the indirect effect of SNR on CPI through CRA was 0.114, with 95% confidence interval of [0.024, 0.215], excluding 0, indicating that SNR has a significant indirect effect on SMIC, through CRA. So, CRA plays a mediating role between SNR and CPI. Therefore, the hypothesis H4 has proved to be valid.

Indirect effect analysis	Standardized estimate	SE	Lower	Upper	Hypothesis
$CPI \leftarrow CRA \leftarrow SNR$	0.114	0.056	0.024	0.215	H4
$CPI \leftarrow PV \leftarrow SMIC$	0.036	0.023	-0.005	0.086	H5
$CPI \leftarrow PV \leftarrow CRA$	0.202	0.035	0.141	0.278	Н6
$CPI \leftarrow PV \leftarrow CRA \leftarrow SNR$	0.119	0.026	0.076	0.179	H7

Table 10. The indirect effect analysis results.

It can be seen from **Table 10** that the standardized estimate of the indirect effect of SMIC on CPI through PV was 0.036, with 95% confidence interval of [-0.005, 0.086], including 0, indicating that SMIC has no significant indirect effect on CPI, through PV. So, PV plays no mediating role between SMIC and CPI. Therefore, the hypothesis H5 has not proved to be valid.

It can be seen from **Table 10** that the standardized estimate of the indirect effect of CRA on CPI through PV was 0.202, with 95% confidence interval of [0.141, 0.278], excluding 0, indicating that CRA has a significant indirect effect on CPI, through PV. So, PV plays a mediating role between CRA and CPI. Therefore, the hypothesis H6 has proved to be valid.

It can be seen from **Table 10** that the standardized estimate of the indirect effect of SNR on CPI through CRA and PV was 0.119, with 95% confidence interval of [0.076, 0.179], excluding 0, indicating that SNR has a significant indirect effect on CPI, through CRA and PV. So, CRA and PV plays a chain mediating role between SNR and CPI. Therefore, the hypothesis H7 has proved to be valid.

4.5. Discussion

This study explores the relationship between social network relationships, social media influencer characteristics and consumer purchase intentions, analyzes the mediating role of consumer attachment and perceived value. The findings confirm most of the hypothesis. The results show that the social network relationships and social media influencer characteristics are positively related with consumer purchase intention, which was consistent with the findings of AlFarraj et al. (2021), Kala (2023), Kurdi et al. (2022) and AL-Sous et al. (2023).

Furthermore, consumer attachment plays a mediating role in the effect of social network relationships on consumer purchase intentions, which was consistent with the findings of Ma and Wu (2022), Bin (2023). Perceived value plays a mediating role in the effect of consumer attachment on consumer purchase intentions, which was consistent with the findings of Sheng et al. (2022), Wang et al. (2021). But Perceived value plays no mediating role in the effect of consumer attachment on consumer purchase intentions. Possible explanations were as follows. The expectation that consumer perceived value straightforwardly mediates the relationship between influencer characteristics and purchase intentions might overlook several complex dynamics: External factors such as social trends, economic conditions and personal consumer characteristics can disrupt the direct mediation role of perceived value, suggesting that these external factors could dilute or overshadow the influence of influencer characteristics on perceived value (Ao et al., 2023). Consumers' interpretations of influencer characteristics vary widely, leading to different perceived values for the same influencer marketing efforts. This diversity in perception challenges the uniformity assumed in the mediation role of perceived value (Koay et al., 2021).

Finally, the results of this study also confirmed consumer attachment and perceived value have a chain mediating role between social network relationships and consumer purchase intention, which was consistent with the findings of Liu et al. (2021), Li et al. (2023).

5. Conclusion, implications and limitations

5.1. Conclusion

This study systematically analyzed the impact of social network relationships and social media influencer characteristics on consumer purchase intention, introduced consumer attachment and perceived value as mediating variables to construct the research framework. While previous research has suggested different factors and mechanisms to elucidate purchase intention processes in social commerce, the constrained theoretical viewpoint of these studies underscores the need for fresh theoretical perspectives to address the issue. On the basis of consumer attachment and perceived value, this study revealed how social network relationships and social media influencer characteristics Influence consumer's community purchase intention. By Using the first-hand data in the form of a survey questionnaire, the authors tested the hypotheses propose dint the study.

Based on the results of empirical analysis, all seven hypotheses were tested. The

direct effect test results support hypothesis 1: Social network relationships has a significant impact on consumer purchase intentions. Hypothesis 2: Social media influencer characteristics has a significant impact on consumer purchase intentions. Hypothesis 3: Consumer attachment has a significant impact on perceived value. The indirect effects test results support hypothesis 4: Consumer attachment plays a mediating role in the effect of social network relationships on consumers purchase intentions. Hypothesis 6: Perceived value plays a mediating role in the effect of consumer attachment on consumer purchase intentions. Hypothesis 7: Consumer attachment and perceived value have a chain mediating role between social network relationships and consumer purchase intentions.

The indirect effects test results do not support hypothesis 5: Perceived value plays a mediating role in the effect of social media influencer characteristics on consumer purchase intentions.

5.2. Implications of the study

5.2.1. Theoretical implications

Research provides important theoretical contributions to the field of social network marketing. On the one hand, research shows that consumer attachment and perceived value as mediating variables, are the bridge between social network relationships and consumer purchase intentions. Integrating social network relationships in the framework of consumer purchase intention emphasizes the role of social network relationships in forming consumer attachment and perceived value, thus affecting consumer purchase intentions. This finding expands the theoretical basis of the influence of social networks and provides a novel theoretical perspective to reveal the formation mechanisms of consumer purchase intentions in the social network environment. This chain mediating effect not only reveals the complex mechanism of consumer purchase intentions, but also provides community managers and practitioners with strategies to promote purchase intentions by enhancing consumer attachment feelings on social networks and improving their perceived value.

On the other hand, the dual mediating role of perceived value. Found that perceived value plays a mediating role in the effect of social network relationships and consumer attachment affect on purchase intentions. This finding emphasizes the importance of perceived value in transforming social network relationships and attachment emotions into consumer purchase intentions, providing strategies for community managers, brands to increase consumer perceived value to promote purchase intentions.

5.2.2. Managerial implications

In strengthening the construction of social network relations, community managers or brands should actively build and maintain the concern relationship with consumers through social network platforms, such as enhancing the connection with consumers through regular interaction, content marketing and community activities. Community designers can also add more IT designs to increase user access to other users and interact with other users (such as personalized recommendation systems, induced friend recommendation design, etc.). Thus, by providing high-quality social interaction experience and building meaningful community activities, consumer

attachment to their members and the community is cultivated and highlighting the perceived value of products, it can improve the perceived value of consumers and then increase their purchase intentions. For example, it can be achieved through personalized recommendation, user evaluation and display and emotional marketing. In addition, the characteristics of social media influencer also have a significant impact on consumer purchase intentions. Community managers should choose cooperation with social media influencer who can effectively influence the target audience, use their personal characteristics to spread brand information and enhance consumer purchase intentions in the community. For example, they can share more content to highlight their expertise and publish good, attractive pictures, videos to attract more followers.

5.3. Study limitations

Although some important empirical results and theoretical progress have been made in this study, there are still some shortcomings in future research work, which need to be gradually improved.

First, all the hypotheses of the study were verified by data on the social e-commerce community from Chinese mainland, so the applicability of this study may be limited. Future scholars can recollect data in other cultural contexts to test the hypothesis of this paper to verify the universality of the findings or conduct cross-cultural comparative studies to examine the possible impact of culture therein.

Second, this study focused on social network relationships when considering the social network perspective. However, some studies have found the importance of the emotional properties of social networks, such as the strength of relationships. Therefore, future studies can consider the strength of the relationship between consumer and social media influencer, examining their direct and regulatory effects on consumer purchase decisions.

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