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Mediating Role of Social Commerce Trust in Behavioral Intention and Use

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Mediating Role of Social Commerce Trust in Behavioral Intention and Use ABSTRACT

While the importance of s-commerce is implicitly recognized, inconsistencies in extant empirical research pose significant challenges. Based on perspectives from trust, social presence, and socio-technical theories, this study develops an integrated model of the factors that influence intention and use behavior, with particular attention to the role of trust in s-commerce. The model is tested using meta-analytic structural equitation modeling techniques on 201 observations from 83 s-commerce studies. Implications for research and practice are discussed. **Keywords:** Social commerce, Behavioral intention, System use, Meta-SEM

Mediating Role of Social Commerce Trust in Behavioral Intention and Use 1. INTRODUCTION

The growth of social networking and e-commerce lead to the development of social commerce (s-commerce) (Dong & Wang, 2018). S-commerce is defined as "exchange-related activities that occur in, or are influenced by, an individual's social network in computer-mediated social environments, where the activities correspond to the need recognition, pre-purchase, purchase, and post-purchase stages of a focal exchange" (Yadav et al., 2013). S-commerce is a mixture of social and commercial activities (Hassan et al., 2018) and includes four major elements in the value creation process including individuals, social networks, community interactions, and commercial activities (Hassan et al., 2018). The size of global s-commerce market is expected to reach over USD 3.3 billion by 2028 (Grand View Research, 2021). Several large organizations such as Amazon, Alibaba, and eBay use a strategy of developing online communities and adding social technologies into their platforms (Goraya et al., 2021). For example, Amazon Live provides opportunities for brands to connect with consumers through interactive, shoppable livestreams and includes a chat feature for consumers to ask questions and receive information in real-time (Geyser, 2021).

S-commerce is of burgeoning interest to researchers (Sharma et al., 2019). Prior studies have empirically examined the effects of various factors on consumer behavior in s-commerce contexts (Hajli & Sims, 2015; Hajli, 2015; Makmor et al., 2019; Sharma et al., 2019). Different theoretical perspectives (e.g., Technology acceptance model, Theory of Planned Behavior, Stimulus-organism-response model, trust transfer theory, social support theory, social presence theory, social exchange theory) have been applied in such studies. Empirical findings in the scommerce domain have been inconsistent at times (Bugshan & Attar, 2020; Molinillo et al., 2018; Zhang et al., 2014) and several studies have attempted to synthesize prior findings using meta-analytic methods (e.g. Busalim, 2016; Han et al., 2018; Jadil et al., 2022; Sarker et al., 2020; Zhang & Benyoucef, 2016; Mou & Benyoucef, 2021). These studies generally provided a corrected effect size of the relationship between various factors and behavioral intention or use behavior, but did not examine inter-relationships between factors. Dwivedi et al. (2021) employed meta-analytic structural equation modeling (MASEM) methods to examine the impact of various s-commerce factors on intention and use. Jadil et al. (2022) employed meta-analytic approach to examine the effects of moderators (for example, the six dimensions of Hofstede's national culture) in the social commerce adoption research.

This study develops an integrated research model appealing to trust, social presence, and sociotechnical theories and focusing on the role of trust in s-commerce settings. For many consumers, there is a perceived risk in using s-commerce connected to potential dangers and personal losses (Kaur & Kumar, 2019) and trust continues to be a significant factor influencing intention and behavior (Chen & Wang, 2016; Hassan et al., 2018) while lack of trust raises doubts about scommerce transactions (Jones & Leonard, 2008). Thus, trust in s-commerce sites remains a significant consideration for e-vendors and establishing trust is important for s-commerce companies (Kim & Park, 2013). Our research model anchored in multiple theoretical perspectives is empirically tested using MASEM methods, which enables the synthesis of prior empirical findings and the analysis of relationships between constructs (Jeyaraj & Dwivedi, 2020), on 201 findings coded from 83 prior studies on s-commerce. Our findings show that trust partially mediates the effects of s-commerce features and familiarity and fully mediates the effect of social presence on behavioral intention and use behavior. The rest of the paper is organized as follows. The theoretical background of s-commerce field is presented in Section 2. Section 3 describes the research model along with the hypotheses. Section 4 describes the research methodology, section 5 presents the results, and section 6 provides a discussion. Finally, section 7 concludes the paper.

2. THEORETICAL BACKGROUND

2.1. Trust-based theory

Trust is generally recognized as a crucial element for online transactions (Al-Adwan & Kokash, 2019). A trust-based consumer decision-making model was proposed by Kim et al. (2008), which explains how consumer's trust, perceived risks, and perceived benefits influence their intention to purchase online (Abou-Elgheit, 2019). Trust and risk have four main categories of antecedents based on cognition (e.g. security, privacy, and quality of information), affect (emotional and feelings towards the electronic vendor and friends); experience (e.g. familiarity with the electronic vendor); and personality (disposition to trust, purchasing preferences) (Kim et al. 2008). Several studies have investigated the role of consumer trust in the context of online shopping and adoption of new technologies (Abou-Elgheit, 2019; Cheng et al., 2019b; Shin, 2013; Yahia et al., 2018). For example, Abou-Elgheit (2019) studied the antecedents of trust and risks of Egyptian online shoppers and their intention to purchase using s-commerce.

2.2. Socio-technical theory

Socio-technical theory (Bostrom & Heinen, 1977) states that the social and technical subsystems are required to build a system. The social subsystem is connected to the human perspective and consists of users' knowledge, skills, the reward system, relationships, and values whereas the technical subsystem focuses on the technical capabilities of the system and includes the procedure, technologies, and tools which help users to accomplish a certain task by using the system (Al-Adwan, 2019). Both subsystems are required to work together in order to produce the enhanced outputs (Al-Adwan, 2019; Bostrom & Heinen, 1977). In the context of s-commerce, the social subsystem involves consumers' knowledge, skills, and prior experiences of online shopping, social interactions, and relationships. The technical subsystem includes functionalities and tools of social media which help users to share information about products/services with other users (Liang et al., 2011). Prior studies used the principles of socio-technical theory to investigate factors affecting consumer behavior in s-commerce (Al-Adwan, 2019; Hajli et al., 2017b; Lin et al., 2019). For example, Al-Adwan (2019) used technical (i.e., social commerce constructs) and social components (i.e., familiarity and user experience) to investigate the actual purchase behavior of online shoppers in Jordan.

2.3 Social presence theory

According to social presence theory, effective communication can be achieved when the communication medium has a social presence that mirrors interpersonal participation necessary for completing an action (Al-Adwan & Kokash, 2019). Social presence, considered an important feature of s-commerce, is defined as the quality of a communication medium that forms a key basis for understanding the communication between individuals (Al-Adwan & Kokash, 2019; Short et al., 1976). Social presence theory has been widely used in the context of s-commerce to examine consumer behavior (Al-Adwan & Kokash, 2019; Liang et al., 2011; Lu et al., 2016; Rashid et al., 2020). For instance, Al-Adwan & Kokash (2019) surveyed 237 Facebook users and found that social presence positively affects trust and purchase intentions on s-commerce platforms.

3. RESEARCH MODEL

Figure 1 presents the proposed research model based on a combination of perspectives from trust, social presence, and socio-technical features.

Insert Figure 1 here

Social presence

Grounded in social presence theory (Short et al., 1976), social presence is defined as "a representation of the degree to which the medium of communication makes an individual aware of the others on the communication process with the communication medium also facilitating social interaction" (Al-Adwan & Kokash, 2019, p. 22). Social presence helps to overcome the impersonal and transaction-focused nature of electronic shopping environments (Hassanein & Head, 2007). Social presence can have a positive effect on consumer buying intention as it enables the positive attitude of consumers towards the s-commerce platform, which in turn will result in buying intention (Friedrich et al., 2019a). Social context is important in forming and increase consumer trust (Weisberg et al., 2011; Gefen & Straub, 2004; Rahman et al., 2020) and the feeling of security for consumers (Shin & Shin, 2011; Rahman et al., 2020).

H1: Social presence has a significant positive influence on perceived s-commerce trust.

Social Commerce Features

S-commerce features can also influence trust (Hajli, 2015). S-commerce features help consumers to feel closer to each other which can encourage participation and engagement. As a result, the supportive climate created by s-commerce features help to increase the level of trust (Hajli, 2015). The relationship between social commerce features and perceived trust has been examined in several studies (Hajli, 2015; Rahman et al., 2020; Shekhar & Jaidev, 2020). For

example, Hajli (2015) in this study by using survey data from 243 UK participants found that social commerce features have significant effect on consumers' trust.

H2: *S*-commerce features have a significant positive influence on perceived s-commerce trust.

S-commerce platforms provide consumers with opportunities to share product-related information with peers and engage in discussions. S-commerce platforms offer various features of Web 2.0 technologies such as referrals, ratings, reviews forums, communities, and recommendations (Atchariyakarn & Zhang, 2021), which help consumers to share and exchange product-related information and their experience with each other (Al-Adwan, 2019). These tools play an important role in transforming consumers' experiences and perceptions of online shopping websites (Curty & Zhang, 2013). S-commerce features not only allow users to easily access information about the experiences of other people with products/services but also share their own experiences and interact with other consumers (Al-Adwan, 2019). These features help consumers better understand the available products/services and help them in the decision-making process (Al-Adwan, 2019). Researchers have shown that s-commerce features have significant effects on consumer purchase decisions (Hajli & Sims, 2015; Makmor et al., 2019).

H3: *S*-commerce features have a significant positive influence on behavioral intention to use s-commerce.

Familiarity

Familiarity is defined as "as specific activity-based cognizance based on previous experience of learning about how to use a particular interface" (Gefen, 2000, p. 727). In an online context, familiarity with a certain online platform refers to the extent to which users comprehend the

procedures of the website (Gefen et al., 2003a). Familiarity can help to lessen the perceived uncertainty by increasing understanding of what is happening (Al-Adwan, 2019; Gefen et al., 2003a), making users increase their confidence in the environment (Al-Adwan & Kokash, 2019). Familiarity reduces concerns that the other party can be opportunistic (Gefen et al., 2003a). The impact of familiarity on trust within online platforms has been supported by prior empirical work (Gefen, 2000; Gefen et al., 2003a; Ng, 2013; Rahman et al., 2020; Sharma et al., 2019). Gefen (2000) argued that familiarity can create trust when the vendor demonstrates trustworthy behavior. Consumers could use familiarity to evaluate benevolence, ability, and credibility of s-commerce platforms which can aid their transaction decisions (Al-Adwan & Kokash (2019).

H4: Familiarity has a significant positive influence on perceived s-commerce trust.

Purchasing from s-commerce websites can be seen as a technical procedure (Hajli et al., 2017a), involving various steps (e.g. searching for products/services, selecting online-vendors/ products/ services, reading reviews and information about the products/services, providing information, placing orders), which can be considered as complex by some individuals. Complexity can be considered as one of the main factors negatively affecting purchase intention in the online environment (Gefen et al., 2003b). Familiarity with an online platform is positively related to consumer understanding of the purchasing process and reduces difficulty in making decisions (Gefen et al., 2003b). When users are familiar with the system, their intention to use the system for purchases is increased (Adwan & Kokash, 2019; Martinez-Lopez et al., 2010). Therefore,

H5: *Familiarity has a significant positive influence on behavioral intention to use scommerce.*

Trust

Trust plays an important role in online consumer behavior (Akman & Mishra, 2017; Cheng et al. 2017). Trust is defined as "belief that one can rely upon a promise made by another and that the other, in unforeseen circumstances, will act toward oneself with goodwill and in a benign fashion" (Suh & Han, 2003, p. 137). Due to the absence of face-to-face communications between customers and sellers in the s-commerce context, high levels of risk and uncertainty are present (Al-Adwan & Kokash, 2019). Consequently, trust plays a fundamental role in consumers' intention to use s-commerce (Akman and Mishra, 2017; Al-Dwairi, 2017). S-commerce trust refers to "consumers' subjective beliefs that other consumers are trustworthy and that Web technology (i.e. e-commerce sites, social media and s-commerce features) is reliable to perform social commerce behaviors" (Lin et al., 2019). S-commerce trust comprises both trust in people and technology (Sharma et al., 2019; Lin et al., 2019).

The impact of trust on behavioral intention to use s-commerce has been empirically examined (Abou-Elgheit, 2019; Akman & Mishra, 2017; Al-Adwan, 2019; Liu et al., 2019; Maia et al., 2020; Ng, 2013). Al-Adwan & Kokash (2019) state that consumers form purchase decisions when they trust s-commerce websites. Trusting beliefs in s-commerce platforms can include benevolence, integrity, predictability, and ability of s-commerce platforms to successfully execute an exchange (Al-Adwan & Kokash, 2019). Trust helps individuals to engage in financial transactions and diminish the psychological obstacles connected with online purchases (Pavlou & Fygenson, 2006).

H6: *Trust has a significant positive influence on behavioral intention to use s-commerce.*

Behavioral Intention

Behavioral intention is a significant motivating factor driving people to enact a behavior (Pavlou & Fygenson, 2006). Prior empirical studies have established the impact of behavioral intention on the actual use of technologies (Hossain et al. 2017; Venkatesh et al., 2012). According to Unified Theory of Acceptance and Use of Technology 2 (UTAUT2), behavioral intention and use behavior are two distinct constructs (Venkatesh et al. 2012). Several studies investigated the impact of behavioral intention on use behavior in the context of s-commerce (Akman & Mishra, 2017; Chen et al., 2021; Rahman et al., 2020; Sheikh et al., 2019). Sheikh et al. (2019), using data collected from 343 users of social networking sites in Pakistan, found that behavioral intention has a significant positive effect on use behavior. Therefore,

H7: *Behavioral Intention has a significant positive influence on use behavior in scommerce.*

4. RESEARCH METHODS

4.1. Sample

The Scopus database was used to identify articles on s-commerce adoption and use. The search was initiated with phrases such as "adoption," "intention," and "use" along with "social commerce" published since 2011. The search was restricted to the English language and yielded 193 articles. The articles were screened to determine if they should be included in or excluded from our meta-analysis sample. First, studies that could be considered out of scope were excluded (e.g., Feng et al. 2018 examined electric vehicle adoption whereas Mendoza-Tello et al. 2018 dealt with cryptocurrencies). Second, studies that provided theoretical essays or employed qualitative empirical methods were excluded (e.g., Lăzăroiu et al. 2020 presented a theoretical perspective whereas Li et al. 2018 and Yu et al. 2020 applied qualitative methods). Third, studies

that used quantitative methods, but unusable in our meta-analysis were excluded (e.g., Wu et al. 2015 employed the VIKOR methods whereas Zhao & Li 2020 used a simulation). Fourth, studies that had not reported statistics such as Pearson correlation (Dwivedi et al., 2019; Gopinath & Narayanamurthy, 2022; Hooda et al., 2022; Jeyaraj and Dwivedi, 2020; Mishra et al., 2022), necessary for meta-analysis were excluded (e.g., Hu et al. 2019; Jin & Ryu 2020; Lee & Chen 2020). Finally, studies that did not examine at least one of the relationships in our research model were excluded (e.g., Ali et al. 2020; Shang & Bao 2022; Zafar et al. 2021). We found 83 articles¹ that met all the requirements (See Appendix A).

4.2. Coding

A uniform coding process was used to gather data from studies. We first coded author names, publication year, journal name, country in which data was collected, and the focal technology for each study. We then coded the reliability, mean, and standard deviation (SD) for each of the six constructs in our research model. Finally, we coded the sample size and zero-order Pearson correlation for each of the 15 bivariate relationships in our research model. If the correlations were not available, we attempted to code other statistics that could be converted to correlations (e.g., Abed 2020; Chen et al. 2018; Hajli 2014). We coded 201 observations across studies.

We screened the coded data for consistency with the meta-analysis requirements. First, we ensured the independence of observations such that only one finding from a study was coded for

¹ Nine studies were published in International Journal of Information Management, five each in Electronic Commerce Research and Applications, Information & Management, and Technological Forecasting & Social Change, three each in Journal of Theoretical and Applied Electronic Commerce Research, Journal of Retailing and Consumer Services, Journal of Internet Commerce, and Computers in Human Behavior, two each in Journal of Computer Information Systems, Journal of Business Ethics, SAGE Open, Internet Research, KSII Transactions on Internet and Information Systems, Information Technology & People, International Journal of Business Information Systems, Sustainability, Electronic Markets, Behavior & Information Technology, Asia Pacific Journal of Marketing and Logistics, and one article each in 24 other journals. The years of publication for the articles are: 2011 (1 article), 2012 (1), 2013 (3), 2014 (5), 2015 (6), 2016 (4), 2017 (7), 2018 (10), 2019 (24), 2020 (17), and 2021 (5).

each relationship. When a study reported multiple observations for the same relationship, we computed the average across the multiple correlations resulting in a single statistic. For instance, Chen et al. (2017) examined the impact of ratings and reviews, forums and communities, and recommendations on intention, but an average was computed since the three constructs separate constructs represented SC features in our model. Similarly, Hossain & Kim (2020) examined the impacts of both trust and affective-based trust on intention, for which an average was computed due to the two constructs representing trust in our research model. Second, prior studies did not always report construct reliabilities, especially in the case of use behavior (e.g., Sheikh et al. 2019) did not report reliabilities for use behavior. Different approaches are available to handle missing data, e.g., the mean of reliabilities for the same construct from the other studies can be substituted. In this study, we have taken a conservative approach and did not substitute mean values. Third, when squared correlations were coded from the study, the square root of the squared correlation was coded. In doing so, we ensured that the constructs shared a positive association with each other.

4.3. Analysis

For each bivariate relationship in our model, quantitative meta-analytic methods (e.g., Hunter and Schmidt 1990) were used to obtain the corrected correlation effect size. The measurement errors in observed correlations were corrected using the reliabilities of the constructs. The sampling errors were corrected by weighting the effect size by the sample size. Table 1 (lower triangle) portrays the matrix of meta-analyzed correlations for all relationships. The lower triangle of Table 1 also includes the number of findings and the cumulative sample size for each relationship.

Insert Table 1 here

Table 1 (upper triangle) shows the credibility interval and the failsafe-N for each relationship in our model. Based on the credibility intervals, the relationships are positive since the interval does not include 0 (Whitener 1990). The relationships between emotional support, informational support, and behavioral intention with use behavior are the exceptions. The failsafe-N estimates the number of additional studies with non-significant effects needed to invalidate the corrected correlation shown by the meta-analysis (Wu and Lederer 2009). Failsafe-N ranged from 16 (for social presence to use behavior link) to 455 (for the trust to behavioral intention link). Overall, the average failsafe-N is 101 across the 15 relationships. The ratio of failsafe-N to the number of findings ranges from 5 to 12 across the relationships (Sabherwal et al. 2006). Thus, publication bias may not be a significant concern in this study. Table 1 also reports the mean and SD for each construct. These were computed on a 7-point scale based on the available statistics from prior studies included in our analysis.

The MASEM analysis was conducted in Stata 15 using the matrix of corrected correlations (Table 1, lower triangle) and the means and SDs (Table 1). The minimum sample size (923) across the 15 relationships was used as the sample size for the MASEM analysis.

5. RESULTS

We initiated the MASEM analysis with the research model (Figure 1). It showed reasonable fit: $\chi^2 = 86.28$, df = 5, p < 0.01, CFI = 0.964, TLI = 0.893, SRMR = 0.05, and RMSEA = 0.133. All hypothesized paths in the model were significant. CFI was acceptable (> 0.90) and TLI was below the recommended threshold of 0.90 (Bentler and Bonett 1980). SRMR was below the recommended level of 0.08 and RMSEA was higher than the recommended level of 0.08 (Browne and Cudeck 1993; Sabherwal et al. 2006). Modification indices (MI > 10) showed other paths that may provide better fit.

Accordingly, the path between trust and use behavior (MI = 40.14) was included first. The resultant model was a better fit for the data than the research model: $\chi^2 = 45.23$, df = 4, p < 0.01, CFI = 0.982, TLI = 0.932, SRMR = 0.028, and RMSEA = 0.106. All significant paths in the previous step remained significant. Both CFI and TLI exceeded the recommended level of 0.90. SRMR was below the recommended level and RMSEA continued to be above the recommended level of 0.90.

The path between SC features and use behavior (MI = 24.07) was added next. The resultant model showed a better fit than the previous step: $\chi^2 = 20.85$, df = 3, p < 0.01, CFI = 0.992, TLI = 0.961, SRMR = 0.016, and RMSEA = 0.08. All supported paths in the previous step were significant. Both CFI and TLI were above 0.90, SRMR was below 0.08, and RMSEA was at 0.08. Modification indices did not show other candidate paths for consideration. This model was thus accepted as the emergent model (**Figure 2**), and it explained 47.6% variance in trust, 49.6% variance in behavioral intention, and 36.4% variance in use behavior.

Insert Figure 2 here

6. DISCUSSION

6.1. Findings

Our research model integrated perspectives from trust, social presence, and socio-technical theories to examine behavioral intention and use behavior in s-commerce contexts. All seven hypotheses were supported: social commerce features, social presence and familiarity influence trust; social commerce features, trust and familiarity influence behavioral intention, which in turn influences use behavior. Two relationships emerged in our analysis: social commerce features and trust influence use behavior. Collectively, these results demonstrate the mediating role of trust in s-commerce settings. Specifically, trust fully mediates the effect of social presence on behavioral intention and partially mediates the effects of s-commerce features and familiarity on both behavioral intention and use behavior.

Social presence exerted a significant positive influence on trust (H1 supported). Problems of physical absence in the online marketplace can lead to lack of trust, which can be improved by using social presence tools (e.g. live chat, full time contact person). The finding can be explained by social presence theory and is consistent with prior findings on s-commerce (Rahman et al., 2020).

Social commerce features had a significant impact on trust and behavioral intention in the context of s-commerce (H2 and H3 supported). This finding is consistent with prior research (Hajli, 2015; Hajli & Sims, 2015; Makmor et al., 2019) and shows that the presence of s-commerce features within s-commerce platforms can significantly increase the level of trust and behavioral intention. By using s-commerce features, customers can provide and receive valuable and credible information which can enhance their knowledge, increase trust of s-commerce

platforms, and aid the purchase decision-making process. Additionally, our analysis showed that social commerce features have a direct impact on use behavior (emergent path).

Familiarity was found to be an antecedent of trust and behavioral intention in s-commerce settings (H4 and H5 supported). This implies that the more the consumers are familiar with s-commerce platforms, the more they will trust it and intend to use it. Familiarity is considered as a precondition of trust, as it creates a framework of understanding between the consumer and the third party (Sharma et al., 2019). Sharma et al. (2019) argued that familiarity and trust help to reduce complexity and uncertainty while performing s-commerce transactions. Familiarity with s-commerce platforms can be achieved by motivating users to adopt special features, which will improve familiarity with s-commerce platforms (Rahman et al. 2020; Sharma et al. 2019; Al-Adwan and Kokash 2019). If individuals had pleasant experiences on s-commerce platforms, they are likely to develop positive post-purchase beliefs towards the platform and will consider the platform for future purchases (Al-Adwan, 2019).

Trust positively influenced behavioral intention in s-commerce contexts (H6 supported). With the increase of individuals' trust in s-commerce, individuals' intention to engage in s-commerce increases as well. Trust is one of the most important elements of s-commerce due to the high risk of uncertainty (Akman and Mishra, 2017). As trust is a strong predictor of behavioral intention, the factors which influence trust in s-commerce environments are particularly important to understand (Sharma et al., 2019). Our findings can be explained by trust-based theory and are also consistent with prior research within s-commerce (Abou-Elgheit, 2019; Akman & Mishra, 2017; Al-Adwan & Kokash, 2019; Al-Adwan, 2019). Additionally, a new emergent path was found- the direct effect of trust on use behavior.

Behavioral intention was found to have a significant positive effect on use behavior (H7 supported), in line with previous findings in s-commerce research (Akman & Mishra, 2017; Chen et al., 2021; Rahman et al., 2020; Sheikh et al., 2019). According to Kim et al. (2008) behavioral intention is one of the psychological aspects which can result in actual behavior. As a result, it can be concluded that usage intention can help predict the frequency and possibility of activities on s-commerce platforms (Rahman et al., 2020).

The findings of this research show that a combination of perspectives from trust, social presence, and social-technological theories was successful in predicting trust, behavioral intention and use behavior in the context of s-commerce. The model accounts for 47.6% variance in trust, 49.6% variance in behavioral intention, and 36.4% variance in use behavior. The variance explained in prior s-commerce studies was below 29% for trust (Al-Adwan, 2019; Al-Adwan & Kokash, 2019; Bugshan & Attar, 2020), below 45% for behavioral intention (e.g. Riaz et al., 2021; Zhang et al., 2014), and below 27% for use behavior (Chen et al., 2021; Lin & Wu, 2015; Sheikh et al., 2019). Our integrated research model performed better than prior models in s-commerce research.

6.2. Limitations

The findings should be interpreted in light of the limitations of the study. First, the study used reported statistics from prior studies and not primary data directly gathered from respondents, and assumes the quality of prior studies. Second, the findings are based on a subset of prior studies since studies that did not report data necessary for the meta-analysis were excluded. It is possible that the results are biased. Third, this study did not consider the analysis of moderating variables due to an insufficient number of studies on moderating effects. Future research could investigate the effect of moderators such as respondents characteristics (e.g., age, gender,

country of residence, propensity to trust, frequency of purchasing from internet, repurchase from the same online store), platform types, product type on predictors to behavioral intention and use in the context of s-commerce. Additionally, the impact of culture (e.g. individualistic vs collectivistic) was not tested due to insufficient number of studies in individualistic country settings. It is recommended that future research examine these relationships as more studies in individualistic country settings are published. Fourth, the study was based on findings reported in journal articles. While the failsafe-N values are good, it is possible that our analysis excluded studies from other sources that reported non-significant effects. Finally, assumptions for missing data had to be implemented in our study. While the coding process was stringent, accommodations for missing data could bias the findings of our study.

6.3. Implications for Research

The results of this study make several contributions to academic research. First, this study underlined the role of s-commerce trust by showing the ways in which it mediated the effects of other variables on behavioral intention and use behavior. While prior research has shown that trust impacts behavioral intention and use behavior (e.g., Dwivedi et al. 2021), our study shows that trust also mediates the effects of social presence, s-commerce features, and familiarity on behavioral intention and use behavior. Second, this study advanced our understanding of the antecedents of trust, behavioral intention, and use behavior. Based on quantitative meta-analysis procedures, our findings provide generalized understanding of the relationships between social commerce features, social presence, familiarity, trust, behavioral intention, and use behavior in the context of s-commerce. Third, this study examined an integrated model based on trust, social presence, and socio-technical theories in the context of s-commerce. This is in response to calls for theoretical models which can help identify the antecedents of consumer behavior on s-

commerce platforms (Al-Dwairi, 2017). Our study furthers a model for understanding consumer behavior on s-commerce platforms. Fourth, our study synthesized prior findings for a cumulative understanding of s-commerce intention and use behavior. Zhang & Benyoucef (2016) argued that it is important to identify key factors and resolve inconsistent effects in prior empirical findings. This study helps resolve inconsistent and contradictory findings on the relationships involving trust, intention and use in s-commerce contexts. Finally, the current research provided an in-depth understanding of factors influencing use behavior. Our integrated research model found that trust and social commerce features not only influence behavioral intention but also significantly impact use behavior. Prior studies largely focused on behavioral intention and not use behavior, resulting in calls for assessing use behavior (Abou Ali et al., 2020). This study also enhances our understanding of use behavior in the context of s-commerce.

6.4. Implications for Practice

The findings of this research raise several implications for s-commerce practitioners. Trust plays an important role in increasing s-commerce intention, i.e., the higher the trust, the greater the intention to use s-commerce. S-commerce platforms may be made more trustworthy by improving platform features such as ratings and forum discussions, which may increase customers' trust. They may also enhance the interactive capabilities of s-commerce platforms, which provide convenient communication channels for customers to find relevant information and share their purchase experiences. Platform providers could identify ways such as incentives to increase customer engagement to enhance the trustworthiness of ratings and discussions. By providing communications tools, s-commerce providers may enhance customers' perceptions of social presence (Al-Adwan, 2019). Platform providers could display statistics on product adoption (e.g. how many people bought the product, how many people use the product on regular basis). This type of social proof can significantly increase consumers' trust (Pandey, 2022).

Companies may engage in friendly and authentic conversations with their potential and actual customers on their social media pages. It will help strengthen the connection and community identification between the company and the public (Men & Tsai, 2014). Companies may build strong social communities, where customers are encouraged to interact with each other, perhaps even rewarding the most active members (Yoo et al., 2013). Customer engagement may be increased through incentives such as coupon codes, discounts, or giveaways. Social competition, hashtag challenge, fun hashtag sharing with pictures/videos of products to engage with the brand community, and pop-up events for brand fans may be other ways to further increase customer engagement. Platform providers may strive to understand why and how consumers engage with s-commerce platforms. Such knowledge can be used by marketers to influence information sharing in s-commerce, which can affect consumer purchase decisions, customer loyalty, and consumer commitment to the community (Hennig-Thurau & Walsh, 2003).

S-commerce platform providers may consider the importance of familiarity with s-commerce platforms. While users gain familiarity through repeated use of the s-commerce platforms, it may be advantageous to provide quick tutorials and how-to guides that can enable users to become more familiar with the platforms. These may be offered in various formats (e.g. video, text) such that users with different abilities and skillsets may benefit from such resources. System designers can include useful and necessary information on the FAQ sections that help customers in their decision making processes. Shopping assistants to highlight the different system capabilities and help customers to complete transactions may also be deployed on s-commerce platforms.

Platform providers could include 24/7 chat enabled by artificial intelligence (AI) that could help resolve shopping-related problems, which could lead to an increase in sales.

7. CONCLUSION

This study examined an integrated research model of factors affecting consumer behavior in scommerce settings with a focus on trust. Based on perspectives from trust, social support, and socio-technical theories, our research model provides insights into behavioral intention and use behavior of consumers on s-commerce platforms. MASEM results show social presence, scommerce features, and familiarity influence trust; s-commerce features, trust, and familiarity impact behavioral intention; and behavioral intention, trust, and s-commerce features influence use behavior. These findings can advance our understanding of trust, including its mediating role in s-commerce settings.

DISCLOSURE

The authors have no financial or non-financial competing interests to report.

REFERENCES

- Abed, S. S. (2020). Social commerce adoption using TOE framework: An empirical investigation of Saudi Arabian SMEs. *International Journal of Information Management*, *53*, 102118.
- Abou Ali, A., Abbass, A., & Farid, N. (2020). Factors Influencing Customers' Purchase Intention in Social Commerce. *International Review of Management and Marketing*, *10*(5), 63.
- Abou-Elgheit, E. (2019). Affect-based and personality-based trust and risk in social commerce. International Journal of Electronic Marketing and Retailing, 10(2), 173-207.
- Akman, I., & Mishra, A. (2017). Factors influencing consumer intention in social commerce adoption. *Information Technology & People*, 30(2), 356-370.
- Al-Adwan, A. S. (2019). Revealing the influential factors driving social commerce adoption. *Interdisciplinary Journal of Information, Knowledge, and Management, 14*, 295-324.
- Al-Adwan, A. S., & Kokash, H. (2019). The driving forces of Facebook social commerce. *Journal of theoretical and applied electronic commerce research*, 14(2), 15-32.
- Al-Dwairi, R. (2017). Social commerce adoption among Jordanian youth: empirical study. International Journal of Business Information Systems, 26(3), 277-296.
- Al-Tit, A. A., Omri, A., & Hadj, T. B. (2020). The driving factors of the social commerce intention of Saudi Arabia's online communities. *International Journal of Engineering Business Management*, 12, 1847979019899746.

- Ali, W. A., Mukhtar, M., & Mohamed, I. (2020). Validating the factors influencing social commerce adoption in small and medium enterprise in Malaysia. Indonesian Journal of Electrical Engineering and Computer Science, 17(1), 440–447.
- Aslam, W., Ham, M., & Farhat, K. (2019). Building brand loyalty: an application of expectation confirmation model in mobile social commerce. *Pakistan Journal of Commerce and Social Sciences* (*PJCSS*), 13(4), 806-825.
- Atchariyakarn, N., & Zhang, J. (2021). A systematic review of perceived value toward online review on s-commerce platform. *International Journal of Research in Business and Social Science*, 10(3), 46-52.
- Attar, R. W., Shanmugam, M., & Hajli, N. (2021). Investigating the antecedents of e-commerce satisfaction in social commerce context. British Food Journal, 123(3), 849-868
- Aydın, G. (2019). Do personality traits and shopping motivations affect social commerce adoption intentions? Evidence from an emerging market. *Journal of Internet Commerce*, 18(4), 428-467.
- Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological bulletin*, 88(3), 588-606.
- Bostrom, R. P., & Heinen, J. S. (1977). MIS problems and failures: A socio-technical perspective. Part I: The causes. *MIS quarterly*, 17-32.
- Browne, M. W., & Cudeck, R. (1989). Single sample cross-validation indices for covariance structures. *Multivariate behavioral research*, 24(4), 445-455.
- Bugshan, H., & Attar, R. W. (2020). Social commerce information sharing and their impact on consumers. *Technological Forecasting and Social Change*, *153*, 119875.
- Busalim, A. H. (2016). Understanding social commerce: A systematic literature review and directions for further research. *International Journal of Information Management*, *36*(6), 1075-1088.
- Chen, A., Lu, Y., & Wang, B. (2017). Customers' purchase decision-making process in social commerce: A social learning perspective. *International Journal of Information Management*, *37*(6), 627-638.
- Chen, C. C., Hsiao, K. L., & Wu, S. J. (2018). Purchase intention in social commerce: An empirical examination of perceived value and social awareness. *Library Hi Tech*, 36(4), 583-604.
- Chen, L., & Wang, R. (2016). Trust development and transfer from electronic commerce to social commerce: an empirical investigation. *american journal of industrial and business management*, 6(05), 568.
- Chen, X., Li, Y., Davison, R. M., & Liu, Y. (2021). The impact of imitation on Chinese social commerce buyers' purchase behavior: The moderating role of uncertainty. *International Journal of Information Management*, 56, 102262.
- Cheng, J. H., Lin, L. W., & Lee, L. C. (2019a). Influence of ambidextrous governance mechanisms and risk management on repurchase intention in social commerce. *Internet Research*, 29(6), 1301-1323.
- Cheng, X., Fu, S., & de Vreede, G. J. (2017). Understanding trust influencing factors in social media communication: A qualitative study. *International Journal of Information Management*, 37(2), 25-35.
- Cheng, X., Gu, Y., & Shen, J. (2019b). An integrated view of particularized trust in social commerce: An empirical investigation. International Journal of Information Management, 45, 1-12.
- Cho, E., & Son, J. (2019). The effect of social connectedness on consumer adoption of social commerce in apparel shopping. *Fashion and Textiles*, 6(1), 1-17.
- Curty, R. G., & Zhang, P. (2013). Website features that gave rise to social commerce: a historical analysis. *Electronic commerce research and applications*, *12*(4), 260-279.
- Dabbous, A., Aoun Barakat, K., & Merhej Sayegh, M. (2020). Social commerce success: Antecedents of purchase intention and the mediating role of trust. *Journal of Internet Commerce*, *19*(3), 262-297.
- Dashti, M., Sanayei, A., Dolatabadi, H. R., & Javadi, M. H. M. (2019). Application of the stimuliorganism-response framework to factors influencing social commerce intentions among social network users. *International Journal of Business Information Systems*, *30*(2), 177-202.
- Doha, A., Elnahla, N., & McShane, L. (2019). Social commerce as social networking. *Journal of Retailing and Consumer Services*, 47, 307-321.

- Dong, X., & Wang, T. (2018). Social tie formation in Chinese online social commerce: the role of IT affordances. *International Journal of Information Management*, *42*, 49-64.
- Dwivedi, Y. K., Ismagilova, E., Sarker, P., Jeyaraj, A., Jadil, Y., & Hughes, L. (2021). A Meta-Analytic Structural Equation Model for Understanding Social Commerce Adoption. *Information Systems Frontiers*, 1-17, doi: https://doi.org/10.1007/s10796-021-10172-2
- Dwivedi, Y. K., Rana, N. P., Jeyaraj, A., Clement, M., & Williams, M. D. (2019). Re-examining the unified theory of acceptance and use of technology (UTAUT): Towards a revised theoretical model. *Information Systems Frontiers*, 21(3), 719-734.
- Fan, J., Zhou, W., Yang, X., Li, B., & Xiang, Y. (2019). Impact of social support and presence on swift guanxi and trust in social commerce. *Industrial Management & Data Systems*, 119(9), 2033-2054.
- Featherman, M. S., & Hajli, N. (2016). Self-service technologies and e-services risks in social commerce era. *Journal of Business Ethics*, 139(2), 251-269.
- Feng, B., Ye, Q., & Collins, B. J. (2019). A dynamic model of electric vehicle adoption: The role of social commerce in new transportation. Information & Management, 56(2), 196–212.
- Friedrich, T., Schlauderer, S., & Overhage, S. (2019a). Some things are just better rich: how social commerce feature richness affects consumers' buying intention via social factors. *Electronic Markets*, 1-22.
- Friedrich, T., Schlauderer, S., & Overhage, S. (2019b). The impact of social commerce feature richness on website stickiness through cognitive and affective factors: An experimental study. *Electronic Commerce Research and Applications*, 36, 100861.
- Gefen, D. (2000). E-commerce: the role of familiarity and trust. Omega, 28(6), 725-737.
- Gefen, D., & Straub, D. W. (2004). Consumer trust in B2C e-Commerce and the importance of social presence: experiments in e-Products and e-Services. *Omega*, 32(6), 407-424.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003a). Trust and TAM in online shopping: An integrated model. *MIS Quarterly*, 27(1), 51-90.
- Gefen, D., Karahanna, E., & Straub, D. W. (2003b). Inexperience and experience with online stores: The importance of TAM and trust. *IEEE Transactions on engineering management*, *50*(3), 307-321.
- Geyser, W. (2021). 11 Social Commerce Platform Examples That Prove Social Is Key. Available at https://influencermarketinghub.com/social-commerce-platform/. Accessed 8 July 2022.
- Ghahtarani, A., Sheikhmohammady, M., & Rostami, M. (2020). The impact of social capital and social interaction on customers' purchase intention, considering knowledge sharing in social commerce context. *Journal of Innovation & Knowledge*, *5*(3), 191-199.
- Gopinath, K., & Narayanamurthy, G. (2022). Early bird catches the worm! Meta-analysis of autonomous vehicles adoption–Moderating role of automation level, ownership and culture. *International Journal of Information Management*, 66, 102536.
- Goraya, M. A. S., Jing, Z., Shareef, M. A., Imran, M., Malik, A., & Akram, M. S. (2021). An investigation of the drivers of social commerce and e-word-of-mouth intentions: Elucidating the role of social commerce in E-business. *Electronic Markets*, 31(1), 181-195.
- Grand View Research (2021). Social Commerce Market Size Worth \$3,369.8 Billion By 2028. Available at https://www.prnewswire.com/news-releases/social-commerce-market-size-worth-3-369-8-billion-by-2028--cagr-28-4-grand-view-research-inc-301207167.html Accessed 3 August 2021.
- Hajli, M. N. (2014). The role of social support on relationship quality and social commerce. *Technological Forecasting and Social Change*, 87, 17-27.
- Hajli, N. (2015). Social commerce constructs and consumer's intention to buy. International journal of information management, 35(2), 183-191.
- Hajli, N., & Sims, J. (2015). Social commerce: The transfer of power from sellers to buyers. *Technological Forecasting and Social Change*, 94, 350-358.
- Hajli, N., Shanmugam, M., Powell, P., & Love, P. E. (2015). A study on the continuance participation in on-line communities with social commerce perspective. *Technological Forecasting and Social Change*, 96, 232-241.

- Hajli, N., Sims, J., Zadeh, A. H., & Richard, M. O. (2017a). A social commerce investigation of the role of trust in a social networking site on purchase intentions. *Journal of Business Research*, 71, 133-141.
- Hajli, N., Wang, Y., Tajvidi, M., & Hajli, M. S. (2017b). People, technologies, and organizations interactions in a social commerce era. *IEEE Transactions on Engineering Management*, 64(4), 594-604.
- Han, H., Xu, H., & Chen, H. (2018). Social commerce: A systematic review and data synthesis. *Electronic Commerce Research and Applications*, *30*, 38-50.
- Handarkho, Y. D. (2020). Social experience vs. social technology in enhancing the intention to use social commerce: a case study of Indonesia. *Journal of Enterprise Information Management*, 34(3), 860-883.
- Hassan, M., Iqbal, Z., & Khanum, B. (2018). The role of trust and social presence in social commerce purchase intention. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, *12*(1), 111-135.
- Hassanein, K., & Head, M. (2007). Manipulating perceived social presence through the web interface and its impact on attitude towards online shopping. *International journal of human-computer studies*, 65(8), 689-708.
- Hennig-Thurau, T., & Walsh, G. (2003). Electronic word-of-mouth: Motives for and consequences of reading customer articulations on the Internet. *International journal of electronic commerce*, 8(2), 51-74.
- Hew, J. J., Lee, V. H., Ooi, K. B., & Lin, B. (2016). Mobile social commerce: The booster for brand loyalty?. *Computers in Human Behavior*, *59*, 142-154.
- Hooda, A., Gupta, P., Jeyaraj, A., Giannakis, M., & Dwivedi, Y. K. (2022). The effects of trust on behavioral intention and use behavior within e-government contexts. *International Journal of Information Management*, 67, 102553.
- Hossain, M. A., & Kim, M. (2020). A comprehensive study on social commerce in social networking sites. *SAGE Open*, *10*(2), 2158244020936225.
- Hossain, M. A., Hasan, M. I., Chan, C., & Ahmed, J. U. (2017). Predicting user acceptance and continuance behaviour towards location-based services: the moderating effect of facilitating conditions on behavioural intention and actual use. Australasian Journal of Information Systems, 21.
- Horng, S. M., & Wu, C. L. (2020). How behaviors on social network sites and online social capital influence social commerce intentions. *Information & Management*, 57(2), 103176.
- Hossain, M., Jahan, N., & Kim, M. (2020). A Mediation and Moderation Model of Social Support, Relationship Quality and Social Commerce Intention. *Sustainability*, *12*(23), 9889.
- Hu, X., Chen, X., & Davison, R. M. (2019). Social Support, Source Credibility, Social Influence, and Impulsive Purchase Behavior in Social Commerce. International Journal of Electronic Commerce, 23(3), 297–327.
- Huang, Z., & Benyoucef, M. (2017). The effects of social commerce design on consumer purchase decision-making: An empirical study. *Electronic Commerce Research and Applications*, 25, 40-58.
- Hung, S. Y., Hung, H. M., Chang, C. M., & Tsai, J. C. A. (2015). Cognitive and affective factors influencing customer adoption of social commerce: an empirical study. *International Journal of Business and Systems Research*, 9(2), 154-178.
- Hung, S. Y., Yu, A. P. I., & Chiu, Y. C. (2018). Investigating the factors influencing small online vendors' intention to continue engaging in social commerce. *Journal of Organizational Computing* and Electronic Commerce, 28(1), 9-30.
- Hussain, S., Li, Y., & Li, W. (2021). Influence of platform characteristics on purchase intention in social commerce: Mechanism of psychological contracts. *Journal of theoretical and applied electronic commerce research*, 16(1), 1-17.
- Hunter, J. E., & Schmidt, F. L. (1990). Methods of Meta-Analysis: Correcting Error and Bias in Research Findings Newbury Park, CA: Sage.
- Jadil, Y., Jeyaraj, A., Dwivedi, Y. K., Rana, N. P., & Sarker, P. (2022). A meta-analysis of the factors associated with s-commerce intention: Hofstede's cultural dimensions as moderators. *Internet Research*, doi: https://doi.org/10.1108/INTR-10-2021-0768

- Jeyaraj, A., & Dwivedi, Y. K. (2020). Meta-analysis in information systems research: Review and recommendations. *International Journal of Information Management*, 55. doi.org/10.1016/j.ijinfomgt.2020.102226
- Jin, S. V., & Ryu, E. (2020). "I'll buy what she's #wearing": The roles of envy toward and parasocial interaction with influencers in Instagram celebrity-based brand endorsement and social commerce. Journal of Retailing and Consumer Services, 55, 102121.
- Jones, K., & Leonard, L. N. (2008). Trust in consumer-to-consumer electronic commerce. *Information & management*, 45(2), 88-95.
- Kaur, K., & Kumar, S. (2019). Identifying factors of consumer perceived risk towards s-commerce. Business Management and Social Innovations. ISBN: 978-81-85495-28-6
- Kim, D. J., Ferrin, D. L., & Rao, H. R. (2008). A trust-based consumer decision-making model in electronic commerce: The role of trust, perceived risk, and their antecedents. Decision support systems, 44(2), 544-564.
- Kim, S., & Park, H. (2013). Effects of various characteristics of social commerce (s-commerce) on consumers' trust and trust performance. *International Journal of Information Management*, 33(2), 318-332.
- Kim, S., Noh, M. J., & Lee, K. T. (2012). Effects of antecedents of collectivism on consumers' intention to use social commerce. *Journal of Applied Sciences*, *12*(12), 1265-1273.
- Ko, H. C. (2020). Beyond browsing: motivations for experiential browsing and goal-directed shopping intentions on social commerce websites. *Journal of Internet Commerce*, 19(2), 212-240.
- Lăzăroiu, G., Neguriță, O., Grecu, I., Grecu, G., & Mitran, P. C. (2020). Consumers' Decision-Making Process on Social Commerce Platforms: Online Trust, Perceived Risk, and Purchase Intentions. Frontiers in Psychology, 11.
- Lee, C.-H., & Chen, C.-W. (2020). An Empirical Study of Social Commerce Intention: An Example of China. Information, 11(2), 99.
- Lee, H., & Choi, J. (2014). Why do people visit social commerce sites but do not buy? The role of the scarcity heuristic as a momentary characteristic. *KSII Transactions on Internet and Information Systems (TIIS)*, 8(7), 2383-2399.
- Li, C. Y. (2019). How social commerce constructs influence customers' social shopping intention? An empirical study of a social commerce website. *Technological Forecasting and Social Change*, *144*, 282-294.
- Li, C. Y., & Ku, Y. C. (2018). The power of a thumbs-up: Will e-commerce switch to social commerce?. *Information & Management*, 55(3), 340-357.
- Liang, T. P., Ho, Y. T., Li, Y. W., & Turban, E. (2011). What drives social commerce: The role of social support and relationship quality. *International journal of electronic commerce*, *16*(2), 69-90.
- Lin, C. S., & Wu, S. (2015). Exploring antecedents of online group-buying: Social commerce perspective. *Human Systems Management*, *34*(2), 133-147.
- Lin, J., Li, L., Yan, Y., & Turel, O. (2018). Understanding Chinese consumer engagement in social commerce: The roles of social support and swift guanxi. *Internet Research*, 28(1), 2-22.
- Lin, J., Yan, Y., & Chen, S. (2017). Understanding the impact of social commerce website technical features on repurchase intention: a Chinese guanxi perspective. *Journal of Electronic Commerce Research*, 18(3), 225-244.
- Lin, X., Wang, X., & Hajli, N. (2019). Building e-commerce satisfaction and boosting sales: The role of social commerce trust and its antecedents. *International Journal of Electronic Commerce*, 23(3), 328-363.
- Liu, C., Bao, Z., & Zheng, C. (2019). Exploring consumers' purchase intention in social commerce: an empirical study based on trust, argument quality, and social presence. *Asia Pacific Journal of Marketing and Logistics*, 31(2), 378-397.
- Liu, H., Chu, H., Huang, Q., & Chen, X. (2016). Enhancing the flow experience of consumers in China through interpersonal interaction in social commerce. *Computers in Human Behavior*, 58, 306-314.

- Lu, B., Zeng, Q., & Fan, W. (2016). Examining macro-sources of institution-based trust in social commerce marketplaces: An empirical study. *Electronic Commerce Research and Applications*, 20, 116-131.
- Maia, C. R., Lunardi, G. L., Dolci, D., & D'Avila, L. C. (2020). Competitive price and trust as determinants of purchase intention in social commerce. *BAR-Brazilian Administration Review*, 16(4), 1-24.
- Makmor, N., Aziz Abd, N., & Alam Shah, S. (2019). Social Commerce an Extended Technology Acceptance Model: The Mediating Effect of Perceived Ease of Use and Perceived Usefulness. *Malays. J. Consum. Fam. Econ*, 22, 119-136.
- Martínez-López, F. J., Rodríguez-Ardura, I., Gázquez-Abad, J. C., Sánchez-Franco, M. J., & Cabal, C. C. (2010). Psychological elements explaining the consumer's adoption and use of a website recommendation system: a theoretical framework proposal. *Internet research*, 20(3), 316-341.
- Men, L. R., & Tsai, W. H. S. (2014). Perceptual, attitudinal, and behavioral outcomes of organization– public engagement on corporate social networking sites. *Journal of public relations research*, 26(5), 417-435.
- Mendoza-Tello, J. C., Mora, H., Pujol-López, F. A., & Lytras, M. D. (2018). Social Commerce as a Driver to Enhance Trust and Intention to Use Cryptocurrencies for Electronic Payments. *IEEE* Access, 6, 50737–50751.
- Mishra, A., Shukla, A., Rana, N. P., Currie, W. L., & Dwivedi, Y. K. (2023). Re-examining postacceptance model of information systems continuance: A revised theoretical model using MASEM approach. *International Journal of Information Management*, 68, 102571.
- Molinillo, S., Liébana-Cabanillas, F., & Anaya-Sánchez, R. (2018). A social commerce intention model for traditional e-commerce sites. *Journal of theoretical and applied electronic commerce research*, 13(2), 80-93.
- Mou, J., & Benyoucef, M. (2021). Consumer behavior in social commerce: Results from a meta-analysis. *Technological Forecasting and Social Change*, 167, 120734. https://doi.org/10.1016/j.techfore.2021.120734
- Ng, C. S. P. (2013). Intention to purchase on social commerce websites across cultures: A cross-regional study. *Information & management*, 50(8), 609-620.
- Osatuyi, B., & Qin, H. (2018). How vital is the role of affect on post-adoption behaviors? An examination of social commerce users. *International Journal of Information Management*, 40, 175-185.
- Osatuyi, B., Qin, H., Osatuyi, T., & Turel, O. (2020). When it comes to Satisfaction... It depends: An empirical examination of social commerce users. *Computers in Human Behavior*, 111, 106413.
- Pandey, S. (2022). How to build trust in eCommerce in 2022? Available at https://vwo.com/blog/trust-in-ecommerce/. Accessed 10 July 2022.
- Pavlou, P. A., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behavior. *MIS quarterly*, 115-143.
- Qin, L. (2020). A cross-cultural study of interpersonal trust in social commerce. *Journal of Computer Information Systems*, 60(1), 26-33.
- Rahman, T., Kim, Y. S., Noh, M., & Lee, C. K. (2020). Determinants of social commerce adoption in an emerging economy. *Service Business*, *14*(4), 479-502.
- Rashid, R. M., Rashid, Q. U. A., & Pitafi, A. H. (2020). Examining the Role of Social Factors and Mooring Effects as Moderators on Consumers' Shopping Intentions in Social Commerce Environments. SAGE Open, 10(3), 2158244020952073.
- Riaz, M. U., Guang, L. X., Zafar, M., Shahzad, F., Shahbaz, M., & Lateef, M. (2021). Consumers' purchase intention and decision-making process through social networking sites: a social commerce construct. *Behavior & Information Technology*, 40(1), 99-115.
- Sabherwal, R., Jeyaraj, A., & Chowa, C. (2006). Information system success: Individual and organizational determinants. *Management science*, 52(12), 1849-1864.
- Saprikis, V., & Markos, A. (2018). Modeling Users' Acceptance of Social Commerce. *International Journal of E-Business Research (IJEBR)*, 14(4), 28-50.

- Sarker, P., Rana, N. P., Hughe, L., & Dwivedi, Y. K. (2020). A Meta-analysis of Social Commerce Adoption Research. In *International Working Conference on Transfer and Diffusion of IT* (pp. 404-418). Springer, Cham.
- Shahbaz, H., Li, Y., & Li, W. (2020). Psychological contract-based Consumer Repurchase behavior On Social commerce platform: An Empirical study. *KSII Transactions on Internet and Information Systems (TIIS)*, 14(5), 2061-2083.
- Shang, B., & Bao, Z. (2022). How Repurchase Intention Is Affected in Social Commerce?: An Empirical Study. Journal of Computer Information Systems, 62(2), 326–336.
- Sharma, S., & Crossler, R. E. (2014). Disclosing too much? Situational factors affecting information disclosure in social commerce environment. *Electronic Commerce Research and Applications*, 13(5), 305-319.
- Sharma, S., Menard, P., & Mutchler, L. A. (2019). Who to trust? Applying trust to social commerce. *Journal of Computer Information Systems*, 59(1), 32-42.
- Sheikh, Z., Yezheng, L., Islam, T., Hameed, Z., & Khan, I. U. (2019). Impact of social commerce constructs and social support on social commerce intentions. *Information Technology & People*, 32(1), 68-93.
- Shekhar, R., & Jaidev, U. P. (2020). Antecedents of online purchase intention in the context of social commerce. *International Journal of Applied Management Science*, *12*(1), 68-95.
- Shin, D. H. (2013). User experience in social commerce: in friends we trust. *Behavior & information technology*, *32*(1), 52-67.
- Shin, D. H., & Shin, Y. J. (2011). Consumers' trust in virtual mall shopping: The role of social presence and perceived security. *International Journal of Human-Computer Interaction*, 27(5), 450-475.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. Toronto; London; New York: Wiley.
- Suh, B., & Han, I. (2003). The impact of customer trust and perception of security control on the acceptance of electronic commerce. *International Journal of electronic commerce*, 7(3), 135-161.
- Sun, Y., Shao, X., Li, X., Guo, Y., & Nie, K. (2019). How live streaming influences purchase intentions in social commerce: An IT affordance perspective. *Electronic Commerce Research and Applications*, 37, 100886.
- Teh, P. L., Ahmed, P. K., & Tayi, G. K. (2015). Generation-Y shopping: the impact of network externalities and trust on adoption of social commerce. *International Journal of Electronic Business*, 12(2), 117-141
- Um, N. H. (2019). Antecedents and consequences of consumers' attitude toward social commerce sites. *Journal of Promotion Management*, 25(4), 500-519.
- Venkatesh, V., Thong, J. Y., & Xu, X. (2012). Consumer acceptance and use of information technology: extending the unified theory of acceptance and use of technology. *MIS quarterly*, *36*(1), 157-178.
- Wang, X., Lin, X., & Spencer, M. K. (2019). Exploring the effects of extrinsic motivation on consumer behaviors in social commerce: Revealing consumers' perceptions of social commerce benefits. *International Journal of Information Management*, 45, 163-175.
- Weisberg, J., Te'eni, D., & Arman, L. (2011). Past purchase and intention to purchase in e-commerce: The mediation of social presence and trust. *Internet research*, 21(10), 82-96.
- Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in metaanalysis. *Journal of Applied Psychology*, 75(3), 315-321.
- Wu, J., & Lederer, A. (2009). A meta-analysis of the role of environment-based voluntariness in information technology acceptance. *Mis Quarterly*, 419-432.
- Wu, Y.-C. J., Shen, J.-P., & Chang, C.-L. (2015). Electronic service quality of Facebook social commerce and collaborative learning. Computers in Human Behavior, 51, 1395–1402.
- Yadav, M. S., De Valck, K., Hennig-Thurau, T., Hoffman, D. L., & Spann, M. (2013). Social commerce: a contingency framework for assessing marketing potential. *Journal of interactive marketing*, 27(4), 311-323.

- Yahia, I. B., Al-Neama, N., & Kerbache, L. (2018). Investigating the drivers for social commerce in social media platforms: Importance of trust, social support and the platform perceived usage. *Journal* of *Retailing and Consumer Services*, 41, 11-19.
- Yang, X. (2019). Consumers' decisions in social commerce: the role of guanxi elements. *Asia Pacific Journal of Marketing and Logistics*, 31(4), 759-772.
- Yeon, J., Park, I., & Lee, D. (2019). What creates trust and who gets loyalty in social commerce?. *Journal* of *Retailing and Consumer Services*, 50, 138-144.
- Yoo, C. W., Sanders, G. L., & Moon, J. (2013). Exploring the effect of e-WOM participation on e-Loyalty in e-commerce. *Decision Support Systems*, 55(3), 669-678.
- Yin, X., Wang, H., Xia, Q., & Gu, Q. (2019). How social interaction affects purchase intention in social commerce: A cultural perspective. *Sustainability*, *11*(8), 2423.
- Yu, C.-H., Tsai, C.-C., Wang, Y., Lai, K.-K., & Tajvidi, M. (2020). Towards building a value co-creation circle in social commerce. Computers in Human Behavior, 108, 105476.
- Zafar, A. U., Qiu, J., Li, Y., Wang, J., & Shahzad, M. (2021). The impact of social media celebrities' posts and contextual interactions on impulse buying in social commerce. Computers in Human Behavior, 115, 106178.
- Zhang, H., Lu, Y., Gupta, S., & Zhao, L. (2014). What motivates customers to participate in social commerce? The impact of technological environments and virtual customer experiences. *Information & Management*, 51(8), 1017-1030.
- Zhang, K. Z., & Benyoucef, M. (2016). Consumer behavior in social commerce: A literature review. *Decision Support Systems*, 86, 95-108.
- Zhao, N., & Li, H. (2020). How can social commerce be boosted? The impact of consumer behaviors on the information dissemination mechanism in a social commerce network. Electronic Commerce Research, 20(4), 833–856.

APPENDIX A

Prior studies in the Meta-Analysis sample

Study	Country	Technology	N
Abed (2020)	Saudi Arabia	S-commerce site	181
Abou-Elgheit (2019)	Egypt	E-commerce site	599
Akman and Mishra (2017)	Turkey	S-commerce site	142
Al-Adwan (2019)	Jordan	S-commerce site	418
Al-Adwan and Kokash (2019)	Jordan	Facebook	237
Al-Dwairi (2017)	Jordan	S-commerce site	295
Al-Tit et al. (2020)	Saudi Arabia	Facebook & Twitter	389
Aslam et al. (2019)	Pakistan	Mobile s-commerce	344
Attar et al. (2021)	Asian countries	S-commerce site	107
Aydın (2019)	Turkey	S-commerce site	269
Bugshan and Attar (2020)	Asian countries	S-commerce site	400
Chen et al. (2017)	China	Taobao	243
Chen et al. (2018)	Taiwan	S-commerce site	281
Chen et al. (2021)	China	Xiaohongshu	282
Cheng et al. (2019a)	Taiwan	S-commerce site	395
Cheng et al. (2019b)	China	S-commerce apps	614
Cho and Son (2019)	USA	S-commerce site	446
Dabbous et al. (2020)	Lebanon	Facebook & Instagram	206
Dashti et al. (2019)	Iran	S-commerce site	514
Doha et al. (2019)	N/A	S-commerce site	193
Dong and Wang (2018)	China	WeChat	511
Fan et al. (2019)	China	WeChat	333
Featherman & Hajli (2016)	N/A	e-billpay service	467
Friedrich et al. (2019a)	Germany	S-commerce site	237
Friedrich et al. (2019b)	Germany	S-commerce site	164
Ghahtarani et al. (2020)	Iran	S-commerce site	254
Goraya et al. (2021)	China	Holiday booking site	784
Hajli (2014)	United Kingdom	Facebook	200
Hajli (2015)	United Kingdom	Social network site	243
Hajli et al. (2015)	Malaysia	Social media sites	200
Hajli and Sims (2015)	United Kingdom	Facebook	230
Hajli et al. (2017a)	N/A	Facebook	201
Hajli et al. (2017b)	United Kingdom	S-commerce site	199
Handarkho (2020)	Indonesia	S-commerce site	750
Hassan et al. (2018)	Pakistan	Social network site	306
Hew et al. (2016)	Malaysia	Mobile s-commerce	208
Horng and Wu (2020)	Taiwan	Facebook	970
Hossain et al. (2020)	USA	S-commerce site	232
Hossain and Kim (2020)	USA; South Korea	Social network site	549
Huang and Benyoucef (2017)	China	S-commerce site	262
Hung et al. (2015)	Taiwan	Facebook	446
Hung et al. (2018)	Taiwan	Social network site	166
Hussain et al. (2021)	China	Weitao	430
Kim et al. (2012)	South Korea	S-commerce site	365
Kim and Park (2013)	South Korea	S-commerce site	371
Ko (2020)	Taiwan	Facebook	284
Lee and Choi (2014)	South Korea	S-commerce site	324
Li (2019)	Taiwan	Kidshome	408
Li and Ku (2018)	Taiwan	Pchome & Kidshome	357

Liang et al. (2011)	Taiwan	Plurk	411
Lin and Wu (2015)	Taiwan	Online group-buying	202
Lin et al. (2018)	China	WeChat	511
Lin et al. (2017)	China	Weibo	506
Liu et al. (2019)	China	Dianping	288
Liu et al. (2016)	China	S-commerce site	349
Lu et al. (2016)	China	Online group-buying	260
Maia et al. (2020)	Brazil	S-commerce site	160
Makmor et al. (2019)	Malaysia	S-commerce site	100
Molinillo et al. (2018)	Spain	S-commerce site	201
Ng (2013)	East Asia	Facebook	176
Osatuyi and Qin (2018)	USA	Facebook & Twitter	510
Osatuyi et al. (2020)	USA	S-commerce site	531
Qin (2020)	USA	S-commerce site	131
Rahman et al. (2020)	Bangladesh	Social network site	300
Rashid et al. (2020)	China	S-commerce site	303
Riaz et al. (2021)	Pakistan	Social network site	232
Saprikis and Markos (2018)	Greece	Social network site	433
Shahbaz et al. (2020)	China	Taobao	367
Sharma and Crossler (2014)	USA	Social network site	252
Sharma et al. (2019)	USA	Social network site	215
Sheikh et al. (2019)	Pakistan	Social network site	343
Shekhar and Jaidev (2020)	India	Social network site	267
Shin (2013)	South Korea	S-commerce site	329
Sun et al. (2019)	China	S-commerce site	504
Teh et al. (2015)	Malaysia	S-commerce site	220
Um (2019)	South Korea	S-commerce site	354
Wang et al. (2019)	USA	Amazon	408
Yahia et al. (2018)	Asian countries	Instagram	205
Yang (2019)	China	WeChat	243
Yeon et al. (2019)	South Korea	Social network site	323
Yin et al. (2019)	China	S-commerce site	291
Zhang et al. (2014)	China	Renren	563
Zhang et al. (2014)	China	Renren	563

Construct	Mean (SD)	TR	SF	SP	FM	BI	UB
Trust	4.44		[0.247,	[0.333,	[0.114,	[0.308,	[0.251,
(TR)	(1.16)		0.794]	0.918]	0.907]	0.958]	0.729]
· · ·			84	69	64	455	35
SC Features	4.16	0.52		[0.387,	[0.257,	[0.307,	[0.137,
(SF)	(1.59)	(9, 2880)		0.678]	0.649]	0.824]	0.781]
				28	32	196	32
Social Presence	4.21	0.62	0.53		[0.212,	[0.224,	[0.055,
(SP)	(1.41)	(6, 1640)	(3, 923)		0.742]	0.816]	0.594]
					51	178	16
Familiarity	4.83	0.51	0.45	0.47		[0.167,	[0.120,
(FM)	(1.17)	(7, 1923)	(4, 1240)	(6, 1678)		0.830]	0.646]
						134	19
Behavioral intention	5.45	0.63	0.56	0.52	0.49		[0.191
(BI)	(2.76)	(39, 12301)	(19, 6364)	(19, 6662)	(15, 4613)		0.936]
							123
Use behavior	3.23	0.49	0.45	0.32	0.38	0.56	
(UB)	(1.10)	(4, 1281)	(4, 1323)	(3, 939)	(3, 995)	(12, 4267)	

Table 1. Meta-analysis Results

SD: Standard deviation; CR: Construct reliability (average across studies) Lower triangular matrix contains: Corrected correlation (Number of findings, Cumulative sample size) Upper triangular matrix contains: 90% credibility interval [Low, High] Failsafe N









Figure 1. Research Model

Figure 2. Emergent Model