



# Article Understanding Consumers' Purchase Intentions in Social Commerce through Social Capital: Evidence from SEM and fsQCA

Xue Yang



Citation: Yang, X. Understanding Consumers' Purchase Intentions in Social Commerce through Social Capital: Evidence from SEM and fsQCA. J. Theor. Appl. Electron. Commer. Res. 2021, 16, 1557–1570. https://doi.org/10.3390/jtaer16 050087

Academic Editor: Eduardo Álvarez-Miranda

Received: 28 March 2021 Accepted: 11 May 2021 Published: 12 May 2021

**Publisher's Note:** MDPI stays neutral with regard to jurisdictional claims in published maps and institutional affiliations.



**Copyright:** © 2021 by the author. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). School of Business Administration, Zhejiang University of Finance and Economics, Hangzhou 310018, China; yangxue@zufe.edu.cn

**Abstract:** Social commerce has become a fiercely competitive environment. Understanding consumers' purchase intentions can help social commerce platforms retain and attract more consumers. Social capital is one of the primary resources that plays a critical role in facilitating consumers' purchase intentions in social commerce. Here, complex relationships between different dimensions of social capital are further clarified and its impact on consumers' purchase intentions are discussed. Based on a survey of 302 social commerce users, this study utilizes an SEM and fsQCA approach to validate the effect of social capital on consumers' purchase intentions. The SEM results reveal that the effect of structural social capital on consumers' purchase intentions is fully mediated by relational and cognitive social capital. The fsQCA results confirm the significance of consumers' social capital as determinants and provide the configurations that can lead to high purchase intentions. Though previous studies have discussed the factors influencing consumers' purchase intentions, this study takes the first step toward enhancing the understanding of the configurations that link dimensions of social capital to consumers' purchase intentions in s-commerce using fsQCA approach.

Keywords: social capital; social interaction; purchase intentions; social commerce; fsQCA

# 1. Introduction

Nowadays, online transaction has shifted from electronic commerce (e-commerce) to social commerce (s-commerce), which emphasized social interaction and interpersonal communication [1–3]. Traditional websites also added social functions to encourage content generation and improve consumers' experience. Online business process in s-commerce was facilitated by social media, especially social networks sites [4]. Consumers created user-generated content, shared their purchasing, and spread product-related information with their friends in social network sites [5–7]. Usually, consumers' purchase decisions in s-commerce relied on peer consumers' shopping experience, eWOM, and recommendations [8,9]. Social features were foundations of s-commerce because online purchase was facilitated by the social relationships among peer consumers [10]. Therefore, social capital was one of the primary resources that played a critical role in facilitating consumers' purchase intentions in an s-commerce context [11,12].

Social capital reflects valuable resources embedded in individuals' relational networks [13]. It consists of three dimensions, that is, structural social capital (SSC), relational social capital (RSC), and cognitive social capital (CSC). Social capital can influence knowledge sharing and purchasing [14,15]. However, the conclusions regarding the effect of different dimensions of social capital on the outcome variables were not consistent. For example, CSC, manifested by a shared language, was positively related to knowledge sharing in some studies [16], while other studies argued that a shared language had no effect on knowledge sharing [12]. What is more, some studies considered the different dimensions as parallel elements [17–20], while other studies proposed a causal relationship between the different dimensions [21–23]. Hsu and Hung (2013) put forward the interaction model of three dimensions of social capital [24]. Because of inconsistent research results, specific research on the relationship between different social capital dimensions is needed. The effect of social capital dimensions on the dependent variables also needs to be made explicit.

Therefore, this study aimed to further clarify the complex relationships between different dimensions of social capital and make clear its impact on consumers' purchase intentions utilizing the method of structural equation modeling (SEM) and fuzzy-set qualitative comparative analysis (fsQCA). Ragin (2008) proposed the fsQCA approach, which can provide combinations of conditions to improve results [25]. The integration of SEM and fsQCA method has been applied in the information system studies [26,27]. Although the factors influencing consumers' purchase intentions in s-commerce have been discussed, this study enhanced the understanding of the configurations that link dimensions of social capital to consumers' purchase intentions in s-commerce using fsQCA approach. This research provided a new methodology to use in s-commerce research, and utilizing this novel analytical technique was critical to our research.

## 2. Theoretical Development

# 2.1. S-Commerce

Facilitated by information and communication technologies (ICTs), s-commerce enabled consumers to create user-generated content, share their purchasing, and spread product-related information with their friends in social network sites [2,5,28,29]. The socialtechnical features of s-commerce make it a favorable platform to share information and knowledge [30]. This consumer-generated content can benefit online purchase decisionmaking [31,32], trust building [10], relationship quality and brand loyalty [4], and brand co-creation [8,11].

One stream of previous studies focused on information sharing and eWOM behavior in s-commerce [33–35]. These studies have shown that extrinsic motivation, especially external motivation and identified motivation [34], utilitarian motivation, hedonic motivation and social motivation [36], community commitment and trust [10,37], passion [38], and perceived social distance [35], were significant predictors of information sharing and eWOM behavior in s-commerce. Recent research showed that the effect of information sharing activities on intention to buy was mediated by trust in platform and perceived risk [2]. Furthermore, effect of perceived participation risk on post comments in s-commerce was positively moderated by social identity [39].

Another stream of previous studies has explored the factors influencing consumers' purchasing in s-commerce [31,40,41]. Interpersonal contact and relationships in social networks can generate commercial opportunities, such as improving sales [30,42]. For example, it was found that *guanxi* elements, including *ganqing*, *renqing*, *xinren* [43], communication and social interaction [1,32,40], consumer experience [44], social desire, and commercial desire [41], were positively related to purchase intention. In addition, trust is a critical predictor of purchase intention as well [45–47]. Furthermore, it was found that the impact of trust on purchase intention was mediated only by positive valence, and the mediation effect of negative valence and social media content were insignificant [48]. Purpose of sociability, policies of sociability, and people of sociability were positively related to trust in product recommendations [49], which can in turn increase the likelihood of purchase in s-commerce [44]. Specifically, it was found that perceived risk was negatively related to purchase intention, and identity positively moderated the negative effect of perceived risk on purchase intention [39]. It was also found that design quality and website features were significant predictors of purchase behavior in s-commerce [50,51].

## 2.2. Social Capital

Social capital reflects valuable resources embedded in individuals' relational networks [13]. It is embedded in social relationships and can facilitate resource exchanges. Diversified and informed social connection was the access to favorable resources [52,53]. These resources can benefit a series of activities ranging from technology transfer [54], employee performances and satisfaction [55,56], contract duration [57], information disclosure [58], eWOM and online purchase [23,59,60], information sharing and knowledge exchange [18,19,61], and popularity of user-generated content [22], to crowdfunding [62].

Social capital consists three dimensions, that is structural, relational, and cognitive dimension [13]. SSC refers to the structure of actors' relations, which can be manifested as social interaction. It represents the pattern and frequency of connections between individuals or organizations [17]. Social network ties can provide the access to the information and resources that are embedded in social relationships [63,64], and actors in the critical position of the social network, such as occupying the position of structural hole, have priority to access such resources [65]. RSC reflects the quality of exchanged relationship, such as trust [66] and norm of reciprocity [67]. RSC can be cultivated through the history of interactions between individuals [68]. CSC reflects the resources that enable collective goals and shared rules among parties, which are manifested as shared language [13].

The first stream of studies considered the different dimensions of social capital as parallel elements [17–20]. SSC was found to be a positive predictor of quantity of knowledge sharing [67,69]. Similarly, it was found that the effect of SSC on tacit knowledge creation was significant [19]. However, a recent research showed the effect of SSC on perceived knowledge quality was insignificant [18]. Variables related to RSC were found to have different influence on outcome variables as well. For example, trust was found to be positive predictor of knowledge quality in virtual communities but to have no influence on quantity of knowledge sharing [67]. Trust and identification were found to have positive effect on perceived knowledge quality, whereas the effect of reciprocity on perceived knowledge quality was insignificant [18]. Variables related to CSC were found to have different influence on outcome variables as well. For example, the effect of CSC on member's perception of knowledge quality [18] and tacit knowledge sharing [19] were positive. Shared language was positive driver of knowledge quality in virtual communities but had no influence on quantity of knowledge sharing [67]. In another study, shared language was found to have positive effect on both quantity and quality of knowledge sharing [17].

The second stream of studies proposed the causal relationship between the different dimensions of social capital [21–23]. First, SSC was found to be positive predictors of RSC and CSC [12,22,56]. Specifically, it was found that tie strength was positively related to trust and shared language, which is in turn positively related to eWOM sharing [12]. Familiarity was positively related to trust and perceived similarity, which was in turn positively related to sense of belonging [70]. Structural linkage was positively related to relational linkage and cognitive linkage [71]. However, there existed exceptions, for example, SSC, manifested by social interaction, was found to have no effect on RSC, manifested by trust [16]. Moreover, CSC was found to be a positive predictor of RSC [21,22,72]. Specifically, shared vision and shared language were positively related to trust [12,16]. The positive effect of CSC on RSC reached a consensus.

The potential third stream of studies was put forward by Hsu and Hung (2013) [24], in which the interaction model of three dimensions of social capital was proposed. They found that the effect of paired dimensions, including the interaction effect of SSC and RSC, the interaction effect of SSC and CSC, and interaction effect of RSC and CSC on process performance are significant but in different ways. However, only the interaction effects of SSC and RSC and RSC on product performance were observed.

## 3. Hypothesis

## 3.1. RSC: Trust in Peers and Reciprocity

RSC reflects the quality of exchanged relationship, including trust [66] and norm of reciprocity [67]. Trust is often cultivated through frequent interactions between individuals. In an online marketing context, trust in peers is the essential driving factor of consumers' purchase intentions [73]. Reciprocity refers to perceived fairness regarding the time and

effort spent in resource exchange [67]. If there exists strong sense of reciprocity, that is, if individuals consider resource exchange to be reciprocal, they are more willing to engage more [17]. In an online marketing context, reciprocity can represent the quality of relationships, which can influence individuals' behaviors [74]. First, RSC can be viewed as a kind of governance mechanism, reducing uncertainty and perceived risk in embedded relationships [67,74,75]. Specifically, RSC can reduce the opportunism and contradictions in social relationships [76] and enhance commitment to social relationships [77]. In addition, when there exists high level of RSC between two individuals, they are more willing to engage in resources exchange [12,78] and then enhance consumers' intention to buy [73]. Thirdly, RSC is positively linked to consumers' attitudes [79] and consumers' satisfaction [80], which can in turn positively influence consumers' intention to buy.

## Hypothesis 1 (H1): RSC is positively related to consumers' purchase intentions.

#### 3.2. CSC: Shared Language

CSC reflects the resources that enable collective goals and shared rules among parties, manifested as shared language [13]. In an online marketing context, shared language is one of the essential driving factor of consumers' purchase intentions. First, shared language can not only improve the common understanding [19] and shared perceptions among individuals but also reduce each individual's cognitive barriers [56]. When individuals shared their shopping experience and recommendation products among peers with strong cognitive capital, they could easily understand each other without ambiguity, which in turn facilitated their subsequent purchase decisions. Second, communication efficiency can be improved using shared language, specifically shared vocabulary [12,17]; thus, the individuals can experience a better resource exchange process. Sometimes, consumers may be confronted with the problem of information overload when they search for eWOM in s-commerce platform [81]. When cognitive capital is strong, the problem of information overload can be relieved and consumers can absorb useful information efficiently and effectively. Thirdly, CSC is positively related to peers' perception of knowledge quality [18]. When CSC is strong, consumers' perceptions of recommendation quality are high. Therefore, they are willing to take high-quality recommendations, and purchase, in the s-commerce platform.

#### Hypothesis 2 (H2): CSC is positively related to consumers' purchase intentions.

#### 3.3. Structural Social Capital: Social Interaction

SSC reflects the structure of actors' relations, which was manifested as social interaction. Social interaction can facilitate information transfer and recourse exchange [19,57]. According to social embeddedness theory, actor's position in the social network results in his/her ability to acquire resources [82]. Social interaction is one of the essential driving factor of consumers' purchase intentions [83]. On one hand, SSC is directly related to consumers' purchase intentions. Due to the fact that actors in the central position in the social network can utilize personal contacts to gain specific resources and curial information [84], consumers that participate more in social interaction and social exchange can get sufficient production recommendations more easily. These product recommendations can in turn help consumers to make better purchase decisions, and increase their purchase intentions in s-commerce. One the other hand, the effect of SSC on consumers' purchase intentions is partially mediated by RSC and CSC. SSC represents the frequency of exchanges and communications among consumers. High level of SSC enhanced the possibility that more consumers will generate, share, and utilize the product recommendation from peers [68]. Consumers with high level of social interaction will have frequent mutual communication, product-related information exchange, and shopping experience sharing. These interpersonal interactions can cultivate reciprocity [21], trust [12,23], and shared language [16,21], which in turn increase consumers' purchase intentions.

**Hypothesis 3A (H3A):** The effect of SSC on consumers' purchase intentions is partially mediated by RSC.

**Hypothesis 3B (H3B):** The effect of SSC on consumers' purchase intentions is partially mediated by CSC.

The conceptual model is presented in Figure 1.

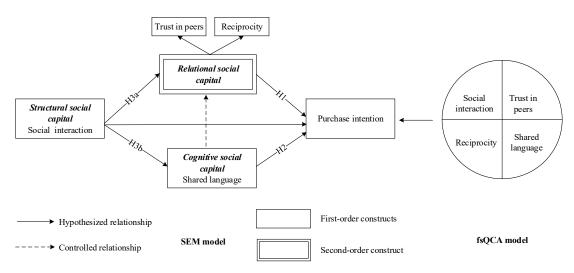


Figure 1. Conceptual model.

#### 4. Methods

## 4.1. Data Collection

WeChat is a popular mobile instant message app in China. Specially, WeChat users can share their daily life with friends in the WeChat moment and make online transactions in WeChat store. WeChat store is a typical s-commerce platform, in which online purchase is facilitated by the social interaction and recommendation of WeChat friends. This study employed a sampling service by a professional company. A survey link was provided to the potential users of the WeChat store, and then the participants gave feedback through the online survey directly and anonymously. The data were collected in 2018. Finally, a total of 302 valid questionnaires was collected. Majority of the respondents were female (51.99%), aged from 20 to 30 years old (59.27%), and had a university degree (50.99%). 72.19% of the respondents had used WeChat for more than three years. The maximum variance inflation factor (VIF) was 2.28, indicating there was no multicollinearity. Harman's single factor test showed that the first factor explained 38.11% of the variance. Then, common method factor was examined in the PLS model (see Appendix A). The average squared values of the method factor loadings (0.381) were smaller than the average squared loadings of substantive constructs (0.625), suggesting that common method biases are not an issue in this study. Moreover, a t-test of early and late questionnaires showed that the t-values are nonsignificant, so non-response bias is not an issue either.

#### 4.2. Measurements

All the items used in this study were adapted from prior studies. Measures of social interaction and shared language were adapted from Chiu et al. (2006) [67]. Measures of trust in peers were adapted from Chang and Chuang (2011) [17]. Measures of reciprocity were adapted from Pai and Tsai (2016) [85]. Measures of purchase intentions were adapted from Liang et al. (2011) [86]. A five-point Likert scale, ranging from "strongly disagree—1" to "strongly agree—5", was used to measure all the items. Measurements was shown in Supplementary Materials.

#### 4.3. Analytical Methods

This study utilized SEM and fsQCA method to analysis the data. The fsQCA method put forward a way to find out the different configurations of causal conditions that may result in the same outcome [25]. Traditional statistical methods focused on the net effect of independent variables on dependent variables and the results showed that the different causal path can result in the same outcome, whereas the fsQCA method took a step forward to clarify the configurations of conditions that may result in an outcome, more importantly, the presence and absence of the outcome, respectively, may be caused by different reasons [87,88].

## 4.4. Calibration

The fsQCA method requires the calibration of all condition and outcome variables [25]. Calibration relies on theoretical and substantial knowledge to generate a fuzzy-set score that relates to the degree of membership in a set [88]. In this study, to produce the fuzzy-set scores, calibration involves the use of "the direct method" [25]. Since the variables were measured using a five-point Likert scale, the original value of 5 was set as full membership, the original value of 3 was set as cross over point, and the original value of 1 was set as full non-membership.

Following the mentioned calibration procedure [25], the outcome variable 'purchase intentions' was calibrated as 'fs\_ purchases. The condition variable 'social interaction' was calibrated as 'fs\_interaction', 'trust in peers' was calibrated as 'fs\_trust', 'reciprocity' was calibrated as 'fs\_reciprocity', and 'shared language' was calibrated as 'fs\_language'.

## 5. Results and Discussions

#### 5.1. Results of Measurement Model

Reliability, convergent validity, and discriminant validity were examined [89]. Composite reliability (CR) and average variance extracted (AVE) were assessed to make sure the reliability. As shown in Table 1, Cronbach's alphas of purchase intention being lower than 0.7 is a shortcoming in this study. However, several published papers also suffered from this issue, in which the alpha scores below 0.7 are acceptable. For example, in Kim et al. (2020)'s study, the reliability coefficients were 0.684 for bonding social capital [90]. CR values ranging from 0.825 to 0.865 exceeded the cutoff values of 0.7, and AVE ranging from 0.612 to 0.638 exceeded the cutoff values of 0.5, demonstrating good construct reliability. Convergent validity was examined by checking the item loadings on their respective constructs. All the loadings exceeded the required values of 0.7 (See Table 1). To examine discriminant validity of the measurement model, we compared the square root of the AVE values with inter-construct correlation coefficients. As shown in Table 2, the square root of the AVEs for each construct ranging from 0.335 to 0.667. Furthermore, HTMT ratio shown in Table 3 falls below the threshold of 0.9, with two exceptions [91].

Construct	Items	Loadings	Mean	SD	rho_A	α	CR	AVE
- · · ·	SI1	0.776	3.917	0.902	0.704	0.705	0.836	0.629
Social	SI2	0.823	3.642	0.967				
interaction	SI3	0.779	3.566	1.002				
	TR1	0.786	3.109	1.017	0.791	0.792	0.865	0.616
Truct in poor	TR2	0.834	3.248	0.934				
Trust in peers	TR3	0.744	3.570	0.893				
	TR4	0.772	3.318	1.017				
Reciprocity	RE1	0.843	3.719	0.952	0.708	0.711	0.838	0.633
	RE2	0.777	3.768	0.878				
	RE3	0.764	3.864	0.977				

Table 1. Construct reliability and validity.

Construct	Items	Loadings	Mean	SD	rho_A	α	CR	AVE
Shared	SL1	0.790	3.632	0.855	0.716	0.718	0.841	0.638
language	SL2	0.785	3.818	0.841				
	SL3	0.820	3.672	0.965				
	INT1	0.796	3.636	0.940	0.683	0.683	0.825	0.612
Purchase	INT2	0.792	3.384	0.977				

0.949

Table 1. Cont.

intention

Notes: SI: social interaction, TR: trust in peers, RE: reciprocity, SL: shared language, INT: purchase intention.

3.268

Table 2. Correlations and square root of AVE values.

0.758

INT3

Construct.	SI	TR	RE	SL	INT
Social interaction	0.793				
Trust in peers	0.480	0.785			
Reciprocity	0.655	0.475	0.796		
Shared language	0.593	0.535	0.667	0.799	
Purchase intention	0.379	0.528	0.335	0.416	0.782

Notes: SI: social interaction, TR: trust in peers, RE: reciprocity, SL: shared language, INT: purchase intention. The off-diagonal elements are the correlations between two distinct constructs. Diagonal elements in bold are square root of AVE values.

#### Table 3. HTMT ratio.

Construct	SI	TR	RE	SL	INT
Social interaction					
Trust in peers	0.642				
Reciprocity	0.925	0.634			
Shared language	0.833	0.709	0.937		
Purchase intention	0.546	0.719	0.479	0.592	

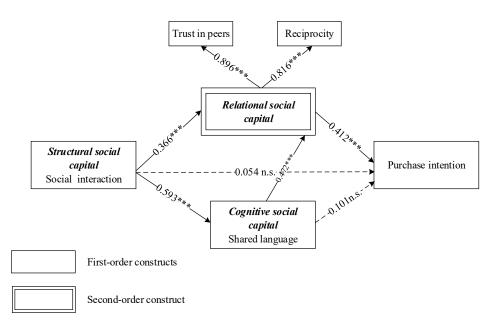
Notes: SI: social interaction, TR: trust in peers, RE: reciprocity, SL: shared language, INT: purchase intention.

#### 5.2. Results from SEM

As shown in Figure 2, RSC is found to be positively related to consumers' purchase intentions ( $\beta = 0.412^{***}$ , p < 0.001,  $f^2 = 0.103$ ). Thus, H1 was supported. Whereas the effect of CSC on consumers' purchase intentions was insignificant ( $\beta = 0.101^{n.s.}$ , p > 0.1,  $f^2 = 0.007$ ). Thus, H2 was not supported. In addition, the effect of SSC on consumers' purchase intentions is fully mediated by RSC ( $\beta = 0.366^{***}$ , p < 0.001,  $f^2 = 0.198$ ) and CSC ( $\beta = 0.593^{***}$ , p < 0.001,  $f^2 = 0.541$ ). Thus, H3a and H3b were not supported.

First, the SEM results demonstrated that SSC was positively related to both RSC and CSC, and CSC was positively related to RSC. These findings were consistent with previous studies, such as Tsai and Ghoshal (1998)'s [66] and Wang et al. (2016)'s [12] studies, suggesting that the three dimensions of social capital were correlated with each other, and this causal relationship still exists in a s-commerce context. SSC was a critical predictor of RSC and CSC, and CSC was a critical predictor of RSC.

Moreover, of all three social capital dimensions, only RSC had a positive direct impact on purchase intention. Trust in peers and reciprocity influenced the consumers' purchase intentions in s-commerce. Consumers are willing to accept the advice and recommendations form the reliable and reciprocal peers in s-commerce. This result agreed with previous studies, for example, Luo et al.(2020) found that trust was positively related to transaction intention in e-commerce [23].



\*\*\* *p* < 0.001, n.s. not supported.

## Figure 2. PLS results.

Contrary to expectations, the direct effect of CSC on purchase intention was insignificant. One explanation was that the likelihood of consumers' purchase intentions in s-commerce depends on trust and reciprocal relationships regardless of the shared language between them. Purchasing online may be perceived to be a risky behavior, resulting in shared language being a less critical factor directly predicting purchase intention in s-commerce. Similarly, Wang et al.(2016) found that shared language had no significant effect on eWOM on social networking sites [12].

Thirdly, the results revealed that the effect of SSC on purchase intentions was fully mediated through RSC and CSC. In other words, social interaction had no direct influence on consumers' purchase intentions in s-commerce. A possible explanation is that only the history of the social interaction cultivated a good relationships among peers and can influence the consumers' purchase intentions. Similarly, Chen et al.(2015) found that the effect of SSC on loyalty to seller was fully mediated by RSC and CSC [21].

## 5.3. Results from fsQCA

First, this study conducted the necessary conditions analysis. If the consistency score exceeded the cutoff of 0.9, a condition or a combination of conditions were considered as "necessary" [88]. Table 4 shows the results of necessary conditions analysis for the presence of purchase intentions. It is found that social interaction, reciprocity, and shared language are necessary conditions for the purchase intentions in s-commerce.

Table 4. Analysis of necessary conditions for purchase intentions in s-commerce.

Consistency	Consistency
0.929	0.803
0.373	0.869
0.839	0.811
0.526	0.805
0.925	0.805
0.378	0.865
0.922	0.860
0.397	0.860
	0.929 0.373 0.839 0.526 0.925 0.378 0.922

Note: ~ indicates the absence of the condition.

Next, as shown in Table 5, the first configuration indicates that the absence of reciprocity and the presence of shared language led to the presence of purchase intentions. The second configuration indicates that the presence of trust in peers and reciprocity led to the presence of purchase intentions. The third configuration indicates that the presence of social interaction and trust in peers led to the presence of purchase intentions.

Table 5. fsQCA results.

	Solutions			
	1	2	3	
fs_interaction			$\bullet$	
fs_trust		$\bullet$	$\bullet$	
fs_reciprocity	$\otimes$	$\bullet$		
fs_language	$\bullet$			
Consistency	0.949	0.917	0.913	
Raw coverage	0.350	0.812	0.821	
Unique coverage	0.018	0.009	0.013	
Solution consistency	0.897			
Solution coverage	0.849			

Note:  $\bullet$  indicates the presence of the condition,  $\otimes$  indicates the absence of the condition, and blank indicates that the presence or absence of the condition is insignificant.

The first configuration indicates that the absence of reciprocity and the presence of shared language are the sufficient conditions for high purchase intentions. When reciprocity is absent, shared language is very critical for generating purchase intentions. Reciprocity reflects perceived fairness of resource exchange [67]. When reciprocity is absent, resource exchange may be perceived as non-reciprocal. Thus, shared language plays an important role in improving mutual understanding among members. This mutual understanding can dispel misgivings when adopting recommendations in s-commerce, thus improving purchase intentions. This finding is in line with previous studies highlighting the role of shared language in enhancing mutual understanding [21].

The second configuration indicates that the presence of trust in peers and reciprocity are the sufficient conditions for purchase intentions. When consumers maintain reciprocal and trustful relationships, they will be more willing to purchase. Some of previous studies emphasized the foundation role of SSC (e.g., social interaction) linked to RSC [56]. However, this study found another explanation, that is, the presence or absence of social interaction is insignificant, and reciprocal and trustful relationships can lead to purchase intentions.

The third configuration indicates that the presence of social interaction and trust in peers is a sufficient condition for purchase intentions. The effect of trust on outcome variables was inconsistent in previous studies [17,67]. This study found another explanation, that is, the presence of social interaction and trust in peers is a sufficient condition leading to purchase intentions. Frequent communication with peers and trustful relationship between peers together led to increased purchasing in s-commerce.

In conclusion, the SEM results revealed that shared language had no direct effect on consumers' purchase intentions, whereas shared language was positively related to RSC, which can in turn improve consumers' purchase intentions. The fsQCA findings further confirmed the critical role of shared language, especially when reciprocity is absent, leading to consumers' purchase intentions. In addition, the SEM results revealed that RSC was positively related to consumers' purchase intentions and the fsQCA findings further confirmed the important role of RSC as well, that is, that presence of trust in peers and reciprocity are the sufficient conditions for purchase intentions. Furthermore, the SEM results revealed that the effect of SSC on purchase intentions was fully mediated through RSC and CSC and the fsQCA findings further confirmed that the presence of social interaction and trust in peers is a sufficient condition for purchase intentions.

#### 6. Conclusions

## 6.1. Theoretical Implications

This study has two important theoretical contributions. First, this study shed light on some insightful implications for social capital theory. Previous studies regarding social capital had some inconsistent research results [12,16]. To make further explicit the effect of social capital in cultivating purchase intentions, this study explored the effect of different dimensions of social capital on purchase intentions utilizing SEM and fsQCA method. The results demonstrated the heterogeneous role of social capital dimensions, that is, social interaction, trust in peers, reciprocity, and shared language, in promoting purchase intentions. Specifically, the SEM results presented the effect of causal relationship of social capital on purchase intentions. The fsQCA results suggested three configurations of causal conditions for high purchase intentions. Although the factors influencing consumers' purchase intentions in s-commerce have been discussed, this study enhanced the understanding of the configurations that link dimensions of social capital to consumers' purchase intentions in s-commerce using fsQCA approach.

Moreover, the current study utilizing SEM and fsQCA methods provides innovative analytic techniques to investigate the influence of different dimensions of social capital on purchase intentions in s-commerce. To make clear the complex relationships between different dimensions of social capital, the study explored the configurations of different dimensions of social capital on purchase intentions. In contrast to similar studies, which only considered the different dimensions of social capital either as parallel elements or causal relationship, this study showed the configurations of sufficient conditions for purchase intentions. SEM is a traditional method to explore the effect of social capital on purchase intentions. The fsQCA approach allows the current study to explore the complex configurations of the social capital dimensions that lead to purchase intentions. Therefore, this study contributes to the methods used in s-commerce research.

#### 6.2. Managerial Implications

This study also has some managerial contributions. The results indicated that scommerce platform managers should encourage peers develop strong social capital. Especially, the SEM results revealed that of all three social capital dimensions, only RSC had a positive direct impact on purchase intentions, and the effect of SSC on purchase intentions was fully mediated through RSC and CSC. The fsQCA findings suggested that the absence of reciprocity and the presence of shared language, the presence of trust in peers and reciprocity, and the presence of social interaction and trust in peers are all sufficient conditions for purchase intentions.

Therefore, only enhancing one dimension of social capital is not sufficient for leading to purchase intentions. Structural, relational, and cognitive social capital should be maintained carefully. First, the SEM results revealed that shared language had no direct effect on consumers' purchase intentions, whereas shared language was positively related to RSC, which can in turn improve consumers' purchase intentions. The fsQCA findings further confirmed the critical role of shared language, especially when reciprocity is absent, leading to consumers' purchase intentions. S-commerce managers should establish shared values, shared vision, shared narration, and shared language in the s-commerce community. For example, abbreviations with special meaning are encouraged for use by the consumers in the s-commerce community. By doing so, consumers can gain cohesion power, reduce social distance, and gain a sense of belonging to the s-commerce community.

Moreover, the SEM results revealed that RSC was positively related to consumers' purchase intentions and the fsQCA findings further confirmed the important role of RSC as well, that is, the presence of trust in peers and reciprocity are the sufficient conditions for purchase intentions. S-commerce managers are encouraged to establish rules and regulations to guarantee the transaction environment in s-commerce. Especially, the s-commerce platform should eradicate fake products, false advertising, and misleading recommendations. Opportunism should be punished by the s-commerce platform.

commerce managers should encourage consumers to be honest and genuine to build a reciprocal atmosphere as well.

Thirdly, the SEM results revealed that the effect of SSC on purchase intentions was fully mediated through RSC and CSC, and the fsQCA findings further confirmed that the presence of social interaction and trust in peers are the sufficient conditions for purchase intentions. Interpersonal interaction and communication should be encouraged to improve SSC. For example, s-commerce platform can encourage active consumers through spiritual rewards, such as membership rank and badges, and monetary rewards, such as coupons and credits.

## 6.3. Limitations

There are two limitations. First, only three different dimensions of social capital were considered as antecedent variables. Other components, such as social support, may be other explanations for solutions. Future work should consider more factors that can enrich the configurations. Moreover, this study only explored the factors influencing the presence of purchase intentions. Further work could investigate the configurations leading to the absence of purchase intentions, that is, which factors might prevent consumers from purchasing in s-commerce. Reasons for purchasing or not purchasing in s-commerce may vary.

**Supplementary Materials:** The following are available online at https://www.mdpi.com/article/10 .3390/jtaer16050087/s1. Measurements was shown in Supplementary Materials.

**Funding:** This study was funded by the Natural Science Foundation of Zhejiang Province of China (No. LQ21G020010).

Institutional Review Board Statement: Not applicable.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Not applicable.

Conflicts of Interest: The author declares no conflict of interest.

#### Appendix A

Table A1. Common method bias analysis

Construct	Indicator	Substantive Factor Loading (R1)	R1 <sup>2</sup>	Method Factor Loading (R2)	R2 <sup>2</sup>
Social interaction	SI1	0.774	0.599	0.623	0.388
	SI2	0.824	0.679	0.628	0.394
	SI3	0.780	0.608	0.633	0.401
Trust in peers	TR1	0.791	0.626	0.581	0.338
I.	TR2	0.835	0.697	0.645	0.416
	TR3	0.741	0.549	0.645	0.416
	TR4	0.770	0.593	0.654	0.428
Reciprocity	RE1	0.843	0.711	0.668	0.446
1 2	RE2	0.778	0.605	0.647	0.419
	RE3	0.763	0.582	0.608	0.370
Shared language	SL1	0.790	0.624	0.661	0.437
	SL2	0.787	0.619	0.637	0.406
	SL3	0.819	0.671	0.682	0.465
Purchase intention	INT1	0.795	0.632	0.537	0.288
	INT2	0.805	0.648	0.509	0.259
	INT3	0.746	0.557	0.477	0.228
Average		0.790	0.625	0.615	0.381

## References

- 1. Wang, Y.; Yu, C. Social interaction-based consumer decision-making model in social commerce: The role of word of mouth and observational learning. *Int. J. Inf. Manag.* **2017**, *37*, 179–189. [CrossRef]
- Bugshan, H.; Attar, R.W. Social commerce information sharing and their impact on consumers. *Technol. Forecast. Soc. Chang.* 2020, 153, 119875. [CrossRef]
- 3. Sohn, J.W.; Ki Kim, J. Factors that influence purchase intentions in social commerce. Technol. Soc. 2020, 63, 101365. [CrossRef]
- 4. Zhang, K.Z.K.; Benyoucef, M.; Zhao, S.J. Building brand loyalty in social commerce: The case of brand microblogs. *Electron. Commer. Res. Appl.* **2016**, *15*, 14–25. [CrossRef]
- 5. Lin, J.; Luo, Z.; Cheng, X.; Li, L. Understanding the interplay of social commerce affordances and swift guanxi: An empirical study. *Inf. Manag.* 2019, *56*, 213–224. [CrossRef]
- 6. Luarn, P.; Chiu, Y.-P. Key variables to predict tie strength on social network sites. Internet Res. 2015, 25, 218–238. [CrossRef]
- Shao, G. Understanding the appeal of user-generated media: A uses and gratification perspective. *Internet Res.* 2009, 19, 7–25. [CrossRef]
- 8. Yu, C.-H.; Tsai, C.-C.; Wang, Y.; Lai, K.-K.; Tajvidi, M. Towards building a value co-creation circle in social commerce. *Comput. Hum. Behav.* **2020**, *108*, 105476. [CrossRef]
- 9. Osatuyi, B.; Qin, H. How vital is the role of affect on post-adoption behaviors? An examination of social commerce users. *Int. J. Inf. Manag.* 2018, 40, 175–185. [CrossRef]
- 10. Chen, J.; Shen, X.-L. Consumers' decisions in social commerce context: An empirical investigation. *Decis. Support Syst.* 2015, 79, 55–64. [CrossRef]
- 11. Tajvidi, M.; Richard, M.O.; Wang, Y.C.; Hajli, N. Brand co-creation through social commerce information sharing: The role of social media. *J. Bus. Res.* 2020, 121, 476–486. [CrossRef]
- 12. Wang, T.; Yeh, R.K.-J.; Chen, C.; Tsydypov, Z. What drives electronic word-of-mouth on social networking sites? Perspectives of social capital and self-determination. *Telemat. Inform.* **2016**, *33*, 1034–1047. [CrossRef]
- 13. Nahapiet, J.; Ghoshal, S. Social capital, intellectual capital, and the organizational advantage. *Acad. Manag. Rev.* **1998**, 23, 242–266. [CrossRef]
- 14. Huang, L.T. Flow and social capital theory in online impulse buying. J. Bus. Res. 2016, 69, 2277–2283. [CrossRef]
- 15. Liu, H.; Chu, H.; Huang, Q.; Chen, X. Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce. *Comput. Hum. Behav.* **2016**, *58*, 306–314. [CrossRef]
- 16. Lefebvre, V.M.; Sorenson, D.; Henchion, M.; Gellynck, X. Social capital and knowledge sharing performance of learning networks. *Int. J. Inf. Manag.* **2016**, *36*, 570–579. [CrossRef]
- 17. Chang, H.H.; Chuang, S.-S. Social capital and individual motivations on knowledge sharing: Participant involvement as a moderator. *Inf. Manag.* **2011**, *48*, 9–18. [CrossRef]
- 18. Petter, S.; Barber, C.S.; Barber, D. Gaming the system: The effects of social capital as a resource for virtual team members. *Inf. Manag.* **2020**, *57*, 103239. [CrossRef]
- 19. Ganguly, A.; Talukdar, A.; Chatterjee, D. Evaluating the role of social capital, tacit knowledge sharing, knowledge quality and reciprocity in determining innovation capability of an organization. *J. Knowl. Manag.* **2019**, *23*, 1105–1135. [CrossRef]
- 20. Yan, Y.; Guan, J.C. Social capital, exploitative and exploratory innovations: The mediating roles of ego-network dynamics. *Technol. Forecast. Soc. Chang.* **2018**, 126, 244–258. [CrossRef]
- Chen, X.; Huang, Q.; Davison, R.M. The role of website quality and social capital in building buyers'loyalty. *Int. J. Inf. Manag.* 2015, *37*, 1563–1574. [CrossRef]
- 22. Yang, X.; Li, G. Factors influencing the popularity of customer-generated content in a company-hosted online co-creation community: A social capital perspective. *Comput. Hum. Behav.* **2016**, *64*, 760–768. [CrossRef]
- 23. Luo, N.; Wang, Y.; Zhang, M.; Niu, T.; Tu, J. Integrating community and e-commerce to build a trusted online second-hand platform: Based on the perspective of social capital. *Technol. Forecast. Soc. Chang.* **2020**, *153*, 119913. [CrossRef]
- 24. Hsu, J.S.-C.; Hung, Y.W. Exploring the interaction effects of social capital. Inf. Manag. 2013, 50, 415–430. [CrossRef]
- 25. Ragin, C.C. Redesigning Social Inquiry: Fuzzy Sets and Beyond; University of Chicago Press: Chicago, IL, USA, 2008.
- 26. Xie, X.Z.; Tsai, N.C. The effects of negative information-related incidents on social media discontinuance intention: Evidence from SEM and fsQCA. *Telemat. Inform.* **2020**, *56*, 101503. [CrossRef]
- 27. Mikalef, P.; Pateli, A. Information technology-enabled dynamic capabilities and their indirect effect on competitive performance: Findings from PLS-SEM and fsQCA. *J. Bus. Res.* **2017**, *70*, 1–16. [CrossRef]
- 28. Busalim, A.H.; Ghabban, F.; Hussin, A.R.C. Customer engagement behaviour on social commerce platforms: An empirical study. *Technol. Soc.* **2020**, *64*, 101437. [CrossRef]
- 29. Ballestar, M.T.; Sainz, J.; Torrent-Sellens, J. Social networks on cashback websites. Psychol. Mark. 2016, 33, 1039–1045. [CrossRef]
- 30. Hajli, M.N. The role of social support on relationship quality and social commerce. *Technol. Forecast. Soc. Chang.* **2014**, *87*, 17–27. [CrossRef]
- 31. Bai, Y.; Yao, Z.; Dou, Y.-F. Effect of social commerce factors on user purchase behavior: An empirical investigation from renren.com. *Int. J. Inf. Manag.* 2015, 35, 538–550. [CrossRef]
- 32. Chen, A.; Lu, Y.; Wang, B. Customers' purchase decision-making process in social commerce: A social learning perspective. *Int. J. Inf. Manag.* 2017, *37*, 627–638. [CrossRef]

- Shen, X.L.; Li, Y.J.; Sun, Y.; Chen, Z.; Wang, F. Understanding the role of technology attractiveness in promoting social commerce engagement: Moderating effect of personal interest. *Inf. Manag.* 2019, *56*, 294–305. [CrossRef]
- 34. Wang, X.; Lin, X.; Spencer, M.K. Exploring the effects of extrinsic motivation on consumer behaviors in social commerce: Revealing consumers' perceptions of social commerce benefits. *Int. J. Inf. Manag.* **2019**, *45*, 163–175. [CrossRef]
- 35. Yang, X. How perceived social distance and trust influence reciprocity expectations and eWOM sharing intention in social commerce. *Ind. Manag. Data Syst.* **2019**, *119*, 867–880. [CrossRef]
- 36. Yang, J.; Sia, C.L.; Liu, L.; Chen, H. Sellers versus buyers: Differences in user information sharing on social commerce sites. *Inf. Technol. People* **2016**, *29*, 444–470. [CrossRef]
- Leung, W.K.S.S.; Shi, S.; Chow, W.S. Impacts of user interactions on trust development in C2C social commerce: The central role of reciprocity. *Internet Res.* 2019, 30, 335–356. [CrossRef]
- 38. Herrando, C.; Jiménez-Martínez, J.; Jose, M.M.-D.H. Passion at first sight: How to engage users in social commerce contexts. *Electron. Commer. Res.* **2017**, *17*, 701–720. [CrossRef]
- Farivar, S.; Turel, O.; Yuan, Y. Skewing users' rational risk considerations in social commerce: An empirical examination of the role of social identification. *Inf. Manag.* 2018, 55, 1038–1048. [CrossRef]
- 40. Kim, N.; Kim, W. Do your social media lead you to make social deal purchases? Consumer-generated social referrals for sales via social commerce. *Int. J. Inf. Manag.* 2018, *39*, 38–48. [CrossRef]
- 41. Ko, H.-C. Social desire or commercial desire? The factors driving social sharing and shopping intentions on social commerce platforms. *Electron. Commer. Res. Appl.* **2018**, *28*, 1–15. [CrossRef]
- Molinillo, S.; Anaya-Sánchez, R.; Liébana-Cabanillas, F. Analyzing the effect of social support and community factors on customer engagement and its impact on loyalty behaviors toward social commerce websites. *Comput. Hum. Behav.* 2020, 108, 105980. [CrossRef]
- 43. Yang, X. Consumers' decisions in social commerce: The role of guanxi elements. *Asia Pac. J. Mark. Logist.* **2019**, *31*, 759–772. [CrossRef]
- 44. Li, C.-Y. How social commerce constructs influence customers' social shopping intention? An empirical study of a social commerce website. *Technol. Forecast. Soc. Chang.* 2019, 144, 282–294. [CrossRef]
- 45. Hajli, N.; Sims, J.; Zadeh, A.H.; Richard, M.-O.O. A social commerce investigation of the role of trust in a social networking site on purchase intentions. *J. Bus. Res.* 2017, *71*, 133–141. [CrossRef]
- 46. Lu, B.; Fan, W.; Zhou, M. Social presence, trust, and social commerce purchase intention: An empirical research. *Comput. Hum. Behav.* **2016**, *56*, 225–237. [CrossRef]
- Yahia, I.B.; Al-Neama, N.; Kerbache, L. Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage. J. Retail. Consum. Serv. 2018, 41, 11–19. [CrossRef]
- Hajli, N. The impact of positive valence and negative valence on social commerce purchase intention. *Inf. Technol. People* 2019, 33, 774–791. [CrossRef]
- 49. Fang, Y.H.; Li, C.Y. Leveraging sociability for trust building on social commerce sites. *Electron. Commer. Res. Appl.* **2020**, *40*, 100907. [CrossRef]
- 50. Gonçalves Curty, R.; Zhang, P. Website features that gave rise to social commerce: A historical analysis. *Electron. Commer. Res. Appl.* **2013**, *12*, 260–279. [CrossRef]
- 51. Huang, Z.; Benyoucef, M. The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electron. Commer. Res. Appl.* 2017, 25, 40–58. [CrossRef]
- 52. Benton, R.A. Uniters or dividers? Voluntary organizations and social capital acquisition. Soc. Netw. 2016, 44, 209–218. [CrossRef]
- 53. Hsu, C.L.; Lin, J.C.C. Antecedents and gains of user participation in social media in Taiwan. *Technol. Soc.* **2020**, *61*, 101243. [CrossRef]
- 54. Grzegorczyk, M. The role of culture-moderated social capital in technology transfer—Insights from Asia and America. *Technol. Forecast. Soc. Chang.* **2019**, 143, 132–141. [CrossRef]
- 55. Sheer, V.C.; Rice, R.E. Mobile instant messaging use and social capital: Direct and indirect associations with employee outcomes. *Inf. Manag.* **2017**, *54*, 90–102. [CrossRef]
- 56. Sun, Y.; Fang, Y.; Lim, K.H.; Straub, D. User satisfaction with information technology service delivery: A social capital perspective. *Inf. Syst. Res.* **2012**, *23*, 1195–1211. [CrossRef]
- 57. Ravindran, K.; Susarla, A.; Mani, D.; Gurbaxani, V. Social capital and contract duration in buyer-supplier networks for information technology outsourcing. *Inf. Syst. Res.* 2015, *26*, 379–397. [CrossRef]
- Chen, H.; Beaudoin, C.E. An empirical study of a social network site: Exploring the effects of social capital and information disclosure. *Telemat. Inform.* 2016, 33, 432–435. [CrossRef]
- 59. Lee, Y.C. Effects of branded e-stickers on purchase intentions: The perspective of social capital theory. *Telemat. Inform.* **2017**, *34*, 397–411. [CrossRef]
- 60. Horng, S.M.; Wu, C.L. How behaviors on social network sites and online social capital influence social commerce intentions. *Inf. Manag.* **2020**, *57*, 103176. [CrossRef]
- 61. Lee, J.S.; Tsang, N.; Pan, S. Examining the differential effects of social and economic rewards in a hotel loyalty program. *Int. J. Hosp. Manag.* **2015**, *49*, 17–27. [CrossRef]

- 62. Zheng, H.; Li, D.; Wu, J.; Xu, Y. The role of multidimensional social capital in crowdfunding: A comparative study in China and US. *Inf. Manag.* **2014**, *51*, 488–496. [CrossRef]
- 63. Coleman, J.S. Social capital in the creation of human capital. Am. J. Social. 1988, 94, S95–S120. [CrossRef]
- 64. Portes, A. Social capital: Its origins and applications in modern sociology. Annu. Rev. Social. 1998, 24, 1–24. [CrossRef]
- 65. Burt, R.S. *Structural Holes: The Social Structure of Competition;* Harvard University Press: Cambridge, MA, USA, 1992.
- 66. Tsai, W.; Ghoshal, S. Social capital and value creation: The role of intrafirm networks. Acad. Manag. J. 1998, 41, 464–476.
- 67. Chiu, C.-M.; Hsu, M.-H.; Wang, E. Understanding knowledge sharing in virtual communities: An integration of social capital and social cognitive theories. *Decis. Support Syst.* **2006**, *42*, 1872–1888. [CrossRef]
- 68. Robert, L.P.; Dennis, A.R.; Ahuja, M.K. Social capital and knowledge integration in digitally enabled teams. *Inf. Syst. Res.* 2008, 19, 314–334. [CrossRef]
- 69. Wasko, M.M.; Faraj, S. Why should I share? Examining social capital and knowledge contribution in electronic network of practice. *MIS Q.* 2005, 29, 35–57. [CrossRef]
- 70. Zhao, L.; Lu, Y.; Wang, B.; Chau, P.Y.K.; Zhang, L. Cultivating the sense of belonging and motivating user participation in virtual communities: A social capital perspective. *Int. J. Inf. Manag.* **2012**, *32*, 574–588. [CrossRef]
- 71. Wagner, H.-T.; Beimborn, D.; Weitzel, T. How social capital among information technology and business units drives operational alignment and IT business value. *J. Manag. Inf. Syst.* **2014**, *31*, 241–272. [CrossRef]
- 72. Chiu, C.-M.M.; Huang, H.-Y.Y.; Cheng, H.-L.L.; Sun, P.-C.C. Understanding online community citizenship behaviors through social support and social identity. *Int. J. Inf. Manag.* 2015, *35*, 504–519. [CrossRef]
- 73. Cheng, X.; Gu, Y.; Shen, J. An integrated view of particularized trust in social commerce: An empirical investigation. *Int. J. Inf. Manag.* **2019**, 45, 1–12. [CrossRef]
- 74. Chen, X.; Huang, Q.; Davison, R.M. Economic and social satisfaction of buyers on consumer-to-consumer platforms: The role of relational capital. *Int. J. Electron. Commer.* 2017, 21, 219–248. [CrossRef]
- 75. Khan, S.; Umer, R.; Umer, S.; Naqvi, S. Antecedents of trust in using social media for E-government services: An empirical study in Pakistan. *Technol. Soc.* 2021, *64*, 101400. [CrossRef]
- 76. Fang, Y.; Qureshi, I.; Sun, H.; McCole, P.; Ramsey, E.; Lim, K.H. Trust, satisfaction, and online repurchase intention: The moderating role of perceived effectiveness of e-commerce institutional mechanisms. *MIS Q.* **2014**, *38*, 407–427. [CrossRef]
- 77. Hashim, K.F.; Tan, F.B. The mediating role of trust and commitment on members' continuous knowledge sharing intention: A commitment-trust theory perspective. *Int. J. Inf. Manag.* **2015**, *35*, 145–151. [CrossRef]
- Yan, J.; Leidner, D.E.; Benbya, H.; Zou, W. Social capital and knowledge contribution in online user communities: One-way or two-way relationship? *Decis. Support Syst.* 2019, 127, 113131. [CrossRef]
- 79. Yeon, J.; Park, I.; Lee, D. What creates trust and who gets loyalty in social commerce? *J. Retail. Consum. Serv.* **2019**, *50*, 138–144. [CrossRef]
- Cui, Y.; Mou, J.; Cohen, J.; Liu, Y.; Kurcz, K. Understanding consumer intentions toward cross-border m-commerce usage: A psychological distance and commitment-trust perspective. *Electron. Commer. Res. Appl.* 2020, 39, 100920. [CrossRef]
- 81. Guo, Y.; Lu, Z.; Kuang, H.; Wang, C. Information avoidance behavior on social network sites: Information irrelevance, overload, and the moderating role of time pressure. *Int. J. Inf. Manag.* **2020**, *52*, 102067. [CrossRef]
- 82. Granovetter, M.S. Economics action and social structure: The problem of embeddedness. *Am. J. Sociol.* **1985**, *91*, 481–510. [CrossRef]
- 83. Xiang, L.; Zheng, X.; Lee, M.K.O.; Zhao, D. Exploring consumers' impulse buying behavior on social commerce platform: The role of parasocial interaction. *Int. J. Inf. Manag.* **2016**, *36*, 333–347. [CrossRef]
- 84. Li, G.; Yang, X.; Xu, W.; Zhu, Y. Social embeddedness and customer-generated content: The moderation effect of employee participation. *J. Electron. Commer. Res.* 2017, *18*, 245–253.
- 85. Pai, P.; Tsai, H.-T. Reciprocity norms and information-sharing behavior in online consumption communities: An empirical investigation of antecedents and moderators. *Inf. Manag.* **2016**, *53*, 38–52. [CrossRef]
- 86. Liang, T.-P.; Ho, Y.-T.; Li, Y.-W.; Turban, E. What drives social commerce: The role of social support and relationship quality. *Int. J. Electron. Commer.* **2011**, *16*, 69–90. [CrossRef]
- 87. Poorkavoos, M.; Duan, Y.; Edwards, J.S.; Ramanathan, R. Identifying the configurational paths to innovation in SMEs: A fuzzy-set qualitative comparative analysis. *J. Bus. Res.* **2016**, *69*, 5843–5854. [CrossRef]
- 88. Navarro, S.; Llinares, C.; Garzon, D. Exploring the relationship between co-creation and satisfaction using QCA. *J. Bus. Res.* 2015, 69, 1336–1339. [CrossRef]
- Fornell, C.; Larcker, D.F. Evaluating structural equation models with unobservable variables and measurement error. *J. Mark. Res.* 1981, 18, 39–50. [CrossRef]
- 90. Kim, J.; Kang, S.; Hoon Lee, K. How social capital impacts the purchase intention of sustainable fashion products. *J. Bus. Res.* **2020**, *117*, 596–603. [CrossRef]
- Henseler, J.; Ringle, C.M.; Sarstedt, M. A new criterion for assessing discriminant validity in variance-based structural equation modeling. J. Acad. Mark. Sci. 2015, 43, 115–135. [CrossRef]