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Exploring the Moderating Effect of Demographics on Social Interaction and Purchase Intention in Social Commerce Platforms

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Abstract

The rapid expansion of social commerce platforms has significantly transformed consumer purchasing behavior, largely driven by dynamic social interactions such as peer ratings, community engagement, and social sharing. Although prior studies suggest that social involvement enhances consumers' purchase intentions, the moderating role of demographic characteristics in this relationship remains insufficiently explored. Addressing this gap, the present study investigates how demographic variables—specifically age, gender, education level, and income influence the relationship between social interaction and purchase intention in the context of social commerce. A quantitative research design was employed, surveying 500 active users of social commerce platforms, including Instagram Shopping and Facebook Marketplace. Grounded in the Stimulus Organism Response (S-O-R) framework, the study conceptualizes social interaction as a stimulus influencing consumers' internal evaluations and behavioral responses. Partial Least Squares Structural Equation Modeling (PLS-SEM) was utilized to test the proposed model and examine the moderating effects of demographic variables. The findings reveal that social interaction exerts a significant positive effect on purchase intention; however, this relationship is notably moderated by age and gender. Specifically, younger users particularly female consumers demonstrate greater responsiveness to social cues such as peer recommendations and community feedback. In contrast, income and education level do not exhibit a significant moderating effect on the relationship between social interaction and purchase intention. These results underscore the importance of demographically tailored marketing strategies in social commerce environments. From a theoretical perspective, the study enhances understanding of consumer behavior by integrating demographic moderators into the S-O-R framework. Practically, the findings offer valuable insights for marketers seeking to improve conversion rates through targeted demographic segmentation and socially driven engagement strategies.

Keywords; Social commerce, Social interaction, Buying intention, Demographic moderation, Consumer behavior, PLS-SEM.

INTRODUCTION

In order to assist customers in making purchases, social commerce uses user-generated content (UGC) and frequent social engagement. Social commerce, which is receiving a lot of attention from academics as well as professionals in the industry, is one emerging paradigm in online commerce that has the potential to lead to greater long-term success for businesses [1]. Maintaining social commerce is difficult due to rising competition; research into transaction mechanisms is essential to the long-term expansion of this business model. Consumers' Buying Intention drives buying behavior and informs businesses' market strategy. The traditional e-commerce Buying Intention research is mature, and the two primary factors that influence Buying Intention and sustained transactions are perceived risk and trust. Social commerce's "sociality" makes Buying Intention's impacting aspects worth examining [2].

Social commerce provides customers with more information and a deeper

connection than conventional e-commerce. Product experience sharing, product suggestion, and community debate are examples of regular user interaction. Previous researches have indicated that social network user engagement and word-of-mouth communication may affect user purchasing intentions. Therefore, social commerce connects economic and social aspects of life. To study the purchasing intents of social commerce customers, one must take into account the social characteristic, which is the most significant distinction between social commerce and traditional e-commerce. The online community will have a wide range of cultural norms, and these norms will have a big effect on how and what online shoppers do. According to Choi and Geistfeld's cultural theory, uncertainty avoidance influences risk perception and purchase intent. Doney et al. claim that user trust is influenced by culture. [3]. Because of the interpersonal nature of social commerce, people utilize the Internet more often to connect with one another. Therefore, research on consumers' desire to purchase ought to also investigate the antecedent effects of cultural characteristics because cultural factors have a more noticeable impact on social interaction in social commerce. The well-known Cultural Dimensions Theory was developed by Hofstede to evaluate cultural differences, specifically "uncertainty avoidance" and "individualism/collectivism," as crucial aspects of social interaction in online business. We propose the following research questions because previous studies on social commerce purchasing intent have failed to disclose the entire mechanism of social interaction and have failed to account for the influence of cultural dimensions on social contact. As a result, we propose the following research questions: (1) Are intentions to purchase influenced by social interaction while engaging in social commerce? (2) How do preferences for individualism or collectivism and cultural reluctance to face uncertainty influence interactions amongst social commerce consumers? [4]

This article takes a look at the cultural characteristics of uncertainty avoidance and individualism/collectivism and how they impact social interaction. It also looks at how factors like trust, perceived risk, and proximity affect French and Chinese customers' intentions to buy. In social commerce, trust and proximity partly transmit the influence of perceived risk on purchase intent. The effects of user intimacy and building trust on purchase intention may vary by cultural background. In addition, the social interaction of users is impacted by cultural dimension elements. Reducing exposure to high levels of uncertainty may increase trust but also raise the stakes. Social commerce managers have the tools they need to build trustworthy relationships in a variety of settings thanks to these findings, which is especially helpful for international platforms that are having trouble entering new markets [5].

CONCEPTUAL BACKGROUND

Social Commerce

Social networking and traditional business are combined in social e-commerce. According to Liang et al., social e-commerce is the process of combining social media platforms and user-generated content to make online transactions easier. Curty and Zhang, who categorized 42 social features from well-known e-commerce sites into four categories, claim that these features improve the online shopping experience by encouraging user participation and information sharing [6]. Social commerce has come a long way since its product-centric e-commerce days [7], when it focused on users, word-of-mouth marketing, and active participation in the buying process. The credibility and authenticity of the shared information are enhanced because users are encouraged to share their shopping experiences and interact with one another. Social media also facilitates communication and interaction between customers and sellers, and consumers share and provide feedback on information based on their interests. Lastly, consumers' social identities will be strengthened by connections with others who share their interests and purchasing decisions. All of these things will have an effect on how customers communicate and engage with one another [8].

Social Interaction

To survive, one must engage in social contact. People with similar interests can connect with one another and join online communities based on shared social or commercial principles by using the platform's interactive feature. S-commerce platforms like Facebook, Instagram, and others make money from network communities. E-commerce's long-term viability is supported by research on social commerce community interaction techniques. In theory, engaging in social interactions encourages good behavior. It is the social commerce merchants, not the network center providers, that stand to gain the most from an increase in users, according to Stephen et al. [9]. Because people in a community tend to have similar characteristics and routines, social networks and online shopping platforms may impact consumers' spending patterns. When studying consumers' desire to buy online, researchers have mostly focused on two variables: trust and perceived risk. Within the "social interaction" of social commerce, additional research is required on the effects of trustworthiness and risk on

consumers' intentions to buy. Engaging user-generated content is the key to successful word-of-mouth marketing in social commerce. User intimacy also influences interactive content, such as product recommendations and user experience. Friendships become stronger and users are more forthcoming with their ideas [10].

Intimacy: Lee et al. define "intimacy" as a level of closeness characterized by strong feelings of spiritual support, like, and attachment. According to this piece, "intimacy" refers to the strong bond that may form between friends via shared experiences, thoughts, and feelings.

Perceived risk: Risk indicates decision-making uncertainty. Buyers typically take on risks because they cannot anticipate the outcome of an online transaction.

Trust: According to marketing expert Morgan (1994), trust is two parties cooperating when one has enough faith in the other's trustworthiness and loyalty [11]. Customers' confidence in online commerce platforms and other users is what this study defines as trust. In contrast to mechanism research, which theorizes that trust may be described by laws, antecedent research focuses on aspects of trust in interpersonal interactions. This work will use mechanism research because antecedent study findings vary and trust is difficult to define [12]. The three most common models of trust-building mechanisms are user-based, interaction process, and social system. The interaction process method is used in this study because: Trust grows via prior encounters and relationship maturity. Trust is strengthened when user engagement is more consistent and varied in social commerce [13].

Buying Intention

A customer's intent to buy a product or service soon is called purchasing intention. It strongly predicts purchasing behavior and shows mental preparedness to buy. In social commerce, peer evaluations, online interactions, influencer endorsements, and affective factors (emotions or attitudes toward the product) affect buy intention [14]. Reading reviews, seeing unboxing videos, or seeing Instagram or Facebook recommendations may encourage a buy. For purchasing intention, structured surveys utilize Likert scale statements like "I plan to purchase this product" or "I would recommend this item to others." It indicates a consumer's propensity of buying, but price, availability, and changing tastes may prohibit them. The Technology Acceptance Model and the Theory of Planned Behavior stress intention as a vital stage between perception and action. Understanding buying intention and psychological and social elements that drive purchase choices helps marketers turn attention into sales [15].

Cultural Theory

"Mental programs" internal feelings, ideas, and possibly behavioral patterns that may help to distinguish one group's thinking from another's are linked by Hofstede to culture. Power distance, individualism/collectivism, masculinity/femininity, uncertainty avoidance, long-term/short-term orientation, indulgence/self-restraint, and power distance were the six cultural elements that Hofstede found via interviews and surveys. Whether society values individuals or groups is the subject of individualism/collectivism. Uncertainty is something that people or organizations try to avoid by establishing safety standards. Because they influence consumers' willingness and behavior in social commerce, we chose uncertainty avoidance and individualism/collectivism to investigate how culture influences social interaction [16].

RESEARCH MODEL AND HYPOTHESES

Variable Selection

Trust and perceived danger are crucial factors. Nearby social commerce users who are interested in making a purchase are more likely to use shared material. We chose them so that we could look into how closeness, perceived risk, and social trust affect intent to buy. Culture has an effect on how customers view risk, trust, and intimacy [17]. Culture impacts social interaction in social-commerce platforms; individualism/collectivism and uncertainty avoidance were used to investigate this. The reasons are that consumers' subjective criteria and recognition of their opinions are influenced by individualism and collectivism [18]. In contrast to collectivists, who accept others' opinions and seek societal approval, individualists place a premium on personal goals and independence in decision-making. Internal and external factors influence purchase intent due to uncertainty avoidance. If the uncertainty avoidance index is increased externally, people would enhance the network payment system and adopt laws and regulations to avoid uncertainties. If not, people will tolerate odd views and acts. Without standards, buyers may feel uneasy purchasing, lowering platform and seller trust. Internal motivation, attitude, purpose, and cognitive behavior are altered by uncertainty avoidance, a cultural psychological trait [19].

Hypotheses

Perceived Risk

Perceived risk remains a critical determinant of online purchasing behavior, with online consumers exhibiting

greater risk sensitivity than traditional shoppers. Prior studies indicate that Internet usage experience significantly shapes consumers' risk perceptions (Jarvenpaa et al.). Privacy and security concerns such as misuse of personal data, financial information leakage, and unauthorized transactions are consistently identified as major barriers to online purchasing (Caudill & Murphy; Oghazi) [20,21]. Elevated perceived risk negatively influences purchase intention across domains such as e-banking and online tourism.

In social commerce contexts, however, relational factors such as **trust, intimacy, and social connectedness** may alleviate the adverse effects of perceived risk. Strong interpersonal ties and community engagement can reduce uncertainty and enhance confidence in transactions, potentially weakening the negative relationship between perceived risk and purchase intention [22]. Accordingly, the following hypothesis is proposed:

H1: Higher perceived risk negatively influences social commerce purchase intention.

Trust

Trust plays a pivotal role in shaping consumers' information acceptance and transaction intentions in social commerce. Due to inherent information asymmetry, where sellers possess superior product knowledge—buyers often experience uncertainty and skepticism regarding online transactions. Trust reduces perceived transaction risk, facilitates communication, and enhances transactional efficiency (Doney et al.) [23].

Furthermore, trust formation varies according to information sources, with consumers exhibiting differential trust toward experts, peers, and online reviews. Increased trust in social commerce networks and community members significantly enhances purchase intention, as users rely on socially validated information and recommendations [24]. Therefore, the following hypothesis is proposed:

H2: Trust in social commerce positively influences purchase intention.

Intimacy

Intimacy reflects the strength of interpersonal relationships among users within social commerce networks. Prior research demonstrates that recommendations from close social ties significantly influence purchasing decisions by increasing information credibility and persuasive power. Empirical evidence suggests that individuals with fewer but stronger social ties are more susceptible to peer influence (Bapna & Umyarov) [25].

Stronger relational closeness enhances information flow, trust in peer opinions, and emotional engagement within online communities (Liang et al.) [26]. Additionally, social network characteristics such as relationship intensity, network density, and centrality positively influence consumers' emotional and cognitive involvement, thereby increasing purchase intention (Park et al.) [27]. Based on these findings, the following hypothesis is proposed:

H3: Greater intimacy among social commerce users positively influences purchase intention.

Intimacy and Trust

Intimacy also functions as an antecedent of trust in social commerce environments. Close social relationships foster emotional support, perceived safety, and relational bonding, which collectively enhance trust in shared information and community platforms (Hajli et al.; Shanmuga et al.) [28–30]. Online interactions among close friends and community members strengthen mutual trust, as users feel more secure and socially connected (Ng) [31]. Hence, the following hypothesis is formulated:

H4: Greater intimacy among social commerce users positively influences trust.

Uncertainty Avoidance

According to Hofstede's Cultural Dimensions Theory, uncertainty avoidance reflects the extent to which individuals feel threatened by ambiguous and uncertain situations. Individuals with high uncertainty avoidance tend to perceive greater risk and exhibit heightened caution in unfamiliar online environments (Jarvenpaa et al.) [32]. Cultural studies further indicate that uncertainty avoidance significantly shapes risk perception and decision-making behavior (Chakraborty et al.) [33].

Paradoxically, while high uncertainty avoidance amplifies perceived risk, it may also foster trust once uncertainties are resolved. Individuals with high uncertainty avoidance seek structured, reliable systems and may develop stronger trust in platforms that reduce ambiguity (Doney et al.) [34]. Based on this dual effect, the following hypotheses are proposed:

H5: Higher uncertainty avoidance increases perceived risk in social commerce.

H6: Higher uncertainty avoidance positively influences trust in social commerce.

Individualism vs. Collectivism

Cultural orientation toward individualism or collectivism significantly affects social interaction patterns. Collectivist cultures emphasize group harmony, interpersonal connections, and shared experiences, whereas individualist cultures prioritize autonomy and personal goals, resulting in weaker social ties (Hofstede) [35].

In social commerce environments where interaction and engagement are central collectivist users are more likely to form intimate relationships and engage in peer-influenced decision-making. Conversely, individualistic tendencies may reduce relational closeness and weaken social influence (Arpaci et al.) [36]. Accordingly, the final hypothesis is proposed:

H7: Individualism negatively influences intimacy among social commerce users.

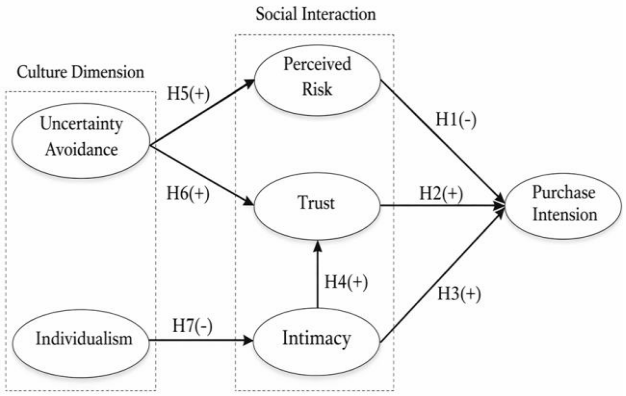

Figure1. Theory and hypotheses

RESEARCHMETHODOLOGY

Measurement

Our study model was tested using survey technique and six constructs: perceived risk, trust, intimacy, uncertainty avoidance, individualism/collectivism, and purchasing intention [37]. We modified questions to meet demands and used existing scales and measurements to check construct reliability and validity.

The study measured cultural component, social engagement, and buying intent. A Likert scale of seven points was used to score each item. The survey uses pre-survey to improve quality and discusses social commerce scenarios. The structures' full measurement items are in Table1 [38].

Table1. Proposed model constructions

Dimension	Item Code	Measurement Statement
Cultural Origins	UA_1	Working in a setting with defined roles and duties is crucial
Cultural Origins	UA_2	Compliance with organizational norms is crucial, even if it brings extra benefits
Cultural Origins	UA_3	We must prioritize long-term employment security
Positivism and Individualism	ID_1	Making sure people have adequate time for themselves and their families is crucial
Positivism and Individualism	ID_2	It is crucial to engage in difficult labor that gives personal accomplishment
Positivism and Individualism	ID_3	Having a job at a big, respected company is crucial
Positivism and Individualism	ID_4	I must make a significant contribution to my organization's success
Risk Perception	PR_1	There's a chance I may purchase fraudulent items, and that worries me
Risk Perception	PR_2	Some commodities may sustain damage while in transit
Risk Perception	PR_3	My personal information could be leaked
Risk Perception	PR_4	After-sale service is not guaranteed
Have Faith	TR_1	Most social e-commerce companies have stellar reputations
Have Faith	TR_2	Online transaction security is effectively guaranteed by laws and methods
Have Faith	TR_3	The website and payment system are dependable
Have Faith	TR_4	A company's credit rating determines its trustworthiness
Have Faith	TR_5	Friends on this website seem trustworthy
Personal Relationship	CL_1	Friendly feelings exist between my buddies and me on this website
Personal Relationship	CL_2	My friends and I feel very close on this website
Personal Relationship	CL_3	I have many conversations with my friends on this website
Buying Intention	PI_1	Social commerce websites are considered when I go shopping
Buying Intention	PI_2	I like to buy products from social commerce websites when I'm in need

Participants and Data Collection

Data was first provided by Chinese social commerce users. We issued additional surveys in France to examine how social interaction affects Buying Intention across cultures since the model contains cultural components.

French and Chinese cultures differ in terms of uncertainty avoidance and individualism/collectivism [39].

Cultural Differences between China and France

The most recent comparison of the cultural dimension index between France and China is shown in Figure 2, which is part of the "Country Comparison" section of Hofstede Insights. Figure 2 shows the most up-to-date cultural dimension index comparison between France and China. This data comes from Hofstede Insights' "Country Comparison" section. Chinese culture is less prone to uncertainty avoidance and more collectivist than French culture [40].

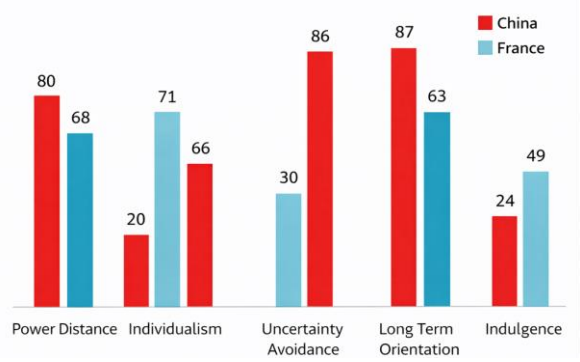

Figure 2. Differences in culture between China and France.

Differences in how France and China deal with uncertainty are due to cultural and historical differences. Chinese are more tolerant and respond with "What must be, must be" when they are hesitant. China and France have different cultures from ancient times, explaining their uncertainty avoidance differences. The Chinese believe that "What must be, must be" and accept societal ambiguity [41]. French people want to avoid ambiguity and are more aware of unknown threats. Individualism and collectivism differ in China and France primarily due to their social environments. Agriculture served as the foundation for collectivism in China. Relationships between people, families, and the country are necessary for growth coordination. French culture values solitude and uniqueness in social contexts. We picked social commerce users in China and France as the study object because we considered there were evident variations in uncertainty avoidance and individualism/collectivism nationwide and more relevant than in other countries [42].

DATA COLLECTION

China and France distributed questionnaires at random. Before the questionnaire was distributed, homogeneity was ensured by a "backtranslation." Surveys were posted online and distributed via email and social media in response to the popularity of China's professional website "So jump" [43]. After receiving payment for posting links on Facebook, email, and LinkedIn, one of the authors personally delivered the surveys to French stores, libraries, and other gathering places [44]. French distribution broadens answers because we are not native speakers. Given the constant migration throughout Europe, "Are you French?" should also be questioned. was added to the French questionnaire to prevent the validity of the data from being affected by samples from other countries.

DATA ANALYSIS AND RESULTS

A total of 558 questionnaires were collected, of which 518 were deemed valid. Responses that lasted less than a minute, respondents who had never experienced social commerce, and extreme responses like choosing "totally disagree" or "totally agree" were the three types of flawed surveys [45].

Demographic Statistics

Among the 518 valid questionnaires, the sample comprised 291 Chinese users and 227 French users. The gender distribution was relatively balanced, with comparable numbers of male and female respondents. Reflecting the widespread adoption of social commerce among younger populations, approximately 74% of respondents were aged between 18 and 37 years. In terms of educational attainment, the majority of participants held a bachelor's degree or higher [46]

Table2. A Demographic summary.

Category	Subcategory	China	China %	France	France %	Male	Male %	Female	Female %	Total	Total %
Age Group	18–27 years	101	34.7	7	1.4	–	–	–	–	184	81.1
Age Group	28–37 years	98	33.7	32	14.1	–	–	–	–	130	25.1
Age Group	37+ years	92	31.6	11	4.8	–	–	–	–	103	19.9
Academic Standing	Below or in High School	–	–	–	–	0	0.0	27	5.2	27	9.3

Academic Standing	Bachelors	–	–	–	–	113	38.9	58	25.6	171	33.0
Academic Standing	Masters	–	–	–	–	151	51.9	169	74.5	320	61.8
Academic Standing	Total	–	–	–	–	291	56.2	227	43.8	518	100.0

Table3.Descriptive statistics.

Item code	Values provided (in the order you gave them)
UA_1	1.21, 5.51, 1.22, 5.96, 0.81 / 7, 7.12, 0.87
UA_2	1.55, 1.75, 1.93, 1.87
UA_3	1.31, 7.68, 4.91, 0.95
ID_1	1 / 7.16 / 1.18 / 1 / 7.59 / 0.84
ID_2	0.86 / 7.50 / 1.27 / 7.50 / 5.80
ID_3	47.77, 1.46, 7.37, 0.99
ID_4	1.19, 7.90, 0.93, 4.92, 1, 7.90
PR_1	1.74, 1.59, 1.75, 5.10, 0.90
PR_2	1.75, 2.1, 1.54, 1.75, 5.17, 0.92
PR_3	1.74, 1.59, 1.74, 4.93, 0.87
PR_4	1.74, 1.48, 1.75, 0.08, 0.85
PR_5	1.62, 7.05, 0.97, 1.00, 7.05
CL_1	1.74, 1.46, 3.89, 4.74, 0.85
CL_2	1 / 7.93 + 1.46 + 4.62 = 0.97
CL_3	1.73, 1.57, 4.50, 0.98
TR_1	3.7, 1.40, 1.7, 4.7, 0.96
TR_2	1, 7, 3.64, 1.58, 1, 7, 4.79, 0.90
TR_3	1 / 7.49, 0.65 ; 1 / 7.81, 0.92
TR_4	1 / 7.49, 0.52 ; 1 / 7.02, 0.05, 0.02
TR_5	1 / 7.49, 0.25 ; 1 / 7.81, 0.74
PI_1	1.59, 0.91
PI_2	1.09, 1.64, 0.91

Reliability Assessment

Composite reliability (CR) and Cronbach's alpha were used to evaluate the internal consistency reliability; the scores should have been more than the minimum cutoff value of 0.7. The results of the F test are shown to be statistically significant in Table 4, and Cronbach's alpha and composite reliability for each of the questionnaire's six variables are greater than 0.7. Consistent results demonstrate the factors' reliability in measuring the constructs [47].

Table 4. Analysis of reliability

Item	Item-Total Correlation	Cronbach's Alpha if Item Deleted
UA_1	0.416	0.539
UA_2	0.534	0.384
UA_3	0.491	0.422
ID_1	0.382	0.658
ID_2	0.509	0.579
ID_3	0.367	0.678
ID_4	0.600	0.516
CL_1	0.766	0.762
CL_2	0.760	0.767
CL_3	0.663	0.863
TR_1	0.523	0.645
TR_2	0.530	0.641
TR_3	0.466	0.668
TR_4	0.381	0.700
TR_5	0.461	0.671
PR_1	0.505	0.657
PR_2	0.510	0.654
PR_3	0.503	0.658
PR_4	0.657	0.657

Additional information: ***p<0.01, *p<0.1.

Validity Assessment

The validity of the measuring model was confirmed by looking at its content and construct validity. Evaluations of "content validity" are subjective. While we developed our questionnaire based on ideas and research from previous studies, we also made adjustments based on expert feedback and social commerce's unique characteristics. We looked at the construct validity of convergent and discriminant variables. Findings on convergent validity were based on composite reliability, components analysis, and Cronbach's alpha (better than 0.7) [48]. There was an average extracted variance (AVE) for more than half of the data points. The CA, CR, and AVE of each model construction are all in compliance with the requirements, as shown in Table 4. As a first step in doing factor analysis, we conducted the KMO and Bartlett sphericity tests. In the second exploratory study, components with eigenvalues greater than 1 were found by employing Varimax orthogonal rotation. When the KMO-value is greater than 0.7, factor analysis often employs the initial variables. The cultural dimension data could be used for component analysis in the validity test since they were dependable (KMO-value: 0.781, Bartlett's test of sphericity coefficient: 818.469, 0.000 significance level) [49]. By rotating the scale with varimax, we were able to locate a component with an eigenvalue greater than 1. The theoretical model was matched by both variables. These two parts make up 56.74 percent of the total, which is within the factor analysis's acceptable range (Table 5). After orthogonal rotation, the loading matrices for each component were calculated (Table 6). Table 6 demonstrates that all indicators have convergent and discriminant validity by placing a greater emphasis on their own constructs than on any other construct in the model. The dependent variable

(buying intention) and independent variables (social interaction variables) passed the validity tests for the KMO-value and Bartlett's test of sphericity coefficient, respectively. Table 7 displays the factor loading matrices for the social interaction variables. Here, we have a non-rotating, unidimensional dependent variable. In place of tests of discriminant and convergent validity, factor loading can be used. To determine discriminant validity, concept AVEs and inter-construct correlations were evaluated. The AVE's square root is larger than similar inter-construct correlations, as shown in Table 8. As a result, discriminant validity is shown by the model. Since there were no significant connections among the table predictors, we also did not observe any multicollinearity [50].

Table5.Explanation of the Total Variance.

Factor Dimension	Component	Eigenvalue	Variance (%)	Cumulative Variance (%)
Cultural Dimension	Initial Eigenvalue	2.0021	14.582	56.740
Cultural Dimension	Extraction SS Loadings	12.951	42.158	42.158
Cultural Dimension	Rotation SS Loadings	2.036	29.090	29.090
Cultural Dimension	Cumulative	27.650	1.935 (approx.)	56.740
Social Interaction	Component 1	3.876	32.299	32.299
Social Interaction	Component 2	3.065	25.540	25.540
Social Interaction	Component 3	2.183	18.192	50.492
Social Interaction	Component 4	2.205	18.375	43.914
Social Interaction	Component 5	3.0069	8.905	59.397
Buying Intention	Component 1	1.680	84.009	84.009

Notes: It is impossible to extract factors with eigenvalues greater than 1.

Table 6 Results of the cultural dimension exploratory factor analysis.

Item	Factor 1 (F1)	Factor 2 (F2)
ID_1	0.608	0.361
ID_2	0.794	0.090
ID_3	0.609	0.180
ID_4	0.800	0.215
UA_1	0.415	0.660
UA_2	0.077	0.779
UA_3	0.293	0.748

Table7.Findings from social interaction exploratory factor analysis

Item	Factor 1 (F1)	Factor 2 (F2)	Factor 3 (F3)
PR_1	0.107	0.723	0.022
PR_2	0.148	0.747	0.004
PR_3	0.198	0.725	0.134
PR_4	0.057	0.741	0.131
TR_1	0.293	0.064	0.722
TR_2	0.403	0.108	0.705
TR_3	0.108	0.045	0.815
TR_4	0.424	0.127	0.622
TR_5	0.238	0.093	0.682
CH_1	0.860	0.081	0.196
CL_3	0.813	0.017	0.074
CL_2	0.827	0.029	0.258

Table8.statistical relationships.

No.	Construct	Values / Coefficients
1	Uncertainty Avoidance	0.731
2	Egoism vs. Collectivism	5.536%, 7.709%
3	Perceived Risk	0.279**, 0.305, 0.734
4	Trust	0.238**, 0.102, 0.046, 0.712
5	Intimacy	0.131, 0.503*, 0.063, 0.624**, 0.834
6	Buying Intention	0.265**, 0.184**, 0.109*, 0.430**, 0.429**, 0.828

Notes: The square root of the average variance extracted (AVE) is what diagonal elements are. **When $p<0.01$, and *When $p<0.05$ are used.

Results of Hypotheses Testing

We used Structured Equation Modeling (SEM), which lets us simultaneously investigate all routes with latent variables, to test our hypothesis. We examined samples from China and France. The model fit's outcomes are displayed in Table 9. All Fit Indexes (Good Fit, Comparative Fit, Normalized Fit, Tucker-Lewis, and Adjusted Goodness of Fit) are more than 0.9, indicating that the model matches the CMIN/DF data well.

Also, the RMSEA (root mean square error) is little less than 0.08.

Table9.Model fit results.

Fit Index	China	France
CMIN/DF	1.958	1.848
RMSEA	0.0670	0.078
TLI	0.925	0.910
CFI	0.944	0.915
GFI	0.938	0.920
AGFI	0.929	0.912
Overall Index	0.942	0.937

The outcomes of the postulated hypotheses in France are reported in Table 11, whereas those in China are shown in Table 10. As hypothesized, H2, H3, H4, H5, and H6areallsupportedinbothChinaandFrance. But Hypothesis1 fails the significance test. Despite the considerable effect in premise 7, individualism is favorably associated to closeness

in group China, contradicting the initial premise. Group France does not support Hypothesis 7 because to poor significance.

Table10.China group hypothesis testing results.

Hypothesis	Path	Path Coefficient	p-Value	Supported?
H1	Perceived Risk → Buying Intention	0.188	0.125	No
H2	Trust → Buying Intention	0.764	–	–
H3	Intimacy → Buying Intention	0.278	–	–
H4	Intimacy → Trust	0.536	–	–
H5	Uncertainty Avoidance → Perceived Risk	0.579	–	–
H6	Uncertainty Avoidance → Trust	0.326	–	–
H7	Individualism → Intimacy	0.629	–	–

Notes: sample size: 291; ***p 0.001; **p 0.01; *p 0.05

Table11.France's group tested its hypotheses.

Hypothesis	Path	Path Coefficient	p-Value	Supported?
H1	Perceived Risk → Buying Intention	0.219	–	No
H2	Trust → Buying Intention	0.324	–	Yes*
H3	Intimacy → Buying Intention	0.926	–	Yes
H4	Intimacy → Trust	0.907	–	Yes
H5	Uncertainty Avoidance → Perceived Risk	0.531	–	Yes
H6	Uncertainty Avoidance → Trust	0.582	–	Yes
H7	Individualism → Intimacy	0.139	0.228	No

Notes: sample size: 227; ***p 0.001; **p 0.01; *p 0.05.

DISCUSSION

This study examines the social and cultural determinants of purchase intention by comparing Chinese and French social commerce users. The empirical results for each hypothesis are discussed below.

A. Impact of Social Interaction on Purchase Intention

The rejection of Hypothesis 1 in both China and France indicates that perceived risk does not significantly influence purchase intention in social commerce environments. Unlike traditional e-commerce where risk perception strongly deters online transactions social commerce mitigates risk through trust, intimacy, and repeated social interaction. Users who actively participate in communities and interact with peers tend to perceive lower transaction risk, thereby increasing purchase intention. Consistent with prior studies, trust rather than perceived risk emerges as the dominant driver of purchasing behavior in social commerce.

Hypothesis 2 is supported, confirming that trust significantly enhances purchase intention across both cultures. Notably, the influence of trust on purchase intention is substantially stronger among Chinese users than French users. This suggests that social commerce transactions in China rely heavily on long-term trust formation, possibly due to platform heterogeneity and inconsistent regulatory frameworks. Platforms that successfully differentiate themselves and cultivate trust are therefore more likely to convert user engagement into purchases.

The findings also support Hypothesis 3, demonstrating that intimacy positively affects purchase intention. Social commerce relies heavily on word-of-mouth and peer recommendations. French users, despite being culturally more individualistic, are more likely to rely on close friends' recommendations when making purchase decisions. With comparatively smaller social networks, French consumers often seek validation and risk reduction through trusted peer advice, particularly in online communities.

Hypothesis 4 is confirmed, indicating that intimacy positively influences trust in both cultural contexts. Higher levels of community closeness foster emotional bonds and shared norms, which strengthen trust. French users exhibit stronger trust derived from intimacy, consistent with the individualistic emphasis on close interpersonal relationships.

B. Impact of Cultural Dimensions on Social Interaction

Consistent with Hypothesis 5, uncertainty avoidance significantly increases perceived risk in both Chinese and French social commerce users. Individuals who are more sensitive to ambiguity tend to perceive higher transaction risks.

Hypothesis 6 is also supported, showing that uncertainty avoidance positively influences trust. Once uncertainty is reduced through platform safeguards or social reassurance,

high uncertainty-avoidant users develop stronger trust relationships.

Contrary to expectations, Hypothesis 7 is partially rejected. Individualism does not negatively affect intimacy among French users, and unexpectedly, individualism positively influences intimacy among Chinese users. This paradox suggests that in online environments where interactions are voluntary and selective—individualistic users may form stronger, more meaningful ties. These findings highlight the evolving nature of social identities in digital commerce contexts.

C. Key Findings and Implications

Overall, the study demonstrates that while perceived risk influences purchase intention indirectly, its impact is weaker than that of trust and intimacy in social commerce. Trust is the primary driver of purchase intention among Chinese users, whereas intimacy plays a more prominent role for French users. This indicates that scarce social resources trust in China and interpersonal closeness in France carry greater decision-making weight.

Furthermore, cultural dimensions significantly shape social interactions. Reducing uncertainty enhances trust but simultaneously increases perceived stakes in transactions. These insights underscore the importance of culturally adaptive trust-building strategies for global social commerce platforms.

CONCLUSIONS

This research shows that demographic characteristics including age, gender, education level, and income moderate the association between social engagement and purchase intention on social commerce platforms. Social contact strongly predicted consumer purchasing behavior in digital social contexts, though the strength and direction of this association varied by demographic category. Peer recommendations, user-generated content, and online engagement had a greater impact on younger customers than on older ones, indicating a generational gap in social cues and purchasing decisions. Before making a purchase, people with more education responded more instinctively to social signals, whereas people with less education responded more critically to social interactions. Females were more likely to make purchases and showed greater emotional involvement in social commerce interactions, with gender acting as a moderator of the effect. Before making a purchase, people's levels of social trust and community approval were influenced by their income. The findings emphasize the significance of targeted social commerce marketing as demographics have a significant impact on purchase intention. To increase user engagement, build trust, and convert social interactions into sales, businesses must take demographics into account.

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