



Understanding Influence Mechanisms of Social Commerce on Behavioral Intentions: Evidence from Xiaohongshu

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Abstract. Social commerce, a new form of online shopping, is growing with more consumers purchasing through platforms like Xiaohongshu. However, its impact on consumer behavior remains unclear. This study examines consumer behavioral intentions on Xiaohongshu, proposing models and hypotheses. Data from online surveys were analyzed using SPSS and AMOS. Results show that trust propensity and interface design significantly influence consumer behavior, offering insights for platform development.

Keywords: social commerce; trust; behavioral intentions; survey research; structural equation modeling

1 Introduction

With the rapid rise of social media, social commerce has become a key part of the digital economy, enhancing online shopping experiences and reshaping brand promotion. Users can share product information, exchange opinions, and even shop directly on platforms, which has influenced consumer behavior and integrated social commerce into the broader e-commerce landscape ^[1]. Social commerce connects consumers and businesses, leveraging social media features like reviews, ratings, recommendations, and social advertisements to influence purchasing decisions. Despite growing research, platform-specific studies remain limited.

This study applies trust commitment and social support theories to explore how social commerce characteristics affect consumer behavior. It examines the roles of trust structures—such as trust propensity, peer interaction, and interface design—and social support structures—like emotional and informational support—on purchase intentions. The study also investigates the mediating effects of platform trust and subjective norms. Focusing on Xiaohongshu, a major Chinese social e-commerce platform, data were collected through surveys and analyzed using SPSS and AMOS to validate the model, with the aim of offering practical insights for improving social commerce platforms.

2 Literature Review

Social commerce generally involves users engaging in product sales, information sharing, and shopping through online marketplaces and social platforms [2]. Recent research on social commerce has focused on three areas. The first is consumers' social behavior. Hsu et al. examined how vloggers enhance consumers' impulse buying behavior through para-social interaction [3]. The second is consumers' purchase intentions. Attar's research indicated that trust impacts satisfaction in social commerce, which in turn affects purchase intentions[4]. The third area is consumer perception. Zhang et al. found that perceived risks related to products and services affect trust in other platforms [5].

The rise of social commerce also brings challenges related to trust, such as misleading prices and low-quality products. According to Trust Commitment Theory (TCT), successful relationship marketing relies on trust and commitment, with trust—integrity and honesty—affecting transaction outcomes directly [6]. Abbas highlighted peer interaction and interface design as key trust-building factors in TCT [7].

Based on Social Support Theory, Cohen categorized social support into four types: emotional, informational, instrumental, and appraisal support [8]. In social commerce, emotional and informational support are the primary elements of social support. Emotional support improves well-being and reduces anxiety, while informational support provides helpful resources. Both forms of support enhance consumer trust and engagement on social platforms, promoting purchase intentions.

3 Hypothesis Development

The research model is illustrated in Fig. 1. Trust propensity is a consumer's general tendency to trust others or platforms. Consumers with higher trust propensity are more likely to trust platforms, leading to increased purchase decisions. Prior interactions, word-of-mouth, and individual traits influence this trust tendency. Peer interaction refers to communications between consumers on social platforms, such as sharing and commenting. This interaction provides informational support and enhances trust, satisfaction and social recognition, ultimately driving purchase intention [7].

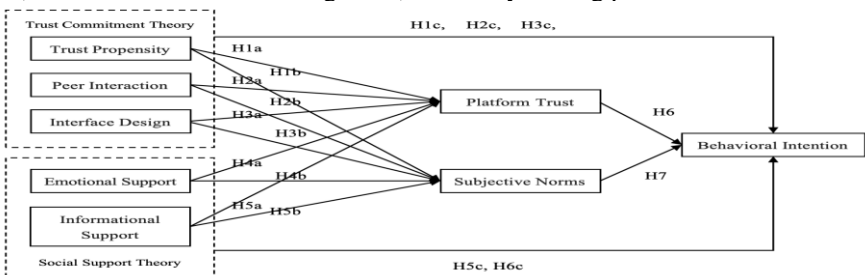


Fig. 1. Research model of consumer behavior in social commerce

Platform interface design enhances perceptions of security and control by improving user experience. A well-designed interface builds trust, making consumers more receptive to reviews and subjective norms, promoting purchases^[7]. Emotional support through social platforms, including customer service or community interactions, helps consumers feel supported, reducing stress and increasing confidence. This support enhances trust, facilitating purchase decisions^[9]. Informational support provides clarity through product details and reviews, helping consumers make informed decisions. Consumers value shared information and rely on word-of-mouth, strengthening platform trust and shaping purchase behavior^[8].

H1: Trust propensity positively affects platform trust (H1a), subjective norms (H1b), and consumer behavioral intention (H1c).

H2: Peer interaction positively affects platform trust (H2a), subjective norms (H2b), and consumer behavioral intention (H2c).

H3: Interface design positively affects platform trust (H3a), subjective norms (H3b), and consumer behavioral intention (H3c).

H4: Emotional support positively affects platform trust (H4a), subjective norms (H4b), and consumer behavioral intention (H4c).

H5: Informational support positively affects platform trust (H5a), subjective norms (H5b), and consumer behavioral intention (H5c).

Platform trust reflects the consumer's trust in platform's product quality and platform reputation. When consumers trust a platform, they are more likely to make purchases, recommend it, reduce perceived risk and foster long-term relationships^[9]. Subjective norms reflect the influence of others' expectations on decision-making. In social commerce, the expectations of friends or others' purchasing behaviors may encourage consumers to conform, driving herd behavior and increasing purchase likelihood^[10].

H6: Platform trust positively affects consumer behavioral intention.

H7: Subjective norms in social commerce positively affect consumer behavioral intention.

4 Research Methodology

This study used a survey method, collecting data via the Wenjuanxing and snowball sampling. Respondents were Xiaohongshu users. A total of 447 questionnaires were gathered, with 327 valid for analysis. The sample had a balanced gender distribution, with 88% of respondents aged 18 to 45, reflecting a young, internet-savvy demographic. Over 83% had at least a high school diploma, with most holding bachelor's degrees. Students and company employees were the primary user groups. Most respondents used Xiaohongshu daily, with over 50% using it more than once a day.

The measurement of the constructs in this study was primarily adapted from established scales in existing literature. The questionnaire consisted of two parts. The first part collected basic demographic information, including gender, age, education level, and so on. The second part employed a five-point Likert scale, consisting of 28 items,

where respondents rated each statement from 1 ("strongly disagree") to 5 ("strongly agree"). All variables were measured using validated scales.

5 Analysis and Results

SPSS was used for reliability analysis. The overall Cronbach's α was 0.913, indicating high internal consistency. Each research variable had Cronbach's α values above 0.7, demonstrating good reliability across all dimensions (see Table 1). For validity, the questionnaire had strong content validity as items were adapted from established literature. Confirmatory Factor Analysis (CFA) was used to ensure construct validity, yielding a χ^2/df ratio of 3.219 (acceptable range <5) and an RMSEA of 0.082 (moderate fit). CFI, TLI, and NFI values were near 0.9, indicating good construct validity. Further tests showed composite reliability (CR) values above 0.7 for all dimensions, with AVE values above 0.5 for all except behavioral intention. Overall, the questionnaire exhibited good convergent validity and reliability.

Structural Equation Modeling (SEM) was used to test the research hypotheses. The model fit and path testing results are presented in Table 2. Trust propensity significantly impacted platform trust ($\beta=0.226$, $p<0.001$) and subjective norms ($\beta=0.195$, $p<0.001$), supporting H1a and H1b. Peer interaction, interface design, and informational support also significantly affected platform trust and subjective norms, confirming H2a, H3a, H5a, H2b, H3b, and H5b. However, emotional support had a negative impact on both platform trust ($\beta=-0.558$) and subjective norms ($\beta=-0.565$), refuting H4, suggesting that excessive emotional support may decrease platform trust and subjective norms. Lastly, trust propensity, peer interaction, interface design, emotional support, informational support, and platform trust all significantly influenced behavioral intention ($p<0.05$), while subjective norms did not ($\beta=0.798$, $p>0.05$).

Table 1. Reliability analysis table for each dimension

Dimension	Cronbach's α	Item	loadings	Dimension	Cronbach's α	Item	loadings
Trust Propensity	0.813	QX1	0.74	Informational Support	0.814	XX1	0.77
		QX2	0.745			XX2	0.748
		QX3	0.746			XX3	0.717
Peer Interaction	0.853	TB1	0.822	Platform Trust	0.818	PT1	0.784
		TB2	0.815			PT2	0.721
		TB3	0.81			PT3	0.744
		TB4	0.807			ZG1	0.859
Interface Design	0.866	JM1	0.839	Subjective Norms	0.882	ZG2	0.841
		JM2	0.833			ZG3	0.837
		JM3	0.824			ZG4	0.854
		JM4	0.819			XW1	0.728
Emotional Support	0.864	QG12	0.836	Behavioral Intention	0.74	XW2	0.75
		QG13	0.826			XW3	0.78
		QG14	0.811				
		QG15	0.834				

Mediation effects were tested using the Bootstrap method (Table 3). The effect of trust propensity on behavioral intention via platform trust was 0.695 but not significant. However, the effect through subjective norms was 0.167, with a 95% confidence interval excluding 0, indicating a significant mediation effect. The mediation effect of peer interaction on behavioral intention through platform trust was insignificant (0.004), but it was significant through subjective norms (0.19). Emotional support also showed a significant mediation effect on behavioral intention through subjective norms (0.186). Mediation effects for interface design and informational support were not significant.

Table 2. Results of model path test

	Path		Estimate	S.E.	C.R.	P	Hypothesis	
	XR	<---	QX	0.226	0.049	6.671	***	H1a
	ZG	<---	QX	0.195	0.053	5.87	***	H1b
	XR	<---	TB	0.157	0.044	4.974	***	H2a
	ZG	<---	TB	0.13	0.048	4.167	***	H2b
	XR	<---	JM	0.759	0.072	15.463	***	H3a
	ZG	<---	JM	0.765	0.078	15.915	***	H3b
	XR	<---	QG	-0.558	0.067	-12.82	***	H4a
	ZG	<---	QG	-0.565	0.073	-13.15	***	H4b
	XR	<---	XX	0.173	0.046	5.322	***	H5a
	ZG	<---	XX	0.097	0.049	3.087	**	H5b
	XW	<---	QX	2.269	0.668	2.416	*	H1c
	XW	<---	TB	1.463	0.473	2.137	*	H2c
	XW	<---	JM	7.108	2.155	2.388	*	H3c
	XW	<---	QG	-5.009	1.685	-2.27	*	H4c
	XW	<---	XX	1.718	0.533	2.258	*	H5c
	XW	<---	XR	-9.481	2.135	-2.195	*	H6
	XW	<---	ZG	0.798	0.400	0.894	0.371	H7

Notes: * p <.05, ** p <.01, *** p <.001

Table 3. Path coefficients for mediation model

Path	Effect	SE	95%CI		P
			LLCI	ULCI	
QX→XR→XW	0.695	-0.385	-3.091	-0.024	0.029
QX→ZG→XW	0.167	0.037	0.11	0.257	***
TB→XR→XW	0.004	0.056	-0.115	0.111	0.896
TB→ZG→XW	0.19	0.056	0.089	0.31	***
JM→XR→XW	-0.037	0.113	-0.185	0.093	0.612
JM→ZG→XW	0.2	0.071	0.068	0.345	0.005
QG→XR→XW	-0.013	-0.013	-0.13	0.085	0.814
QG→ZG→XW	0.186	0.186	0.086	0.319	***
XX→XR→XW	0.877	-0.404	-3.591	0.357	0.171
XX→ZG→XW	0.142	0.064	-0.062	0.518	0.249

Notes: *** p <.001

6 Conclusion

This study integrates the Commitment Trust Theory and Social Support Theory to examine factors influencing consumer behavioral intentions in social commerce. Key findings include: (1) Trust propensity significantly boosts purchase intentions, as authentic product information shared on platforms builds trust. Peer interaction also positively affects purchase intentions via subjective norms, but not through platform trust. Interface design significantly enhances purchase intentions by improving user experience and visual appeal. (2) Emotional support negatively impacts both platform trust and subjective norms, possibly due to a mismatch with user needs. Informational support positively influences platform trust and norms but does not have a direct effect on purchase intentions. (3) Subjective norms mediate purchase decisions, with trust propensity, and interface design reinforcing social identity, increasing purchase intentions. Limitations include a focus on Xiaohongshu, which may limit generalizability, and the omission of external factors like platform competition. Future studies could explore other platforms and consider moderating variables such as platform reputation or employ machine learning for predictive insights.

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